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Web Design for the USDC of RI

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Project Number: 0109

**Web Development for the
United States District Court of Rhode Island**

A Major Qualifying Project Report:

submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Bachelor of Science

By

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Date: March 3, 2009

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Abstract

This project consisted of the redesign of the United States District Court of Rhode Island's website and the creation of the Rhode Island Probation Office's website. The websites create a user-friendly experience for both the staff of the court office's as well as the general public. The newly redesigned websites are easy to navigate and find all information on each website quickly and easily. The USDC of RI website was redesigned to help organize the content from their old website in a more effective manner and the Probation Office website was created from scratch to help distribute commonly used forms and information which will save time and money in the future.

Authorship Statement

This work represents the combined efforts of Yetunde Ajayi-Obe, Mark Cirillo, and Corey Graves. Our team collaborated to produce the final websites for the USDC of RI and Probation Office. Most tasks required efforts from all team members however some tasks were delegated to individual group members in order to complete the project in the given time period. Yetunde focused primarily on the coding of the websites, Mark's primary concentration was on the documentation of the project and Corey conducted the analysis.

Executive Summary

This project consisted of the creation of two websites for the United States District Court and the Probation and Pretrial Services Office of Rhode Island. Before the project, the District Court had a website that was difficult to navigate unless you were very familiar with it and the Probation Office did not have a website at all. The goal was to create a user interface for both websites that was easy to navigate and portrayed the court in a professional and dignified manner.

In order to better understand the needs of the court and the probation office, information was gathered in a variety of ways. Interviews were conducted with members of the USDC of RI and Probation Office, Joint Application Design sessions took place, and surveys were conducted. These methods of research allowed the team to take the idea of the websites and turn them into fully functional websites.

Adobe Photoshop and Adobe Dreamweaver were used to design the user interface of the websites and then code the websites properly. We were able to hand off the project to the USDC of RI's IT staff with confidence knowing that they had these products to make any changes or updates necessary in the future.

The project began in August of 2009 and the background research was done through November of 2009. The initial proposal plan was presented to the court at the end of that month. The first prototypes of the websites were delivered in January of 2010. We received feedback from both offices multiple times and made those changes over the course of the following two months. On March 3, 2010, the final websites were presented to select members of the Courthouse and the Probation Office to officially deliver the two websites.

1 Introduction

1.1 Project Objectives

Our team evaluated and redesigned the United States District Court of Rhode Island's (USDC of RI) website as well as designed a new website for the Probation Office for the USDC of RI. The USDC of RI website was initially lacking the functionality the Court's staff would have liked to have as well as uphold the image the staff wanted to portray to the public. The project was scheduled to take place during the first three terms of the WPI academic year 2009 through 2010. The project was broken down between the three terms by planning and analysis, design, and implementation respectively. Within each seven-week term our team visited the USDC of RI one day, Wednesday, a week. A vast majority of the work was done outside of the USDC of RI; however, the team was expected to be onsite every Wednesday to work with the Court's staff on the sites redesign.

During the first phase of the project, August 28 through October 15 of 2009, our team developed a plan and conducted an analysis of the original site's content and the daily operations of the USDC of RI. Through this analysis we were able to reconstruct the site's content and gain an understanding of the value that this new site would provide to the USDC of RI and its staff members. The website is a way for the public to view the USDC of RI and understand its purpose. By improving this public interface we enhanced the public image of the USDC of RI and improved the fluidity and momentum of the daily operations conducted by the USDC of RI's staff. In order to successfully make these changes and reflect the appropriate image of the USDC of RI, our team first reviewed the operations of the Court, allowed the staff to iterate the contextual necessity of the site's content, and gained insight into the culture of the USDC of RI.

This analysis was completed by October 15, 2009 and our team provided the USDC of RI with a formal proposal for the site's redesign and reconstruction. This proposal defined the scope of our project, iterated our analysis and defined our plans and objectives for the new website. During the proposal presentation, which capped off the analysis phase, we solicited additional input and buy-in from the key stakeholders. The goal was to reach an agreement with the USDC of RI's Clerk of Court, Mr. David DiMarzio, and Chief US Probation Officer, Mr. Barry Weiner, and they both expressed their approval through their sign-off of the proposed redesign.

The second phase of the project began on October 27, 2009 and ended December 17, 2009. During this phase of the project our team designed and constructed the new websites based on the analysis conducted during the previous academic term. Although this phase was primarily composed of coding and design, our group continued to be present onsite at the USDC of RI every Wednesday. During our time onsite we continued to meet with members of the staff regarding the design of the site in order to keep the staff well informed of the group's progress. These meetings primarily consisted of a demonstrative presentation by a group member to show members of the staff the design and layout of the site in order to mitigate any concerns prior to the implementation of the site and ensure greater support and effectiveness of the site. Additional concerns regarding the site's construction spawned from the platform chosen to build the site. A major concern regarding the site's design and architecture was the ability for the IT staff at the USDC of RI to maintain and expand the site once the project was complete. During this seven-week design phase, the site's coding, layout and design was done. At the end of this phase the finished site was presented to the USDC of RI's staff; the sites actual implementation and publishing took place in the following phase. The group was not present onsite nor did the

group partake in any progression of the project from December 18, 2009 until January 13, 2010 due to a break in our academic calendar for the winter holidays.

The tertiary and final phase of the project began on January 13, 2010 and consisted of the implementation of the site and the training of the USDC of RI's staff in regards to the site's use and upkeep. The end of this phase marked the completion of the project completion in March of 2010. At the beginning of this phase our team published the Court's new website. This means that the existing site was replaced by the newly constructed site and was accessible by both the Court's staff members and the public. Our team then completed a thorough walk-through of the site's layout, and design. The members of the Court's IT Department were trained in the methodology used to code the site and change the site's architecture. This phase was crucial to our group's success in the project; we had to instill the necessary knowledge in the Court's staff regarding the site and location of the site's content. For the IT Department, in particular, we explained how to perform required maintenance, make changes to the content and how to expand the site for necessary future development.

Upon completion of the three phases, this final project document was presented to the project's sponsors, Mr. David DiMarzio and Mr. Barry Weiner, and the other members of the USDC of RI's staff at the final meeting/presentation. This document contains all of the work done by the group in regards to the project. The project was not complete until both the sponsors and our project's advisor, Dr. Eleanor T. Loiacono, signed off the document. After the hand-off of the final document and the presentation the project was complete. The Court's website and its maintenance were placed in the hands of the USDC of RI's staff members.

1.2 The Federal Court System

In order to redesign the USDC of RI website and portray it appropriately, it was important for our team to understand how the federal court system works. There are three branches of government; the *legislative branch*, *executive branch* and the *judicial branch*. The *judicial branch* and the federal courts interpret and apply the law to resolve disputes. Although each of the three branches are separate, they use what they call “checks and balances” to cooperate with each other (Mecham, 1999). It was very important that the federal courts and the rest of the *judicial branch* were represented in a way to show their importance and service to the United States government. The Constitution ultimately dictates how the federal courts are run. The Constitution gives the power to create federal courts, in addition to the Supreme Court, and determines what jurisdiction they have. The judiciary may not decide what types of cases may be addressed in the federal courts, that is the job of Congress. Congress has given three other responsibilities to the federal courts which include 1) how many judges there should be and in what locations, 2) which of the President’s judicial nominees ultimately become federal judges, and 3) the budget and appropriation of the money in order for the judiciary to operate (Federal, 1999).

The Senate is a key advisor in the appointment of judges. The President (*Executive Branch*) often times consults with senators and other various elected officials concerning candidates for openings in the federal courts. The federal courts are used most by the Department of Justice, which is the department in charge of prosecuting federal crimes and representing the government in civil cases (Mecham, 1999). With 94 district courts in the United States, there is a large volume of high profile cases that the public is interested in following. The great thing about the federal courts for the public is that with very limited exceptions, each step

of the judicial process is open to the public (Mecham, 1999). This was a key factor for this project because we needed to make the site appealing to the public and show the public what the federal courts stand for such as justice and honor. If the public was utilizing the website for the USDC of RI, they should be able to find what they want easily as well as in a pleasing atmosphere that represents the federal courts appropriately. This was a key consideration when redesigning the website.

The USDC of RI is one of the 94 trial courts (Figure 1-1) of the federal courts system, the other level of federal courts are the appellate courts. The only two special trial courts that have nationwide jurisdiction over certain types of cases are the Court of International Trade and the Court of Federal Claims (Mecham, 1999). Above the trial and appellate courts is the Supreme Court of the United States. The Supreme Court consists of the Chief Justice of the United States and eight associate judges. Each individual aspect of the *judicial branch* needs to uphold all of their responsibilities for everything to run smoothly.

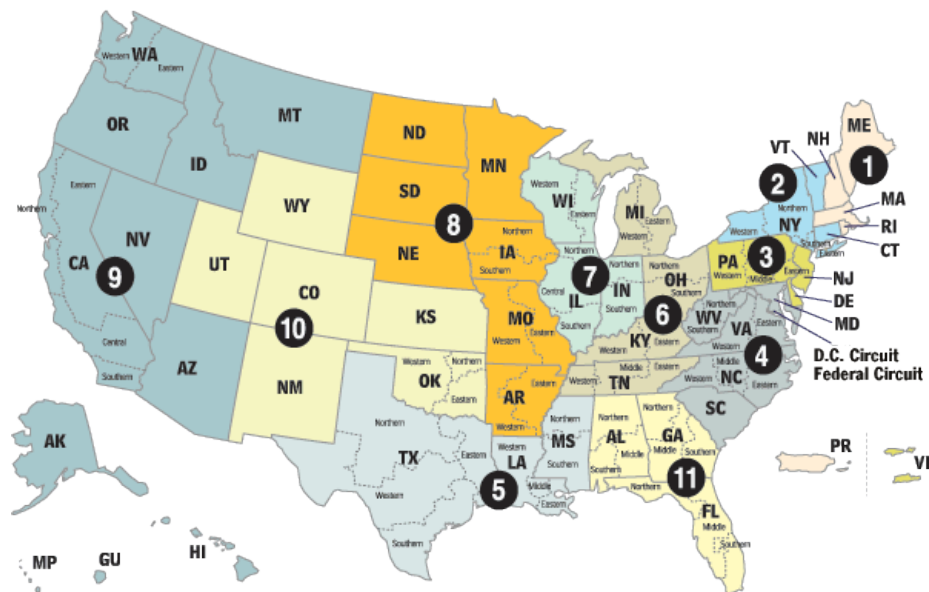


Figure 1-1 - The United States District Courts, (uscourts.gov)

The individual federal courts uphold these responsibilities on a day-to-day basis. It is the job of each individual court to appoint support staff, supervise the spending, and manage the court's records (Mecham, 1999). The chief judge of each court must oversee and coordinate the operations of the court to ensure that they run efficiently. Although the chief judge plays a key role in the operations of the court, the clerk is also a key asset to ensuring the court is run efficiently. The clerk manages the court's non-judicial functions following the policies set by the court and needs to report directly to the chief judge. The clerk is also responsible for managing the money in the court, administering the jury system, providing interpreters and court reporters, sending official court notices and summon, providing courtroom support services, and maintaining the records and dockets of the court room (Mecham, 1999).

It makes sense that our main points of contact and project champions for this project were the USDC of RI Clerk of Court and the Chief US Probation Officer. Appointed by Chief Judge Lisi, Mr. David DiMarzio was involved in all aspects of his court (cases, jurors, lawyers, judges, etc.) and understood what needed to be available on the website for the USDC of RI. It was important that we gained as much information from him as possible regarding the USDC of RI itself and what he thought was necessary for the website. The Clerk Office's main functions include receiving, docketing, and managing files pertaining to USDC of RI court cases. Many of these functions can be done on the website and thorough research was done in order to understand what tasks were on the website. We also needed to understand what the Probation Office would be doing on their site by talking to Mr. Barry Weiner and his staff. We used the following organizational chart to aid us in understanding all uses of the site (Figure 1-2).

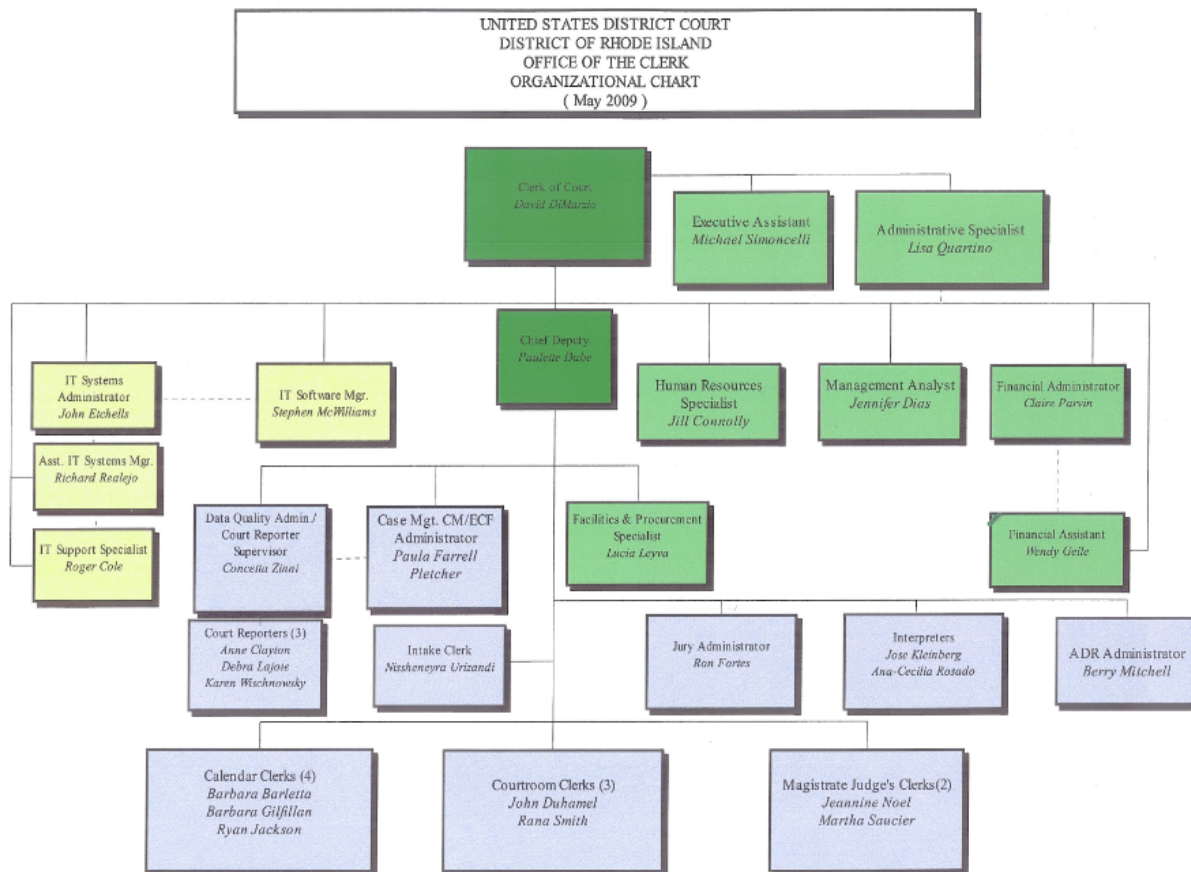


Figure 1-2 - USDC of RI Organizational Chart

The remainder of this document provides a review of literature pertinent to this project. The methodology that we chose is outlined with a detailed explanation of how we planned to execute the project. Finally the document concludes with an overview of how the project was completed and lessons learned from the experience.

2 Literature Review

Understanding the federal court system was crucial to our project but what was even more important was understanding the different options we had when it came to the completion of the website from start to finish. In this section we review multiple sources to gain a better understanding of the systems development life cycle, the different methodologies available, how humans interact with computers and the different platforms available for creating a website. In order to successfully redesign the website for the USDC of RI we needed to have a strong knowledge of all of these topics. We begin this literature review by explaining the phases of the systems development life cycle which were used in the design of the website.

2.1 Systems Development Life Cycle

The Systems Development Life Cycle (SDLC) is a way to aid in the description of the entire process of creating a system. The SDLC is mainly used to break up the different processes that all lead to the completion of the specified project. In a way it helps to ensure that the project is completed on time and correctly before work begins on the project. It is important to understand all of the phases of the SDLC in order to correctly follow them and ensure that the project is planned and executed in the most efficient way possible (Dennis & Wixom, 2003).

The SDLC is most commonly comprised of four main phases: planning, analysis, design and implementation (Figure 2-1). Each of these phases are broken up into separate steps that lead to the completion of each phase. Although the SDLC may contain slight variances from project to project and phases may be completed consecutively, iteratively, or repeatedly, the phases remain the same. The planning phase is composed of identifying the business value, analyzing feasibility, developing a work plan, staffing the project and controlling and directing

the project. The analysis phase includes analysis, information gathering, process modeling, and data modeling. The design phase consists of the physical design, the architecture design, the interface design, database and file design and program design. Finally, implementation requires the construction and installation of the system (Dennis & Wixom, 2003). Each of the phases will now be discussed in greater detail.

Chapter	Stop	Sample Techniques	Deliverable
Planning (Why build the system?)			
2	Identifying business value	System request	<input type="checkbox"/> System request
2	Analyze feasibility	Technical feasibility Economic feasibility Organizational feasibility	<input type="checkbox"/> Feasibility study
3	Develop Work Plan	Task identification Time estimation	<input type="checkbox"/> Work plan
3	Staff the project	Creating a staffing plan Creating a project charter	<input type="checkbox"/> Staffing plan <input type="checkbox"/> Project charter
3	Control and direct project	Refine estimates Track tasks Coordinate project Manage scope Mitigate risk	<input type="checkbox"/> Gantt chart <input type="checkbox"/> CASE tool <input type="checkbox"/> Standards list <input type="checkbox"/> Project binder(s) <input type="checkbox"/> Risk assessment
Analysis (Who, what, when, where will the system be?)			
4	Analysis	Problem Analysis Benchmarking Reengineering	<input type="checkbox"/> Analysis Plan
5	Information gathering	Interviews Questionnaires	<input type="checkbox"/> Information
6	Process modeling	Data flow Diagramming	<input type="checkbox"/> Process Model
7	Data modeling	Entity relationship modeling	<input type="checkbox"/> Data Model
Design (How will the system work?)			
8	Physical Design	Custom development, package development outsourcing	<input type="checkbox"/> Design plan
9	Architecture design	Hardware design Network design	<input type="checkbox"/> Architecture design <input type="checkbox"/> Infrastructure design
10, 11	Interface design	Interface structure chart User interface design	<input type="checkbox"/> Interface design
12	Database and file design	Selecting data storage format Optimizing data storage	<input type="checkbox"/> Data storage design
13	Program design	Program structure chart Program specifications	<input type="checkbox"/> Program design
Implementation (System Delivery)			
14	Construction	Programming test	<input type="checkbox"/> Test plan <input type="checkbox"/> Programs <input type="checkbox"/> Documentation
15	Installation	Direct conversion Parallel conversion Phased conversion	<input type="checkbox"/> Conversion plan <input type="checkbox"/> Training plan <input type="checkbox"/> Sign off sheet

Figure 2-1 - System Development Life Cycle Overview (Dennis & Wixom, 2003)

2.1.1 Planning

The main purpose of the planning phase is to determine why the system should be built and how this process will be accomplished. This phase is used to define the business need: the reason why the system is being build or modified. The business need, or business value, should highlight the necessity for the development or modification of a system.

2.1.1.1 Identifying the Business Value

The process begins by defining the business value that the new system will provide for the organization that it supports. Examples of how a system can provide business value can be seen through a decrease in overhead costs, through a reduction in time necessary to complete a given process, and increasing the profit margine of the organization. The system request is a deliverable that iterates this process and demonstrates the value that will be created through the implementation of the new system. The deliverable explains the business need, outlines the functionality of the system and highlights any special issues or constraints that should be taken into consideration during the construction and implementation of the system. The system request is most commonly completed by the project sponsor and the analysts that are designing the system (Dennis & Wixom, 2003). Once the business value is determined, a feasibility analysis must take place.

2.1.1.2 Analyzing the Feasibility

Before the project can begin, it is necessary to understand if the project is feasible. There are three areas of feasibility analyzed in order properly justify a given project. Technical feasibility looks at whether or not the technology is available to fulfill the needs of the project, the business's familiarity with the project and if the developers have the technical skills to complete the project. Economic feasibility looks into the financial side of the project. This

includes cost-benefit analysis, short and long-term costs, implementation costs and a return on investments to justify the organization's decision to take on the project. Finally, organizational feasibility looks into how well the users of the system will adapt to the changes and how easily they will learn how to use the system (Dennis & Wixom, 2003). The system needs to integrate into the business's current operations smoothly and efficiently.

2.1.1.3 Developing the Work Plan

Once the project is initiated and found to be feasible, it is necessary to develop a work plan for the project. First, all the tasks that need to be completed throughout the life cycle of the project need to be identified, no matter how small or large the task may seem. Once the tasks are identified, they need to be scheduled. A detailed schedule will include all of the tasks, the duration of time that will be spent on those tasks, which tasks need to be completed prior to beginning each task, and finally the status of the task at any given time. It is also important to define who will be in charge of completing each task, which provides a stronger understanding of how long it will take to complete each task. One way of showing the work plan is through the use of a Gantt chart. A Gantt chart is a horizontal bar chart that includes all of the tasks listed vertically and the dates listed horizontally (Dennis & Wixom, 2003). It is a great way to visually show the tasks and timeline in which they will be completed. Once the work plan is established, the staffing of the project begins.

2.1.1.4 Staffing the Project

When staffing a project, one needs to understand people's technical and interpersonal skills before you assign him/her to a specific task. Different tasks require the utilization of different skills; some tasks require the individual responsible for the completion of the task to have a thorough technical understanding of the system. Other tasks may require the individual to

have strong interpersonal skills and the ability to communicate effectively to members of the organization that understand the overall business rather than the system itself. By properly choosing who will complete each task, you can avoid both short and long-term conflicts and help to ensure that the project is completed on-time and correctly.

2.1.1.5 Controlling and Directing the Project

Controlling and directing the project is key to the success of the final system. This step will take place throughout the rest of the project. During the life cycle of the project things are going to change and tasks may take longer, or shorter, than expected. It is important to keep track of these changes and make sure that everything is up to date. This requires the project manager to keep the Gantt chart up to date. There are many ways that a project can be coordinated but a very popular tool that is commonly used is Computer-Aided Software Engineering (CASE). CASE is software that was created specifically for automating a systems development process and often times helps to speed up the overall tracking process of the SDLC. This reduces maintenance costs, improves the quality of the software, enforces discipline and can assess the severity of changes that are made to the project (Dennis & Wixom, 2003).

Holding standards is another really effective way of controlling the project and its direction. By holding standards constant for documentation, coding, procedure, specification requirements, and user interface design, you can eliminate confusion and save time. One major problem that can affect the direction of a project is scope creep. Scope creep is the addition of new requirements to a system during the development stage of the SDLC (Dennis & Wixom, 2003). This can greatly increase the time needed for completion and throw a project off track. By performing scope management and making sure everyone is on the same page regarding the scope, the issue of scope creep can be mitigated.

2.1.2 Analysis

The next major phase of the SDLC is when the current system is examined in order to assess the past and present status of the system. From the analysis, one can determine if the system needs to be modified or replaced. During the analysis phase one must examine the business requirements of the system and define these requirements in order to assertively make progressive changes to the current system's operations. A requirement is defined as a statement of what the system must do and also what characteristics must be part of the system in order for the system to meet its objective. Requirements can be both functional, meaning that the requirement relates directly to a process that the system must perform, and nonfunctional, referring to the behavioral properties that the system must contain. Nonfunctional requirements are broken into five general categories: operational, performance, security, cultural and political (Dennis & Wixom, 2003).

2.1.2.1 Analysis Strategy

There are three techniques used during the analytical phase of requirements gathering, and each one of the three pertains to a different set of criteria that allow an analyst to assess the current system's conversion and determine which one of the three best suits the project. The first technique is Business Process Automation (BPA), which means that the operations of the business will remain unchanged; however computer technology will take on some of the daily workload. The second technique is Business Process Improvement (BPI); BPI results in making moderate changes to the current business process by taking advantage of technological processes currently offered. The final technique is Business Process Reengineering (BPR), this technique requires one to change the fundamental way that the given organization operates. Using BPR

means that the former operational methods of the organization are completely redesigned, discontinuing the former operational techniques of the organization (Dennis & Wixom, 2003).

The analysis strategy that best suits the transgression of the old website used by the USDC of RI to the new website is that of Business Process Improvement (BPI). As noted in Figure 2-2, there are four basic criteria for determining the appropriate analytical strategy to achieve the overall goal of the project. The first of the four is the potential business value that the organization will gain from the completion of the project at hand. The second is the project cost; here one must assess how much money, being both literal dollars and employee time, is being put forth towards the completion of the project. The third criterion is the breadth of the analysis, which describes the actual scope and depth of the analysis that needs to be completed in order to properly assess the current or “as-is” system. The final of the four criteria is the risk, which essentially means the risk that the project fails. Failure can be the result of multiple things such as poor design, inability to meet the defined requirements, or even too much change for the given organization to handle resulting in operational disarray (Dennis & Wixom, 2003).

	Business Process Automation	Business Process Improvement	Business Process Reengineering
Potential business value	Low-Moderate	Moderate	High
Project Cost	Low	Low-Moderate	High
Breadth of Analysis	Narrow	Narrow-Moderate	Very Broad
Risk	Low-Moderate	Low-Moderate	Very High

Figure 2-2 - Characteristics of Analysis Strategies (Dennis & Wixom, 2003)

2.1.2.2 Information Gathering

In order for a new system to be adequately designed information must be gathered regarding the current “as-is” system. This is a critical step in the analysis phase; unforeseen requirements can result in the necessity to completely rethink or redesign the system during its

later stages of development. There are a variety of techniques associated with information gathering, which include interviews, joint application development, commonly referred to as JAD, surveys, document analysis and observation. In the interest of our project we will discuss the following information gathering techniques: interviews, JAD, and surveys (Dennis & Wixom, 2003).

2.1.2.3 Interviewing

The process of interviewing is the most commonly used technique for information gathering. Although interviews are ideally conducted in a one-on-one setting, in the interest of time interviews may often be conducted with several people being interviewed at the same time. The first step one must take in order to gain insight into the organization, or gather information the individual wishes to seek is to select interviewees. This should result in the creation of an interview schedule, which clearly defines the individuals selected for an interview, the location that the interview will take place, and the date/time of the interview. Individuals typically chosen for the process of interviewing are the project sponsor, key business users, and other members of the organizations staff that can help assess the current standing of the system and provide clear insight and understanding into the requirements needed within the newly developed system.

The second step to the interviewing process is question design. There are three broad categories of questions used during an interview, closed-ended, open-ended and probing questions. Closed-ended questions result in qualitative answers, meaning that there are only a few options for the interviewee to choose from when answering the given question. Open-ended questions allow the interviewee to iterate their ideas pertaining to the question. Finally, probing questions are used when the interviewer would like for the interviewee to further elaborate on a

given answer or idea that has been stated by the interviewee. The questions chosen by the analysts should pertain to all three categories in order to provide the analysts with substantial data to provide insight and understanding into the organization and the system that is currently in place as well as the new system's requirements and functionalities (Dennis & Wixom, 2003).

After the analysts have designed their questions they must prepare for the interview by understanding the information that they wish to seek through the interview. The analysts must also understand the position held by the interviewer and their associated responsibilities within the organization. Although the analysts will be given further insight into the interviewee's role from the interview, the analysts want the interviewer to feel that their time was well spent. After the interview is conducted, the analysts should report their findings and make documentation of the data that they have acquired. Through their documentation, the analysts will be able to compile their data and further define the requirements of the new system.

2.1.2.4 Joint Application Development

Joint Application Development, commonly referred to as JAD, is an information gathering technique, which allows the project team, system users, and the organization's management staff to work together to identify the requirements of the system. In order to conduct a JAD session participants must be chosen in a similar technique to that of choosing interviewees. JAD sessions can be very beneficial in requirements gathering because it allows for a key group of individuals to sit down and iterate their ideas pertaining to the system. The downside to a JAD session is that it is typically attended by key figures within the organization, meaning that these individuals must schedule time out of their day to attend the session. Therefore, JAD sessions can be quite expensive for the organization to host because they require the time of these key individuals. Like the interviewing process, JAD sessions typically follow a

formal schedule in order to ensure that time is well spent within the session (Dennis & Wixom, 2003).

2.1.2.5 Surveys

A survey is a set of written questions design by the analysts in order to obtain needed information from a large number of interviews. Although this information is just as important in the process of requirements gathering as that of an interview, the individuals receiving the survey are typically not internal members of the given organization. When designing a survey the analysts must select a given sample, or subset, of individuals to receive the survey and also decide what specific information they wish to acquire through the participation of the sample.

When designing the survey the analysts must consider the fact that participants are not required to complete the survey and therefore questions must be designed in a way to make the survey quick and easy for a given participant to complete. Once the survey is designed then the analysts must administer the survey to the subset. There are a few techniques used by systems analysts to increase the participation rate of a given survey or questionnaire, these techniques include personally administering the survey, and personally contacting the individuals who chose not to participate in the survey and asking them if they could take the time to participate. Once the completed surveys start returning to the analysts it is then necessary for the team to begin documenting the responses and consolidating the data (Dennis & Wixom, 2003).

2.1.2.6 Process Modeling

A process model is a way to depict and describe a given business process. There are a three primary process models used by systems analysts to describe the associated business processes as well as the system design of a given organization. The first of the three process models is referred to as a data flow diagram, commonly abbreviated DFD. A DFD is broken

down into four components of the system; entities, processes, data stores and data flows. These diagrams can also be broken down into different levels of detail; the level zero diagram would be a broad and general overview of the system, with each process being further specified as the diagrams level ascends (Dennis & Wixom, 2003).

2.1.2.7 Data Modeling

A data model is used to describe how the data will be stored in a given system. There are two categories of data models, logical and physical. The logical model is used to describe the logical organization of the data, yet this model does not describe how the data is actually created, stored or accessed within the system. Contrary to the logical model, the physical model shows how the data will physically be created, stored and accessed from the system.

The most common type of logical data model is referred to as an entity relationship diagram, or ERD. An ERD is used to describe how the data will be stored within the given system and how the data will tie together and interact within the system. The diagram depicts the relationships between different categories of data, called entities. There are three major types of relationships used to describe these associations between the data stored in a system; one to one, one to many and many to many (Dennis & Wixom, 2003).

2.1.2.8 Use-Case Analysis

Once the requirements for the new system have been defined, the analysts must then build use-cases around these requirements. A use case is a set of activities that result in a desired output from the system. Each use case should be created to demonstrate how the system reacts to a trigger and what the outcome of that specific trigger will be. This type of analysis can be described as event-driven modeling, if there are no events happening than the system is at rest and when an event occurs the system reacts with the individuals working alongside of the

system. Each use case contrived by the analysts will be documented with a moderately complete description of all the activities and processes that result from a given trigger. This documentation can be broken down into three main sections: basic information, inputs and outputs, as well as the details surrounding the given use case (Dennis & Wixom, 2003).

2.1.3 Design

After the completion of the planning and analysis phases, it is time to create the blueprint for the new system. The design phase of the SDLC is when the team decides how they will move from their logical ideas of the system to the physical design of the system. The transition from the analysis phase to the design phase should be smooth, provided the previous two phases were completed properly. The analyst of the project begins the design stage with a decision to make regarding how the group will handle the design of the system.

2.1.3.1 Selecting a Design Strategy

The three main options for the analyst are to 1) develop a custom in-house system, 2) purchase a packaged system and customize it if they choose, or 3) outsource the design of the system to an external vendor (Dennis & Wixom, 2003). Selecting which design strategy is right for a specific business or business need is crucial to the final outcome of the system. When deciding which strategy the team is going to use they need to look at their business need, in-house experience, project skills, project management, and the time frame which are all shown in Figure 2-3.

	When To Use Custom Development	When To Use A Package System	When To Use Outsourcing
Business Need	The business need is unique	The business need is common	The business need is not core to the business
In-House Experience	In-House functional and technical experience exists	In-House functional experience exists	In-House functional or technical experience does not exist
Project Skills	There is a desire to build in-house skills	The skills are not strategic	The decision to outsource is a strategic decision
Project Management	The project has a highly skilled project manager and a proven methodology	The project has a project manager who can coordinate vendor's efforts	The project has a highly skilled project manager at the level of the organization that matches the scope of the outsourcing deal
Time Frame	The time frame is flexible	The time frame is short	The time frame is short or flexible

Figure 2-3 - Choosing Design Strategy (Dennis & Wixom, 2003)

2.1.3.2 Custom Development

Custom development is the option that allows for the most freedom during the design phase of the SDLC. The developers and users have complete control over what the system looks like and how it is going to function. It is important to remember that the system is usually put into place to solve a business problem or need and custom development really allows for the developers to be innovative in the way they choose to solve that business problem or need because they are the deciding factor when it comes to the final product.

In addition to allowing innovation and creativity for the developers, it makes the system much easier to update and change in the future. While building the system in-house the developers work with the users directly, gain more knowledge on the business, and become more able to align technology systems with the needs of the business (Dennis & Wixom, 2003). Custom development is, however, time consuming and requires a great deal of effort. Obstacles

can arise and time delays can occur when you are trying to develop a system in-house, but that is a price some pay to have a customized system. Although having a custom system may be ideal or necessary for a business, some businesses merely need generic software to solve their problems.

2.1.3.3 Packaged Software

Packaged software has already been developed and is available commercially for any business. These software packages serve a great variety of basic business needs from payroll to accounting and can help the business to run smoothly and efficiently. In addition to being readily available, the software is typically inexpensive and easy to use. An enterprise resource planning (ERP) application is an example of what is known as an all-encompassing system which can be installed to automate an entire business (Dennis & Wixom, 2003). These systems tend to be much more expensive than a smaller system that would only handle one business function. Although packaged software may seem like the easiest solution, there are problems that come with them.

When a business purchases the packaged system from a vendor, they are accepting only the functionality that is provided by the system which is often times hard to match to the exact requirements of the business. Harm can come to a business that lets technology drive the way it does business. Technology should support the business, not dictate it. If there is no technology to fit a particular business need the best solution is customization or manipulation of the system to shape it to the business needs. The company can tailor the system taking the benefits of customization and adding them to the benefits of packaged software. In addition to customization of the packaged software, the business may also choose to create a custom add on known as a workaround. The workaround is developed in-house but works hand in hand with

the packaged system but can be a problem when issues arise or changes are made to the entire packaged system (Dennis & Wixom, 2003).

If a business does not want a custom system or a packaged system, it can select systems integration. Systems integration is the combination of packaged software, existing legacy systems, and new software written to integrate everything. This is a great way to take what you already have and adapt it with a packaged system to fit the needs of the business. In most cases, the company will purchase new software, and then outsource the development involved with integrating the old and new systems together.

2.1.3.4 Outsourcing

If a business is trying to develop a new system with the lowest use of company resources, outsourcing is their best solution. Often time's companies choose to outsource because they do not have the technical knowledge necessary to create a system that meets all of their requirements or they just do not have the time or resources to complete the system on their own. The clear disadvantages of outsourcing are the possible release of some confidential information, miscommunication during the design and once the project is complete and handed off, maintenance of the system may be overlooked and cause future problems (Dennis & Wixom, 2003). Outsourcing is a great solution if the business is trying to save time and resources but they need to first understand that the system development is out of their hands and issues may arise.

Once a design strategy has been decided upon the design process can continue. There are multiple steps to the design phase of the SDLC which include the physical design, architecture design, interface design, database and file design and finally program design (Dennis & Wixom, 2003). We will first discuss the physical design step of the design phase.

2.1.3.5 Physical Design

As we discussed in the analysis phase, the data flow diagrams (DFDs) and entity relationship diagrams (ERDs) are crucial to how the system will turn out. In this phase, the focus is on transitioning the DFDs and ERDs from the logical stage to the physical stage. When converting a logical DFD to a physical version, you must add the components of implementation reference, human-machine boundary, system related data stores, data flows and processes, and updated data elements within the data flows. This information is required to visually show how the processes, data stores, and data flows of the system will be implemented in the final system. The main purpose of this conversion is to show the gap between the manual sections of the system and the automated sections of the system. The conversion from logical to physical continues with the ERDs.

When converting an ERD from logical to physical you must take into consideration several factors. The entities of the logical ERD must be changed to reflect the files or tables that will be used to store the data, the attributes need to be changed into fields (columns in the tables), add primary keys and foreign keys to show how the tables relate, and system related components need to be added to show the balance between the DFD and ERD. This conversion is used to give the ERD a more realistic look. The relationships are clear, the system related components are included, and it shows how the system is going to work.

2.1.3.6 Architecture Design

Once the ERDs and DFDs have been converted it is time to work on the architecture design. The physical DFD and ERD have given a clearer image of the system but to get an even better idea of what the system will consist of. The entire system is represented in this stage by the hardware, software and communications infrastructure that are going to be used. In order to

start the architecture design a decision needs to be made regarding the computing architecture that will be used. The options available for the computing architecture include server-based, client-based and client-server based (Dennis & Wixom, 2003).

A server-based architecture revolves around a server which can perform data storage (where the data is stored), data access logic (accessing the data), application logic (logic documented in DFD), and presentation logic (user interface). The only difference between the server-based and client-based architecture is that on a client-based architecture there is no server used, information can just be stored on a client computer that acts as a server. The client-server based architecture is an attempt to balance the processing between the client and the server. In this architecture the client is responsible for the presentation logic and the server is responsible for the data access logic and the storage of the data. The application logic can be on either side or split up evenly between the two. Many organizations are moving toward client-server architectures due to the scalability which essentially means it is easy to increase or decrease the storage and processing capabilities of the servers (Dennis & Wixom, 2003). Once the architecture is decided, one of the most important stages of design takes place, the design of the user interface.

2.1.3.7 Interface Design

The purpose of the interface design is to show how the system will interact with external entities such as the customer, suppliers or essentially whoever will be using the system. The overall goal in designing the user interface is to make it pleasing to the eye, easy to use and navigate and overall, minimize the effort that users need to put forth to accomplish their work. You want the user to be able to use the system intuitively and require a minimal amount of thinking on their part. The basic principles that need to be taken into consideration during the

interface design include the layout, content awareness, aesthetics, user experience, consistency, and minimal user effort. All of these principles are clearly outlined in Figure 2-4.

Principle	Description
Layout	The interface should be a series of areas on the screen that are used consistently for different purposes – for example, a top area for commands and navigation, a middle area for information to be input or output, and a bottom area for status information
Content Awareness	Users should always be aware of where they are in the system and what information is being displayed.
Aesthetics	Interfaces should be functional and inviting to users through careful use of white space, colors, and fonts. There is often a trade-off between including enough white space to make the interface look pleasing without losing so much space that important information does not fit on the screen.
User Experience	Although ease of use and ease of learning often lead to similar design decisions, there is sometimes a trade-off between the two. Novice users or infrequent users of software will prefer ease of learning, whereas frequent users will prefer ease of use.
Consistency	Consistency in interface design enables users to predict what will happen before they perform a function. It is one of the most important elements in ease of learning, ease of use, and aesthetics.
Minimal User Effort	The interface should be simple to use. Most designers plan on having no more than three mouse clicks from the starting menu until users perform work.

Figure 2-4 - Interface Design Principles (Dennis & Wixom, 2003)

When the design phase begins the analyst needs to think of the use scenarios that are used to show common actions that will be performed by the system. They do this by examining the DFDs and use cases first and then develop what is known as an interface structure diagram (ISD) such as the one shown in Figure 2-5. The ISD defines the basic structure of the interface, how all the screens are connected, and is based off of the DFDs previously created. The next elements to be designed are the interface standards. These standards are the basic design elements on which interfaces of the system are based. All of the previously discussed elements are brought together to complete the interface design prototype which is eventually evaluated using heuristic evaluation, walk-through evaluation, interactive evaluation or formal usability testing.

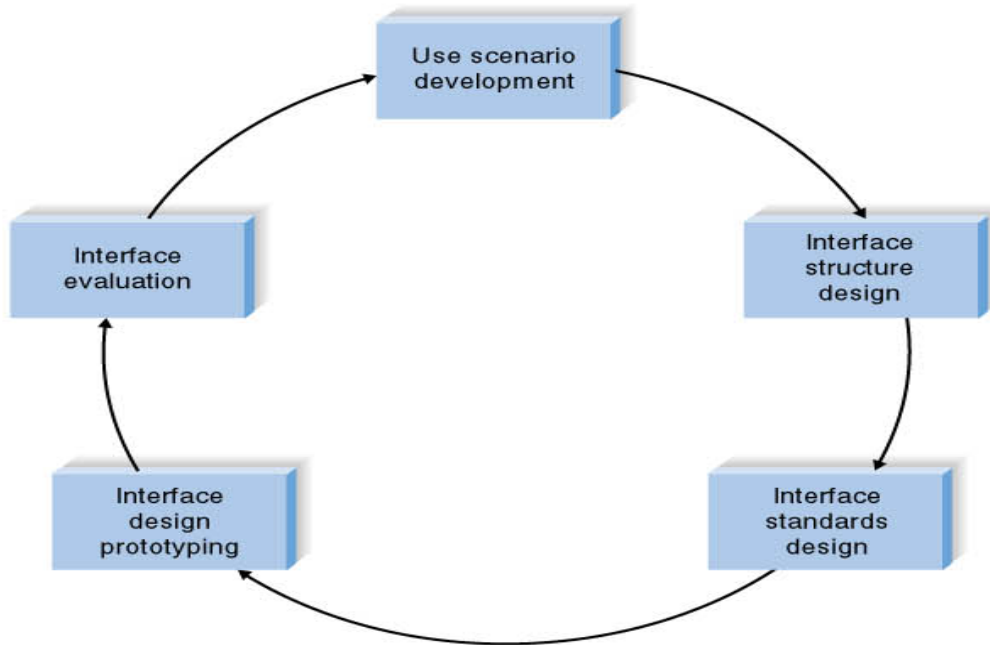


Figure 2-5 - Interface Structure Diagram (Dennis & Wixom, 2003)

Heuristic evaluation is basically evaluating the system based on a comparison to a set of heuristics or principles for interface design. The team must develop a list of these heuristics and if the interface can pass them all, it can pass evaluation. A walk-through evaluation takes it one step further and allows for the team to walk-through each component of the system. The team can show how the system will be used and uses the feedback gained to make any necessary changes. Interactive evaluation is similar but allows users to actually interact with the system and work one on one with project team members. Again the feedback gained is used to make any necessary changes. Formal usability testing is extremely formal and is a very scientific process that usually takes place when products are developed by large corporations (Dennis & Wixom, 2003). It is very important that the interface be evaluated before the final product is produced.

In addition to the way the interface looks and feels, you must consider how the user is going to navigate through the system. Some basic principles to consider are prevention of mistakes, simple recovery if those mistakes do occur, and the use of consistent grammar order. These principles must be taken into consideration as well as what types of controls you will use for navigation. One of the most popular types of navigations is the use of a menu. There are several types of menus and they each have their own time to be used. Figure 2-6 outlines the several different types of menus as well as when they should be used. Once the interface design is complete it is now time to work out the database and file design of the system.

Type of Menu	When to Use	Notes
Menu Bar List of commands at the top of the screen. Always on screen.	Main menu for system	<ul style="list-style-type: none"> Use the same organization as the operating system and other packages Menu items are always one word, never two Menu items lead to other menus, rather than performing action Never allow users to select actions they can't perform (instead use grayed out items)
Drop-Down Menu Menu that drops-down immediately below another menu. Disappears after one use.	Second level menu, often from menu bar.	<ul style="list-style-type: none"> Menu items are often multiple words Avoid abbreviations Menu items perform action or lead to another cascading drop-down menu, pop-up menu or tab menu
Hyperlink Menu A set of items arranged as a menu, usually along one edge of the screen	Main menu for Web-based system	<ul style="list-style-type: none"> Most users are familiar with hyperlink menus on the left edge of the screen, although they can be placed along any edge Menu items are usually only one or two words
Embedded Hyperlinks A set of items embedded and underlined in text.	As a link to ancillary, optional information	<ul style="list-style-type: none"> Used sparingly to provide additional information because they can complicate navigation Usually open a new window that is closed once the action is complete so the user can return to the original use scenario
Pop-up Menu Menu that pops-up and floats over the screen. Disappears after one use.	As a shortcut to commands for experienced users	<ul style="list-style-type: none"> Often (not always) invoked by a right-click in Windows-based systems Often overlooked by novice users, so usually should duplicate functionality provided in other menus
Tab Menu Multi-page menu with one tab for each page that pops-up and floats over the screen. Remains on screen until close	When user needs to change several settings or perform several related commands.	<ul style="list-style-type: none"> Menu items should be short to fit on the tab label Avoid more than one row of tabs because clicking on a tab to open it can change the order of the tabs and in virtually no other case does selecting from a menu rearrange the menu itself
Tool Bar Menu of buttons (often with icons) that remains on the screen until closed.	As a shortcut to commands for experienced users.	<ul style="list-style-type: none"> All buttons on the same tool bar should be the same size If the labels vary dramatically in size, then use two different sizes (small and large) Buttons with icons should have a tool tip— an area that displays a text phrase explaining the button when the user pauses the mouse over it.
Image Map Graphical image in which certain areas are linked to actions or other menus	Only when the graphical image adds meaning to the menu	<ul style="list-style-type: none"> Image should convey meaning to show which parts perform action when clicked Tool tips can be helpful

Figure 2-6 - Menu Options and Use (Dennis & Wixom, 2003)

2.1.3.8 Database and File Design

The next step in designing the system is deciding where all of the data is going to be stored. The two basic types of data storage formats are files and databases. Files are the simplest way to store data and they are simply electronic lists that have been optimized to perform a particular transaction (Dennis & Wixom, 2003). The type of file varies based on what type of information they are storing. Some files are kept for longer periods of time and some are kept for shorter periods of time depending on what type of information it is and how important that information is to the business. Databases are more complex and store information in groups that relate to each other in some way. The different types of databases include legacy, relational, object and multidimensional.

The selection of the database is dependent on the data that is stored on a particular system. Simple data is better stored in a relational database whereas complex data is best stored on object databases. Essentially, the data should drive which database is used, not the other way around. Choosing the correct data storage method can determine whether or not the system will function properly. The final part of the design phase, program design, is now ready to begin.

2.1.3.9 Program Design

The last stage of design takes place when an analyst creates a model of the program to give to the programmer to write the code for. The approach to this stage in theory should be “top-down” and “modular” (Dennis & Wixom, 2003). Planning ahead is key and the end product could be a system that is very difficult to maintain if planning is not done properly. The instructions written for the programmer need to be broken up into separate entities and then put together afterwards. The reason for this is simple, if one entity does not function properly; only that one entity needs to be redesigned as opposed to the entire system.

The best way to do this is to create what is known as a structure chart. This three step process breaks the system down into modules that perform one single function in the system. The three basic steps include 1) identifying the modules and levels, 2) add special connections to the chart, and 3) add couples to the chart (Dennis & Wixom, 2003). This is a great visual aid to see top-down how the system is going to work from module to module.

Pseudocode can also be used for designing programs without actually coding. Pseudocode is a structured language that can assist the programmer with the coding being that it is a generic way of saying what needs to be programmed and can be done by the programmer in any language they choose. Once the program design is finished, the design stage is complete. All that is left to do is implement the system which can sometimes be a challenge but if approached correctly it should run smoothly.

2.1.4 Implementation Phase

The Implementation Phase is the final phase of the SDLC, during this phase the system is actually constructed and implemented. However the role of the systems analyst does not end once the system has been implemented; the employees of the organization must be trained to use the system, and the system must be debugged to ensure that, upon the completion of the project, the business is receiving the exact product that they agreed to within the system proposal. Although the role of the business analyst is not to program the actual system, the analysts must manage and coordinate the coding of the system to ensure that the program stays on-schedule. Due to the fact that our team will be acting as both the systems analysts and the programmers, a brief overview will be discussed regarding this phase of the SDLC.

2.1.4.1 Construction

The programming and coding process must be managed in order to keep the project on schedule. Aside from this management, the system must also be tested to ensure that all the functions of the given system are working properly before the system is actually implemented. The system must also be thoroughly documented; documentation is broken down into two very different categories. The first is the system documentation, which describes the technical backend of the system. This documentation will be a resource for the programmers and the systems analysts after the installation of the system, so that the system can be easily maintained, expanded and even altered. The second type of documentation is the user documentation. This document is similar to a user manual, which will be a major resource for the users of the system rather than the technical support of the system (Dennis & Wixom, 2003).

2.1.4.2 Installation

The migration of the system and the conversion from the old system to the new is a major step in the Implementation Phase of the SDLC. As stated by Machiavelli in his piece *The Prince*, written in 1513, "...there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system." There are two different conversion styles: direct conversion and parallel conversion.

Direct conversion is when the new system instantly replaces the former system. This technique is typically used with commercial software conversions, for although it is the simplest conversion, it is undoubtedly the riskiest. Parallel conversion is when the old system is operated along side of the new system. This requires users to input data into the old system and then into the new system to ensure that the data will be successfully stored while the user is learning to use

the new system. Parallel conversion usually takes one to two months until the old system is completely shut down (Dennis & Wixom, 2003).

When choosing one of these conversion styles there are three major characteristics, which should be assessed by the analysts; risk, cost and time. The advantages and disadvantages of the system can be easily compared and contrasted in the diagram used by Dennis and Wixom's, *Systems Analysis and Design*, shown in Figure 2-7. The diagram allows the analyst to examine the differences between conversion styles, conversion location, and conversion modules. These three categories are examined in terms of their risk, cost and time. Risk can be defined by the chances that the given system conversion is a failure; failure can be the system itself not working correctly and financial limitations. A high risk would mean that there is a good chance that the projects conversion could result in the implementation of a poor system: non-functional or even a lack of training for the end users, which ultimately result in a failure to utilize the new system. These factors can all contribute financially to the project becoming over-budget. A low risk project would have a slower conversion allowing minor functionalities to be added, deleted, and debugged before the company is relying on this system to conduct their daily operations. Cost is simply the amount of money budgeted to the completion of the associated project. The third characteristic analyzed is the time allotted to complete the project. If the conversion must be completed in a matter of months, this would be defined as a short time period. A long time period allotted for a conversion would typically be defined in a matter of years.

Characteristic	Conversion Style		Conversion Location			Conversion Modules	
	Direct Conversion	Parallel Conversion	Pilot Conversion	Phased Conversion	Simultaneous Conversion	Whole-System Conversion	Modular Conversion
Risk	High	Low	Low	Medium	High	High	Medium
Cost	Low	High	Medium	Medium	High	Medium	High
Time	Short	Long	Medium	Long	Short	Short	Long

Figure 2-7 - Conversion Chart (Dennis & Wixom, 2003)

2.1.4.3 Change Management

When a system is undergoing a major conversion, one must always expect resistance to the change. The important thing is to learn how to manage this resistance and inspire those being resistant to accept the change. This is not an easy task, however through user training and the constant iteration that the new system should lighten the work load of the employees at a given organization, the analysts can create a smoother integration of the system (Dennis & Wixom, 2003).

2.2 Systems Development Methodologies

To begin this project we first needed to choose which development methodology best suited the USDC of RI website redesign. In order to do that, we needed to analyze the different methodologies available and find the most appropriate one for this project. There are different methodologies that are structured differently. The first category that we examined is the structured design category.

2.2.1 Structured Design

Structured design methodologies follow a formal step by step version of the Systems Development Life Cycle. The project moves logically from one phase to the next and is simple to follow. One example of a structured design is the waterfall method. Waterfall development works in a simple way where the key deliverables are created for each phase, one at a time.

These deliverables are typically put onto paper and passed off to the project sponsor who then approves them before the development team moves onto the next phase of the project. Waterfall development has some advantages as well as disadvantages that pertain to the development of a system (Dennis & Wixom, 2003).

2.2.1.1 Waterfall Development

One of the biggest advantages of waterfall development is that the planning helps to identify the requirements of the system much sooner than the programming actually begins (Figure 2-8). This minimizes the changes that may need to be made in the future stages of the project. It is much easier to identify any problems and requirements early on in the life cycle to save time and hassle. On the contrary, the disadvantages can be costly to the development of the project as well. In waterfall development, the design must be completely specified on paper before any programming can begin. This is a problem because requirements can often times be overlooked and even missed when they are simply on paper. It is going to take more time and money to fix these problems post-implementation which no one wants to do. Overall waterfall development is a simple methodology that is easy to follow, gathers the requirements early on and follows a simple step by step process (Dennis & Wixom, 2003).

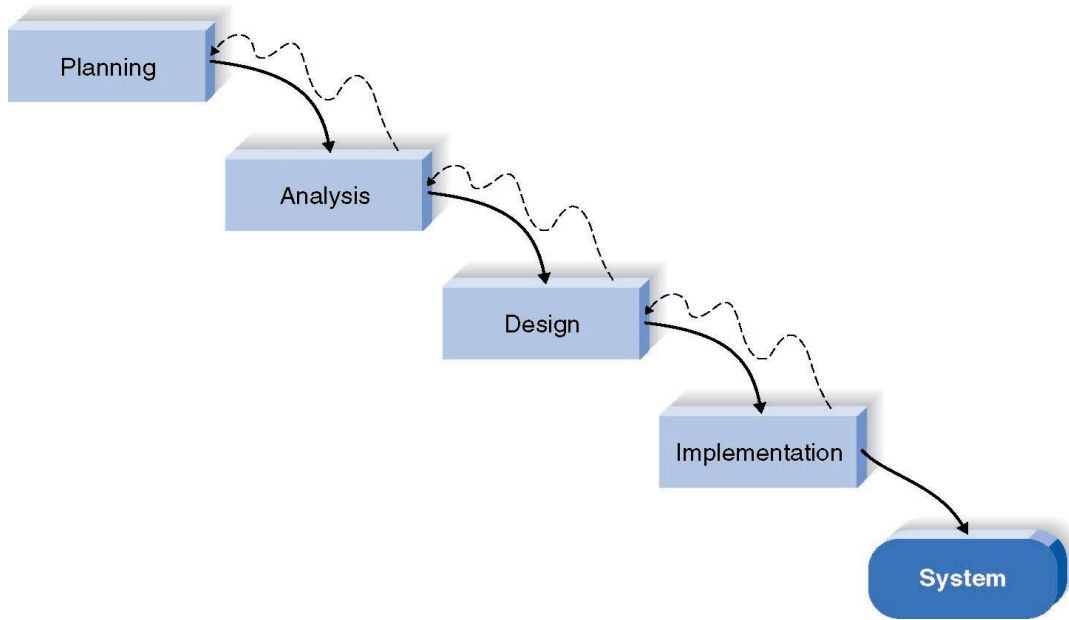


Figure 2-8 - Waterfall Development Methodology (Dennis & Wixom, 2003)

2.2.1.2 Parallel Development

Another structured design approach is parallel development which is similar to waterfall but attempts to reduce the time it takes to move from analysis and planning to the actual implementation of the system (Figure 2-9). Parallel development moves from analysis to design but breaks up different components of the system into sub-projects. This way everything can be developed simultaneously and then brought together to produce the final system during implementation. As stated before, the main advantage is the reduction of time it takes for the system to be completed. However, sometimes changes made to one sub-project may affect another sub-project and this can turn into an issue (Dennis & Wixom, 2003).

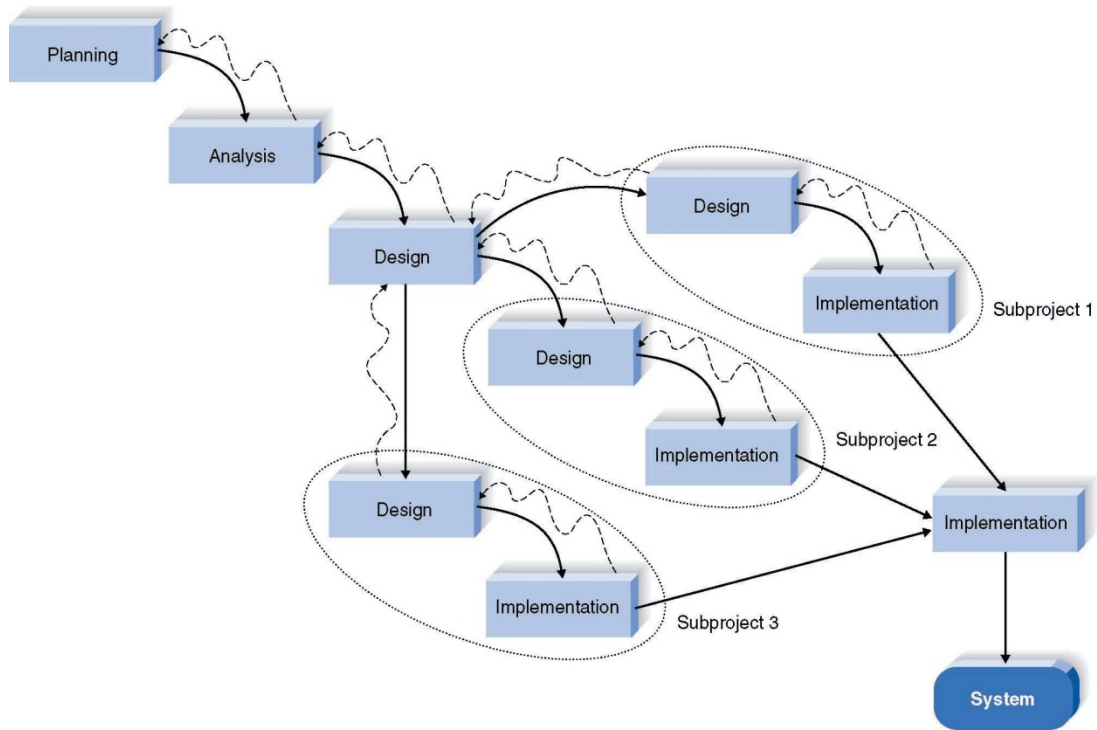


Figure 2-9 - Parallel Development Methodology (Dennis & Wixom, 2003)

2.2.2 Rapid Application Design

Moving away from structured design, another category, which is newer, is rapid application design (RAD). RAD attempts to eliminate the weaknesses of structured design which include the long length of time it takes to complete the system and the difficulty that comes along with understanding everything that is on paper. RAD tries to complete one part of the system and get it into the hands of the users as soon as they can. This way they can fix problems that arise, let the users understand how the system works, and allow for suggestions from the users on what they want to see in the final product of the system (Dennis & Wixom, 2003).

2.2.2.1 Phased Development

The first type of RAD is the phased development methodology (Figure 2-10). This methodology uses different versions of the system until the system is complete per the opinion of the project sponsor or the users. Planning and analysis take place first like in structured design, however once the basic requirements are gathered, they begin the design and implementation of that version. The version is completed and handed off to the users for them to try out. Work begins immediately after the completion of version one based on new requirements found in the first version and what the users have to say about their experience with it. Although the first version does not provide total functionality, it adds value to the business and lets the users basically test drive the final system. Some think that it is of no use to use a system that is incomplete, which is why it is important to find the most useful features and include them in the first version (Dennis & Wixom, 2003).

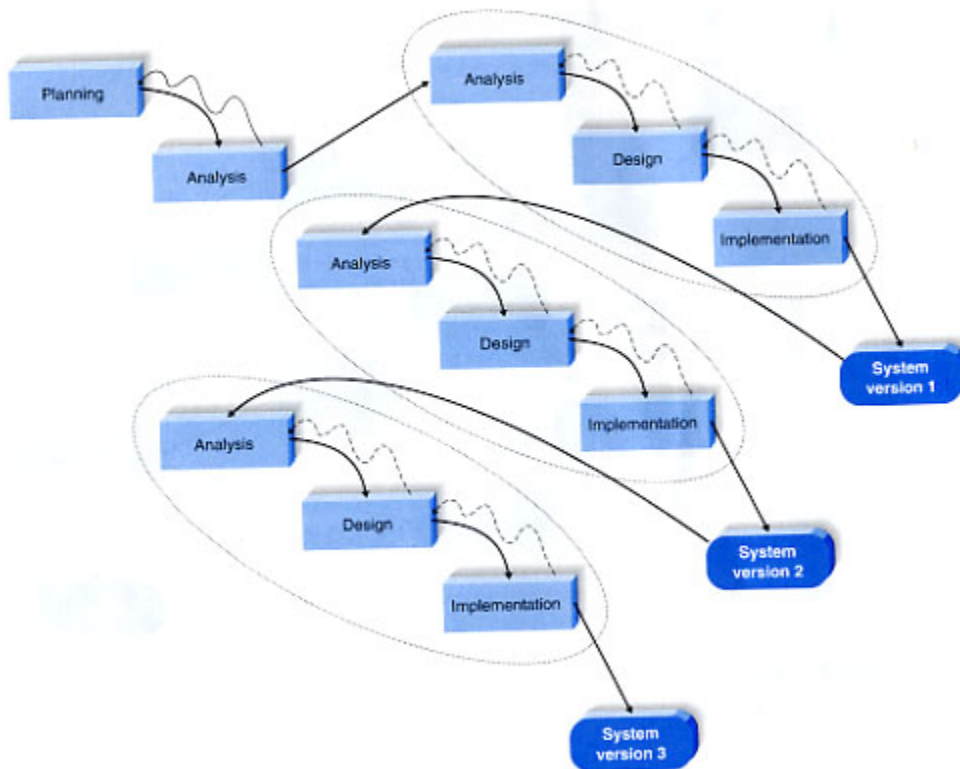


Figure 2-10 - Phased Development Methodology (Dennis & Wixom, 2003)

2.2.2.2 Prototyping

Similar to the phased methodology is prototyping (Figure 2-11). Prototyping is similar to phased in that the point is to get a version to the users and business as soon as possible. However, in prototyping the analysis, design and implementation are bundled and performed at the same time. Very basic analysis and design is completed and work immediately begins on the first prototype. There is a minimal amount of features included in this first prototype which is handed off to the project sponsor and users who provide comments and concerns to be used in the development of the next prototype. The version is not spread organization-wide like in phased development but instead it is given to several users very quickly allowing them to give feedback and insure that work is being done on the system. If the system is complex,

prototyping can run into issues because fundamental problems are often times not found until late into the design stages (Dennis & Wixom, 2003).

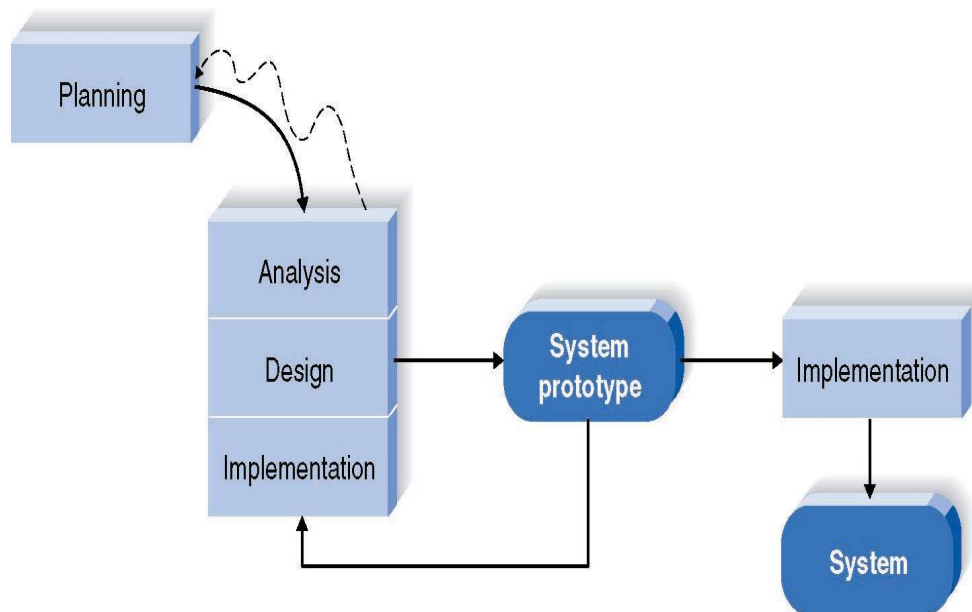


Figure 2-11 - Prototyping Development Methodology (Dennis & Wixom, 2003)

2.2.2.3 Throwing Prototyping

Throwaway prototyping develops prototypes just like the previously discussed methodology but the prototypes are completed during different times of the lifecycle (Figure 2-12). Unlike prototyping, a thorough analysis stage is completed before any design takes place. The design team then comes up with a design prototype which is not a working prototype but shows the users and sponsor how the system will work. If the users find issues, they are resolved and the prototype is thrown away. Overall it helps to resolve key issues before the final design and implementation stages which usually results in a stable and reliable system (Dennis & Wixom, 2003).

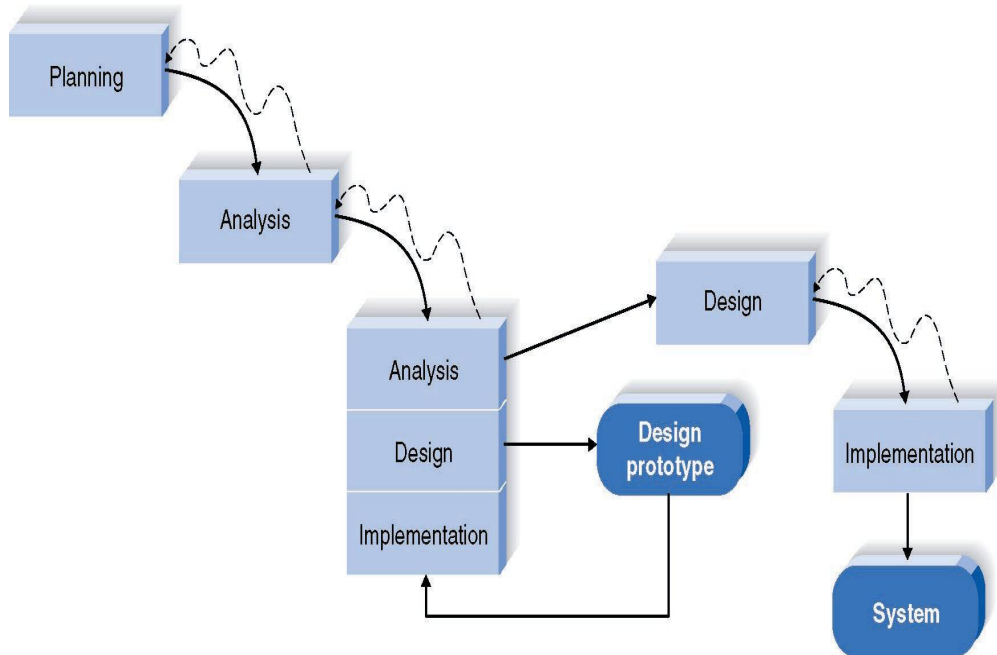


Figure 2-12 - Throwing Prototyping Methodology (Dennis & Wixom, 2003)

2.2.3 Agile

The final category of methodologies is agile development which has only been recognized recently. Agile development is heavily focused on the programming aspect of the development lifecycle. A great example of agile development is extreme programming (XP) (Figure 2-13). XP typically begins with the developers receiving user stories which tell them what the system is going to be used to do. The coding begins immediately and the functionality of the system grows over the specified time period. This methodology is perfect for a project with a shot time line as it allows for development to begin right away and gets a functional version of the system out in a much shorter time period that both RAD and structured design (Dennis & Wixom, 2003).

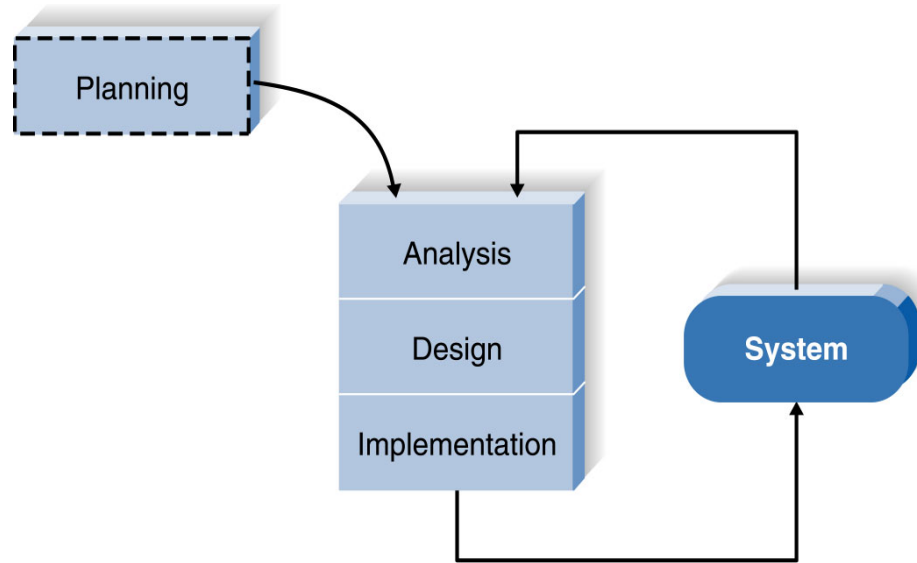


Figure 2-13 - Extreme Programming Methodology (Dennis & Wixom, 2003)

2.2.4 Deciding on the Best Methodology

In deciding the best methodology to use it is important to examine all the possible methodologies and determine which one best fits your needs for the specific project. By selecting the correct methodology, you can ensure the project runs smoothly. As you can see in Figure 2-14, there is a lot to take into consideration, mainly time, how clear the requirements are, the complexity of the system and so forth when determining the best methodology to follow. There are three basic ratings for how well the methodology fits a project: poor, good, and excellent. You can use the chart to match up your project to a methodology that is shown to have good or excellent ratings for the specifications of the project.

Ability to Develop Systems	Structured Methodologies			RAD Methodologies		Agile Methodologies
	Waterfall	Parallel	Phased	Prototyping	Throwaway Prototyping	XP
With Unclear User Requirements	Poor	Poor	Good	Excellent	Excellent	Excellent
With Unfamiliar Technology	Poor	Poor	Good	Poor	Excellent	Poor
That are Complex	Good	Good	Good	Poor	Excellent	Poor
That are Reliable	Good	Good	Good	Poor	Excellent	Good
With a Short Time Schedule	Poor	Good	Excellent	Excellent	Good	Excellent
With Schedule Visibility	Poor	Poor	Excellent	Excellent	Good	Good

Figure 2-14 - Recommendations for Deciding on the Proper Methodology (Dennis & Wixom, 2003)

2.3 Human-Computer Interaction

In addition to selecting an appropriate methodology, for the project, an important aspect of this particular project due to its user interface was Human Computer Interaction. Human Computer Interaction (HCI) consists of three major components: a human, a computer/website, and the interaction between the two. HCI examines the planning and design of what happens when humans interrelate with machines and if the interaction is effective and useful. In order to develop a website that fits the needs of the public and the district court employees HCI must be applied through-out all processes. The goal of HCI is to aid in the construction of new websites and provide the users with a functional and pleasant experience. With the basic principles of HCI the website will allow the users to execute their tasks, whether it be research or browsing, without running into difficulties. In order to accomplish this, the three major components of HCI and the Universal Principles of Design must be understood.

2.3.1 The User, the Computer, and the Interaction

The term ‘user’ refers to any person or group using the website. The website should be created to cater to the user’s needs and capabilities which will vary depending on many factors

such as education, age, etc. One thing that will remain the same is the fact that humans can only process small amount of information at a time which will come into play when designing the website interface and deciding on the placement of links. The system in this case was the USDC of RI website which became a major information portal for various users. After assessing the needs and capabilities of the users the website needs to support these needs in terms of memory, aesthetics and user-friendliness. The interaction serves as a results monitor. If the interaction remains positive, the site is visited frequently and users are accomplishing their tasks with ease, then the site is deemed user-friendly and safe to users. In order for this to happen a few basic principles need to be applied to the design of the website.

2.3.2 Universal Principles of Design

The Universal Principles of Design are principles that were derived for designers to develop a thriving and functional plan, in this case, a website. They allow for designers to continually check the status of their website. Within Universal Principles of Design by William Lidwill and Kritina Holden, these principles were separated into five questions of functionality:

- How can I influence the way a design is perceived?
- How can I help people learn from a design?
- How can I enhance the usability of a design?
- How can I increase the appeal of a design?
- How can I make better design decisions?

2.3.2.1 *How can I influence the way a design is perceived?*

Commonly used principles that answer this functionality question are: Affordance, Color and Consistence. *Affordance* can be described as the physical attributes of an object corresponding with an action or functionality. Microsoft mastered this with the trashcan icon.

The trashcan's affordance is "throwing away", so it only makes sense that users move files or "waste" to the trashcan icon.

The *color* principle applies to the affect of the site and the affect it has on users. Young adults may enjoy brighter colors, but this may not be the case for other generations. Color can also set the mood of the site, i.e. neutral colors for a professional site, soft yet bright colors to promote positivity and happiness.

Last but not least is the principle of *consistency* which refers to keeping similar elements of the website similar. An example of consistency is the "search box" feature found on most websites. These websites use the consistency principle by placing the search box in the top right corner of their website. Most site users automatically look to the top right corner for the search bar.

Other principles that apply are: Closure, Common Fate, Legibility, Uniform Connectedness, and Five-Ground Relationship. These principles may or may not be applied to this system.

2.3.2.2 How can I help people learn from a design?

Although knowing that the design will be perceived in the right way is important, designers need to also make sure users learn from their design. Commonly used principles that can be applied to this functionality are: Advance Organizer, Hierarchy and Forgiveness. *Advance Organizer* is defined as a method that in some way or another provides insight that helps users understand new information in terms of what they already know. There are two types of Advance Organizer: Expository and Comparative. Advance Expository Organizers are used to help users that have no background on the subject being taught. An example for this would be briefly explaining an application and its purpose before teaching users how to use the application.

Advance Comparative Organizers to help users that have are knowledgeable of the subject being taught. An example of this type of organizer is comparing an old applications feature to the newly improved applications features.

Hierarchy is one of the most important principles that can be applied to a system to increase the users understanding of the system. A hierarchy structure is usually categorized under a tree structure, a nest structure or a stair structure. A *tree structure* is a hierarchal structure that is formatted with a parent element branching off into child elements (both left and right). An example of this is a family tree. A *nested tree* is the most effective representation of a hierarchy structure. It is formatted by illustrating the child element within the parent element, such as a Venn diagram. The last category, the *stair structure*, is formatted with the child element below and to the right of the parent element. Examples of this is are an outline or even a drop down menu navigation system for websites.

The *forgiveness* principle states that the application should be designed in a manner that forgives the user if they make an error. Designers do not want to inconvenience the user by providing them with system or website where the user loses all their data after having clicked on a button by mistake. The concept of forgiveness allows for an easier learning curve and lessens frustration for the user.

Other principles that apply are: Depth of Processing, Constancy, Five Hat Racks and Highlighting. These principles may or may not be applied to this system.

2.3.2.3 How can I enhance the usability of a design?

Helping people learn from a design can also mean enhancing the usability of the design. The most commonly used principles for this functionality are: Accessibility, 80/20 Rule, Aesthetic Usability Effect and Attractiveness Bias. The principle of *accessibility* revolves around

guaranteeing that the website is usable at all times by various people with different abilities. A website is considered accessible if it has achieved the four following characteristics: Simplicity, Operability, Perceptibility, and Forgiveness. *Simplicity* is attained when all users of the website can understand its design and content regardless of their experience. *Operability* is attained when all users of the website can understand its design and content regardless of their physical abilities. *Perceptibility* is attained when all users of the website can understand its design and content regardless of their sensory abilities and *forgiveness* was previously described.

The *80/20 Rule* states that 80% of effects of a system or website should be generated by 20% percent of the system or websites features. This rule is useful because it allows designers to focus on the efficiencies of the design. The percentages are not always exact but the purpose of the principle remains. Examples of the 80/20 rule are 80% of a product's usage involves 20% of the products features or 80% of a towns traffic is on 20% of their roads.

The *Aesthetic Usability Effect* principle highlights that most users find aesthetically pleasing sites easier to use than non-aesthetically pleasing sites. Just like the *color* principle, a fresh and appealing design sets the tone and mood for users, allowing them to be more open to the site. A negative mood versus a positive mood results in impatient users and narrow thinking. This principle is usually combined with the *Attractiveness Bias*, because chances are system and website designers will not create a product that aesthetically pleases everyone.

Other principles that apply are: Layering, Mapping and Visibility. These principles may or may not be applied to this system.

2.3.2.4 *How can I increase the appeal of a design?*

Sometimes enhancing the usability of a design means more than fostering some sort of order within the site, it may also mean increasing the appeal of the actual interface. Commonly

used principles that are used to increase the appeal of a design are: Alignment, Proximity, similarity and Exposure Effect. *Alignment* refers to the placement of elements such as links and bullet points. Designers strive to make sure the edges elements line up (in rows or columns). This principle is key because as simple it seems to make sure everything is lined up, it aids to the idea of grouping similar elements, better known as *proximity*, which essentially makes content easier to digest.

The *similarity* principle is using similar elements of a design to help the users recognizing grouping within the system or website. An example of this principle is using one color for all links throughout a website. It helps users identify that a certain colored word belongs to the links functionality.

Other principles that apply are: Exposure Effect, Symmetry, Story-Telling and Aesthetic Usability Effect. These principles may or may not be applied to this system.

2.3.2.5 *How can I make better design decisions?*

Before and after tending to the previous four questions, a designer evaluates the decisions made for the system. The most commonly used principle that identifies whether decisions made for the site were beneficial is the Cost-benefit principle. The *cost-benefit* principle forces the designer to evaluate the idea of a system or website and decide whether its benefits outweigh its costs. This must be interpreted from both the designer's point of view as well as the point of view of the users. The idea is to only be pursued if the benefits outweigh the costs from both aspects. Other principles that apply are: Garbage In Garbage Out, Development Cycle, Redundancy and Accessibility. These principles will most likely be applied to this system.

2.4 Graphic Art Software

Perfecting an appealing design cannot be done without choosing a graphic development application to create and perfect the interface. Graphic art software is used to create basic graphic designs, multimedia development, general and professional photo editing, and specialized image development such as interfaces. Most graphic art software fall under two editor categories: Raster or Vector. Though most graphic art software tries to incorporate some aspects from both editors there is a clear difference between the two. Raster graphic editors are more ideal for creating photorealistic images, retouching photos or creating hand drawn images. Vector graphic editors are more suitable for the creation of logos, flyers, sharp-edged artistic creations such as cartoons, clipart, and complex geometric patterns (Pegg, 2003). This is displayed in Figure 2-15. The two graphic development applications analyzed for the USDC of RI websites are: Adobe Photoshop and Corel Draw.

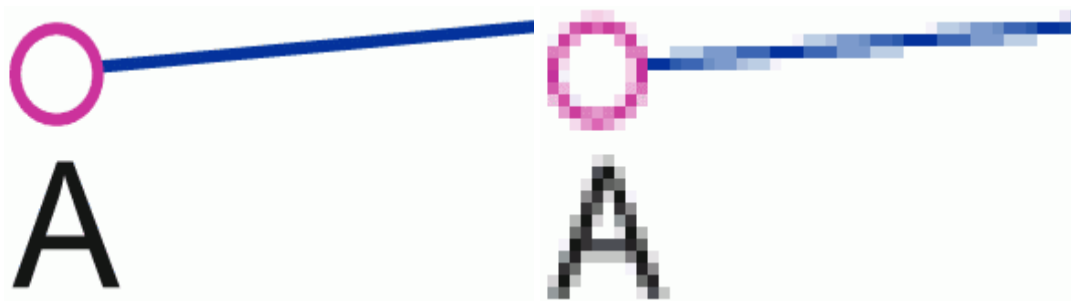


Figure 2-15 - Vector Image vs. Raster Image

2.4.1 Adobe Photoshop

Adobe Photoshop is often seen as the elite graphic development application to date. From its various tools to the multi-purpose services it provides users with “the power and precision they need for superior results” (Adobe Systems, 2008). Even though classified as a raster graphic editor, Photoshop can also perform many of the same functions a vector graphic editor can. With

its newly added 3D engine, its ability to map images, its extended color panel, among other features allows for designers to create both simple and complex interfaces with aesthetically pleasing features. Adobe Photoshop prices range from \$399 to \$699 depending on which suite is purchased and the program can be run on either Windows or Mac. It requires a disk space amount of one gigabyte, along with 512 megabytes of RAM to run smoothly with no freezing moments. Bottom Line, editors and users reviews both state that Adobe Photoshop is a must have for graphic designers.

2.4.2 Corel Paint Shop Pro

Paint Shop Pro, a raster graphic editor, is often seen as the cheaper option to Adobe Photoshop. Its features consist of color management, various image editing tools, and new raster to vector image converter. Its price ranges from \$200 less than the price of Adobe Photoshop, but it can be argued that both software's produce the same quality products. The application works best on Windows, XP or Vista, and requires 200 megabytes hard drive disk space with 256 megabytes RAM. The makers of Corel Draw pride themselves on its easy yet powerful reputation: It is easy enough for beginners to learn use but powerful enough for all vector and image designs.

2.5 HTML Editors

An HTML editor is an application that aids in the creation of websites. HTML editors take the next step up from text editors such as Notepad, by providing users with website management tools and even editing other website related languages. HTML editors include text editor, object editors and WYSIWYG editors. Text editors as previously stated are the simplest form of HTML editors. They usually only edit the HTML language but newer text editor applications include syntax highlighting along with auto-completions and keyword shortcuts.

Object Editors are not commonly used but when they are they contribute to the editing of databases, tables, buttons and so on. They can usually be found within another application. WYSIWYG or *What You See Is What You Get* editors have interfaces and previews that allow you to see you results while you're editing your source code. It is meant to allow those who do not have a large amount of HTML knowledge create and edit a website.

3 Methodology

In this section, we discuss our approach to completing the redesign of the USDC of RI's website. We conducted research on the old USDC of RI website, the Federal Court System, the SDLC, and different methodology options. We also talked to Mr. David DiMarzio, Mr. Barry Weiner and other members of the court about the scope of the project. Based on this research and discussion, we felt that throwaway prototyping was the best methodology to use for this project. We had to get their approval on the design of the sites, so developing prototypes seemed to be the best way to gain that approval.

3.1 Throwaway Prototyping

After analyzing the different types of development methodologies we chose the throwaway prototyping methodology. As we discussed in section 2.2, throwaway prototyping involves a thorough analysis phase before any design begins. We conducted an analysis which included reviews, interviews, surveys, and in-depth research on all aspects involved with this project. Through this methodology our team could develop mock prototypes, site layouts lacking actual functionality, to show the staff at the USDC of RI and get feedback prior to coding. This allowed our team to resolve any issues pertaining to the site's design before the actual design phase of the SDLC began.

In accordance with the table, shown in Figure 3-1 on the following page, we felt that throwaway prototyping best suited our needs. The user requirements were not blatantly clear to us, the exact programming skills were unclear in our group, the website was fairly complex and needed to be reliable, and we had a short 21 week time schedule but that schedule was visible.

Ability to Develop Systems	Structured Methodologies			RAD Methodologies		Agile Methodologies
	Waterfall	Parallel	Phased	Prototyping	Throwaway Prototyping	XP
With Unclear User Requirements	Poor	Poor	Good	Excellent	Excellent	Excellent
With Unfamiliar Technology	Poor	Poor	Good	Poor	Excellent	Poor
That are Complex	Good	Good	Good	Poor	Excellent	Poor
That are Reliable	Good	Good	Good	Poor	Excellent	Good
With a Short Time Schedule	Poor	Good	Excellent	Excellent	Good	Excellent
With Schedule Visibility	Poor	Poor	Excellent	Excellent	Good	Good

Figure 3-1 – Deciding on Throwaway Prototyping

3.2 Planning

The planning phase of this project included identifying the business value that the website will provide to the USDC of RI, analyzing the feasibility of the project, developing the work plan, staffing the project and finally, how we planned to control and direct the project until completion. This portion of the project was crucial to our success and we had taken the proper steps to ensure this success.

3.2.1 Identifying the Business Value

In order to justify the construction of a new site we first needed to identify the business value and show that this re-designed website would provide business value to the USDC of RI. To do this we completed a system request (Appendix A), through which we identified the purpose of the project, whom the key stakeholders were and the necessary functionality of the site. Our project sponsors were Mr. David DiMarzio, the USDC of RI Clerk of Court, and Mr. Barry Weiner, the Chief U.S. Probation Officer for the District of Rhode Island. Mr. David DiMarzio initiated the project and felt there was a need for their website to be redesigned. Mr. Barry Weiner felt that the Probation Office for the District of Rhode Island was in need of a web

presence. Our main liaison with Mr. David DiMarzio and Mr. Barry Weiner was the Administrative Assistant of the Court, Lisa Quartino. All correspondence between our two parties was channeled through Lisa Quartino in order to ensure that all information was correctly delivered to the necessary member of the party.

Due to the vast amount of information that Mr. Weiner wanted to contain within the site, we felt that the Probation Office should not be a subset of the USDC of RI, but instead have its own site. After meeting with Mr. David DiMarzio and Mr. Barry Weiner and select members of their staff we learned that the site would have two primary purposes: allow for a more user-friendly interface for the end-user and uphold the image of the USDC of RI to the public. The staff of the USDC of RI and the Probation Office wanted the site to portray the level of professionalism and dignity that the staff members uphold on a daily basis.

We expected that the value we can give to the court through this re-design of the website was quite substantial. This value would also be noticed by the Probation Office as we developed their website in a similar manner to the USDC of RI website. The websites included much greater functionality but would be more user-friendly and intuitive than the old website that was in use by the USDC of RI. We were also confident that the new websites would portray the USDC of RI and the Probation Office appropriately and professionally. The court officials and probation officers are able to complete their daily operations in a more efficient manner using the additions that are discussed in further detail during the design section of this document.

After talking to Mr. Barry Weiner and Mr. David DiMarzio, we developed a return on investment (ROI) that they would see from the implementation of the new websites. Mr. Barry Weiner estimated that 350 defendants go through his probation office annually. Of those 350, he was assuming that about 50% of them would actually utilize the website. If these 175 defendants

used the website for 15 minutes per month that is about 44 hours per month that the probation officers would save. Assuming that the average salary for a probation office employee is \$60,000 per year, they are roughly working for \$29/hr. If this is correct, the probation office would save roughly \$15,000 annually.

The Office of the Clerk has a greatly improved website but the benefits they received are more intangible. The users have an easier time navigating the site; the image the site portrays is much more professional, and the staff members of the Clerk's Office has an easier time doing their job. Most individuals who have used their website in the past are still using it but not too many additional users will be added after the renovation of the site, but when taking into consideration the exponential growth in internet usage, the site will become a more prominent interface to the public in years to come. With the Probation Office, they did not have a website and through the addition of a site the Probation Officers will save a significant amount of time. We were confident that the new website for the USDC of RI improved the ease of use and hopefully saves time for the court but it is not as significant as the tangible benefits seen by the Probation Office. Overall, the project cost was \$15,000 so the USDC of RI will break even the first year and see a ROI of 100% after two years.

In addition to making the websites easier for the court officials and probation officers to use we were also confident that any citizen who wants to access the site will find it much more intuitive and easy to navigate. There was a clear need for the re-design of the USDC of RI website and the creation of the Probation site but we first needed to figure out if this project was feasible.

3.2.2 Analysis of Feasibility

In order to analyze the feasibility, we had to look into three areas: technical, economical, and organizational (Appendix B). Technically our group was adequately knowledgeable and we felt that the technical feasibility for this project was medium. We had a solid foundation in web design and knew that we could easily understand how different stakeholders used the site by researching early. The project size was not too large to handle and we knew that we could complete the project in the 21-week period. Compatibility was also an issue that came up. The original USDC of RI website was created using Microsoft FrontPage and was maintained by John Etchells, the IT Systems Administrator. John had a thorough understanding of HTML, JavaScript and ASP.Net. The IT staff also had acquired an Adobe software package, giving them access to Adobe Dreamweaver and Photoshop. Through the utilization of these programs, our team, along with the IT staff, had the necessary resources to create the new sites.

Once we established that we had the technical skills to complete the project we had to analyze whether or not it made sense economically for the website to be redesigned. Overall we felt that the economic feasibility was very favorable. The software that was used for the development of the website was available at the courthouse already as well as on campus at WPI. The USDC of RI had to pay for our team to complete the project but we felt that the benefits would greatly outweigh the costs. If we could redesign the site as planned we knew that the benefits for the court included a more efficient workplace, saved time, and simplified the use of the site for the public.

The champions of the project, Mr. David DiMarzio and Mr. Barry Weiner were both very supportive of the project and had given us all the support we could ask for. The court officials and probation officers had also strongly supported the changes that we would be making and had

given us the support we needed. The IT staff, one of the most important parts of the organization regarding this project, was excited about the project, supported our needs and was ready to make the change to a new website. Overall the project was perfectly aligned with the business in the sense that we could provide websites that would increase efficiency at the court buildings and make the daily operations of the staff much easier to complete.

3.2.3 **Developing the Work Plan**

Once we found that the project was feasible we developed a work plan. We began to develop this work plan by developing the Gantt chart (Appendix C). Here we laid out everything that needed to be completed in each stage of the project. During the first seven weeks we conducted the planning and analysis of the project. By laying out how long we thought each task would take we were able to fit everything in and complete the first two stages of the SDLC on time. We started out by conducting the initial research and setting up interviews with several members of the court. We set realistic goals for the project to ensure that we had plenty of time to initially plan how we would complete the project on time and so we could perform a proper analysis of this project.

The Gantt chart also showed us what we needed to complete before we could move onto the next phase. Visually, we could see that we needed to review other district court websites in the United States before we could sit and discuss what we thought would work best for the USDC of RI. Through the utilization of the Gantt chart we were not attempting to complete tasks without already completing the task that preceded it. Upon completion of the work plan our team needed to staff the project.

3.2.4 Staffing the Project

As discussed the literature review, it is important when staffing the project to see what each member of the group's strengths and weaknesses are. This project involved not only the development of the website but thorough research prior to the design as well as involved training after the design and implementation of the site. We decided that the work for this project needed to be split up evenly to ensure that each team member carried their own weight during the life cycle of this project.

The first portion of the project that needed to be completed after planning was the research. This was one portion of the project that we decided to split up evenly by each researching 15 different district court websites and reviewing them as well as each contributing to the literature review. When it came to the interviews conducted at the court house we were all present but the initiative was taken by Corey to lead the interviews due to his strong verbal and interpersonal skills. We developed the interview questions and survey questions together and analyzed the findings together as well.

When the project moved to the design portion of the project it was clear that Yetti would be taking the initiative of programming. However, the interface design, which would be completed using Adobe Photoshop, would be completed by Mark and Corey in collaboration with the coding that Yetti would be doing. Once the design and coding were completed the implementation of the website and training needed to be conducted by the entire group. We all contributed to this section to ensure that our final product was functioning properly and understood by both the IT staff at the courthouse and the court officials that would be using the site on a daily basis. After determining who needed to complete each task of the project we needed to find a way to make sure everyone was playing his or her role.

3.2.5 Controlling and Directing the Project

In order to ensure that everyone was completing their tasks on time we set some guidelines for each other. By having a set time where we all met at the courthouse once a week we were able to complete all of the designated tasks at the courthouse together. We also set a weekly meeting time with Dr. Eleanor T. Loiacono to check in and make sure we were on track with our project. Before the meetings we developed an agenda of what would be discussed and during the meetings we took meeting minutes to record what was discussed as far as the progress of our project (Appendix D). In addition to keeping minutes for our meetings, we have also kept daily summaries of our visits to the courthouse to ensure we knew what was completed during each visit (Appendix E). In order to save time we kept all documentation consistent. When developing the website reviews for other district court websites, we all used the same template to keep our data consistent, allowing us to make quantifiable decisions regarding our data. This also applied to the proposal as well as any other documentation that we had created for this project.

Scope creep can hinder the completion of a project, which is why we made sure that our group and the court officials were all on the same page regarding the true scope of the project. We came to the conclusion that we would be redesigning the USDC of RI website and developing a website for the Probation Office as well. It was necessary to let them know what we were capable of in the 21 week course of our project and make sure they did not add any new requirements later. Once we had developed our work plan and who was going to perform each task, we were ready to begin our analysis phase.

3.3 Analysis

The analysis strategy that we used was Business Process Improvement (BPI) (Dennis & Wixom, 2003). Through the redesign of the USDC of RI's website we took advantage of new technologies that resulted in small migrations in the daily operations of the staff members. The criteria for evaluating which analysis strategy best suits the project are potential business value, project cost, breadth of analysis and risk. Each one of the criterions were taken into consideration to justify the strategy chosen by our group.

3.3.1 Analysis Strategy

The Court's old website was in need of an organizational restructuring and a more professional layout and design. The site was outdated, in an aesthetic sense, and the content of the site was in need of a restructuring in order to make the site more user-friendly. The Court's staff takes a great deal of pride in their work and, more importantly, their purpose in the State of Rhode Island. They wanted the website to portray this image to the public through the site's reconstruction. Our team met with members of the staff to find out not only what they would like to see in the new site but to also gain an insight into their roles within the Court and their feelings regarding their position. Through these interviews we solidified the contextual layout of the site and gaining an understanding of the image they uphold on a daily basis; for it is this image that we were trying to convey to the public.

Our goal was to allow the site to share some of the work load the staff members deal with on a daily basis and provide the public with a clearer view when seeking out information from the Court's website. The content of the site was restructured to make the seeking of the given information more intuitive for an outside end-user. The original site lacked standardization, allowing a first-time user to easily navigate through the information and locate the content they

wished to find. An example of this was seen through the Probation Office and the tasks the staff members must deal with. Every month the defendants must send in a form to their Probation Officer, which means that each defendant must obtain one of the forms and mail the form into their respected officer. Through the creation of our new site, our team made these forms accessible on the web so that the defendants do not have to physically obtain their forms and the Probation Officers may receive these forms via e-mail. This eliminated some of the monotonous tasks that the Probation Office deals with on a daily basis and allows the defendants to have easy access to the information and forms that they need to obtain.

However, the site's primary users are not only Defendants but also Attorneys, Jurors, and members of not only the internal staff of the USDC of RI but also the general public. Each of these users generally seeks specific information regarding their role within the Court System. Our team's goal was to structure and organize the content of the site so that all of these general users could navigate through the site's content and extract the information at ease. Through this restructuring the site became a more effective tool for all internal and external users. This would not only increase the overall efficiency of the internal staff members but it could also increase the site's external usage if members of the general population could effectively and efficiently find the information they wished to seek, rather than having to physically visit the Court or even make a phone call in order to retrieve any piece of given information.

This increase in effectiveness and efficiency may not be immediate, in terms of quantifiable measures, but with the spike in internet usage over the past decade, it is expected that any organization, whether government, public or private, has a web presence and that this presence allows both external and internal members of the organization to access needed information. It was expected that through the reconstruction of this website that, in time, the

Court's presence to the public would expand through their web-interface and there would be a slow migration in the daily tasks of many court officials as they begin to communicate to the public electronically. This communication could consist of something as standard as juror information to an interactive question and answer allowing external members to request case specific information from the Court electronically. This transgression can be seen through the optimization of Case Management/ Electronic Case Filing (CM/ECF). Attorneys no longer have to physically travel to the Court House in order to submit their case filings; the introduction and utilization of this technology has changed the way not only Attorneys handle their daily operations but also the way that members of the Court's staff process and store these filings.

The breadth of analysis describes the scope of the analysis and the level of depth to which the "as-is" system was analyzed by our team. The scope of our project was narrow because the project consisted solely of the redesigning of the website and all of the content that was needed for the site either existed on the current website or was given to us by the USDC of RI's staff members. However, our analysis also included a series of information gathering techniques in order to assess the organizational structure of the site's content and give our analysis greater depth. These information-gathering techniques included interviews, JAD sessions, and surveys.

The risk associated with the completion of the project was low. The project was broken down into three phases, each containing milestones to ensure that our team stayed on schedule. The agenda for the project can be referenced in Appendix B. We also conducted weekly meetings with our project advisor, Dr. Eleanor T. Loiacono, who monitored our progress and provided our team with direction and weekly milestones. The minutes of our weekly meetings can be referenced in Appendix D. Little risk was associated with our design because our project's methodology was throwaway prototyping, meaning that our team and the USDC of

RI's staff would see prototypes of the design and layout of the new website before our final installation took place.

3.3.2 Research

Prior to beginning our process of information gathering, our team conducted research regarding the current status of other USDC websites. In order to make our research quantifiable, we developed a survey to analyze thirty different USDC websites and fifteen US Probation Office websites. These sites were graded in terms of aesthetics, usability and interactive features. We used this research to set a benchmark for ourselves in terms of layout, design, and interactive features that can be incorporated into the website, such as downloadable PDF forms.

The research conducted not only allowed our team to gain a better understanding of the image that the USDC of RI was trying to portray through their website but also a better understanding of the Courts themselves. This research also allowed our team to provide examples to the stakeholders of better web designs so that they could understand the changes that we proposed and the reasoning behind those changes.

3.3.3 Information Gathering

Due to the fulfillment of the criterion described above, we can state that BPI was the most fitting analysis strategy for our project. In progression from the assertion of an analysis strategy our team underwent the process of information gathering. As previously stated, our team utilized three methods of information gathering: interviews, JAD sessions, and surveys. From these three methods of information gathering we were able to state the requirements of the system.

3.3.4 Interviewing

Our primary method for information gathering was the process of interviewing the key staff members, being the project sponsors, key business users and other members of the staff. The project sponsors, the Clerk of Court, Mr. David DiMarzio, and the Chief US Probation Officer of Rhode Island, Mr. Barry Weiner and several members of the Clerk's Office were interviewed individually. Our team developed a list of questions to be asked, including questions of all three criteria discussed in the literature review of the analysis phase.

The interviews were conducted using the list of questions and demonstrations completed by one group member on a large screen to allow the interviewee to view the different websites as they pertained to their respected questions. During this process the interviewee's answers were recorded for analysis and evaluation after the interview. During the interviews, the individuals were also asked to solidify the content of the site and provide their input in terms of the site's organization of the content.

3.3.5 JAD Sessions

Mr. Barry Weiner, the Chief US Probation Officer of Rhode Island, assembled a team of individuals within the Probation Office to determine what features and content they would like to include on the probation portion of the website. Our group held two JAD sessions with the Probation Team to discuss their ideas pertaining to their new site. This marked the first time that the Probation Office would have a website and the Probation Team had several ideas pertaining to the website, including a FAQ section, PDF forms for defendants, and other informational pieces concerning defendants and the families of defendants to inform them of the different processes that would occur during the individual's time as a defendant.

3.3.6 Survey

There are two primary groups of external users of the website of the USDC of RI: attorneys and jurors. In order to receive feedback regarding the information sought after and the ease of finding this information from these two groups our team developed a brief survey. The survey utilized close-ended questions with room for the individual to further express or clarify their answer. This allowed the individual to participate at different levels; they could simply check the close-ended answer or they could further express themselves.

Our survey was approved by the Clerk of Court, Mr. David DiMarzio, and was then sent to all jurors who have attended jury duty within the past two months. The survey was sent with paid postage to entice participation. Members of the bar were given the survey through Survey Monkey™ and their responses were sent directly to Michael Simoncelli, the Executive Assistant at the Clerk's Office. These responses were given to our team for analysis.

3.3.7 Results

Throughout our analysis of the current website we consolidated our findings in order to assess the direction in which we took our new design. Our analysis consisted of research, interviewing, JAD sessions, and surveys; all of which provided our team with an abundance of data that needed to be organized and structured. In this data, our team looked for redundancies in order to bring our findings to a common ground that would be agreed on by all of the stakeholders. These redundancies functioned as a list of prioritized changes unveiled through our analysis.

Beginning with our evaluation of the forty-five different websites prior to our interviewing process, we discovered several consistencies in the design and architecture of these websites. The first consistency was the use of the seal in the header of the website. Each USDC

has a unique seal, and our team felt that this should be a more prominent figure in the design of the new site. The next consistency was the general use of white space. In web design less is more, meaning that cluttered pages deter users from seeking out information on the site. The old site of the USDC of RI was arguably cluttered and the amount of content was re-examined in order to give the content of the new site a more intuitive organization within the website. The third consistency found in the research was the incorporation of drop-down menus. These menus allowed for a consistent navigational tool for the end-user and more importantly the organization of the sites content. By incorporating drop-down menus, the sites content was typically reduced to five-to-ten main categories. This reduction allows the end user to easily locate information that they would find applicable to their search.

Based on our findings in the research, our team constructed our interview questions in order to analyze and demonstrate the design qualities that our team felt should be incorporated into the new design. During each of the interviews, the interviewees were asked questions based on websites chosen from our team's research as well as the current USDC of RI website. Each of these examples (sites) were chosen in order to allow the interviewee to have a fresh look at a given design issue. In addition to the websites that Mr. David DiMarzio and the Probation Office recommended that we look at, our team utilized different websites because we began to see resistance to the change during our interviews, simply because members of the staff were comfortable using the current website. Our team wanted to demonstrate to the staff that a vast majority of the end-users of the website do not have this level of familiarity with the current site and therefore find the site difficult to navigate. Through the incorporation of these examples we allowed the interviewees to view websites for their design and usability rather than their content, which allowed our team to again find redundancies in the responses of the interviewees. These

examples not only provoked the iteration of information from the interviewee, but it also allowed those individuals to be exposed to the functionalities that could be implemented within the new site. Through this exposure, our team witnessed those individuals initially resistant to this change begin to realize the difference in both aesthetics and usability from these examples to the current website.

Through these interviews we, again, found redundancies, and these highlighted the items taken from our research. Members of the staff agreed that the website needed to be restructured, in terms of its content, and redesigned to remove the clutter. The utilization of more images and less text, along with a hierarchal layout of the sites content with consistency between the sites pages increased the site's usability. The incorporation of drop-down menus and a better use of white space were common issues pulled from the interviews.

From our JAD session with the Probation Office our team solidified the content and design that the team assembled by Chief US Probation Officer of RI, Mr. Barry Weiner, wanted to see on their new site. The Probation Office never had a website accessible by the public and therefore we needed to gather all of the content as well as the team's thoughts on design. The primary pieces of content that the Probation team wanted incorporated into their site were the forms used by defendants and FAQ's that are typically asked by defendants and their family members.

The forms mentioned above include a travel permission form and a monthly report filled out by defendants to notify their probation officer of their monthly occurrences; their place of employment, income produced that month and expenses. These forms were initially kept solely in paper copy and are therefore only accessible from the probation office. By making these forms accessible online, defendants no longer needed to travel to the Probation Office in order to

obtain a copy, and more importantly, the Probation Officers would see a reduction in the time they spend during their day to cater to the needs of the defendants.

The FAQ section, although simple in nature, created a reduction in the time spent by the staff of the Probation Office to answer simple, yet necessary, questions made by defendants and their family. These questions and answers were generated by the team at the Probation Office and given to us to add to the content of the Probation Site.

During our JAD sessions we also discussed the layout and the design of the website of the Probation Office. The Probation team agreed that they liked the layout of the site to parallel that of the USDC of RI, with minor changes in terms of the pictures and quotes used on the site. The Probation Office had their own seal, which would replace the seal of the USDC of RI, and also different pictures and quotes that were used on both the home page of their site and the preceding pages.

The final method of information gathering utilized by our team was the administering of a survey to jurors and members of the Rhode Island Bar. The results of the survey are broken down between the information gathered from the jurors and the attorneys. Although the survey used to gather this information from the two different subsets was identical, the information sought after by the two groups was very different from one another.

The court sent the survey out to 225 jurors who had served as a juror in the past 60 days by mail. We received twelve total responses from the jurors. Of these twelve responses, six of the jurors had viewed the website and provided relevant information. Although the number of responses was low, there was still a general response given by these six jurors. All agreed that the site was hard to navigate and that they had trouble finding information regarding Grand Jurors and their responsibilities. The juror responses also concluded that the old site's design

was unappealing and in need of redesign. Some specific comments received from the jurors included: “The layout was not easy to understand,” “Simple would have been much better,” and “It was not easy to find what I was looking for.” Overall we did not receive too much feedback from the jurors but what we did receive showed us that the site was in need of change.

As mentioned before, the survey was also sent to the members of the Rhode Island Bar. This survey was sent out via SurveyMonkey™. The survey was completed by 61 of the members and we received some solid feedback. As far as the ease of use, the members of the bar found it easy to find the information but also noted that it would not be as easy for someone who does not use the website on a regular basis. This was one of the main things we needed to accomplish, allowing for everyone to find the site easy to use and navigate. In regards to the layout of the site, about 59% of the members surveyed found it appealing. However, their comments showed that they only found it average. Some of the specific comments included: “It’s OK but it can be confusing for someone that isn’t familiar with it. Too much on one page,” “I’m not really attracted by such features,” “The site appears dated,” and “Nothing is particularly interesting about it.” This was very helpful to us and further proved the point that the site needed to be revamped. In addition to telling us why they did not like the site, they provided some great information on what they suggested we do to improve the site. Their comments included: “Simplify the home page,” “Ease of access to dockets and local rules,” “Better organization by topic of links and information instead of simple lists on each page,” and “Group some of the buttons on the left side of the website.” Overall the responses we received from the members of the bar were quite comprehensive and helpful for our redesign of the website.

After we analyzed all data gathered, we developed the templates shown in Figure 3-2 and Figure 3-3. The header of the website template consisted of a picture, a quote and the seal aiming

to capture the essence of the atmosphere and environment of the USDC of RI and the Probation Office. Through our interviews with the staff of the court and the probation office we found that the site needed to portray the court in a professional and distinct way. The colors used for the website were taken from the seal to keep the colors of the website consistent and appealing. The tabs were placed over the picture to avoid having the tabs cover the important text that will be appearing below in the tan area. We decided to use tabs to make the navigation of the site easy for anyone who accesses it. As stated in section 2.3.1, it is best to keep the website as simple as possible to allow the user to navigate with ease. To the left of the tan area, related links, contact information and more are located, making it easy for those who are looking for something particular on the site. Mr. David DiMarzio made it clear to us that he wanted certain links, such as the ones just stated, on the home page and easily accessible. The templates were created to encompass intuitive site navigation and an aesthetically pleasing site layout.

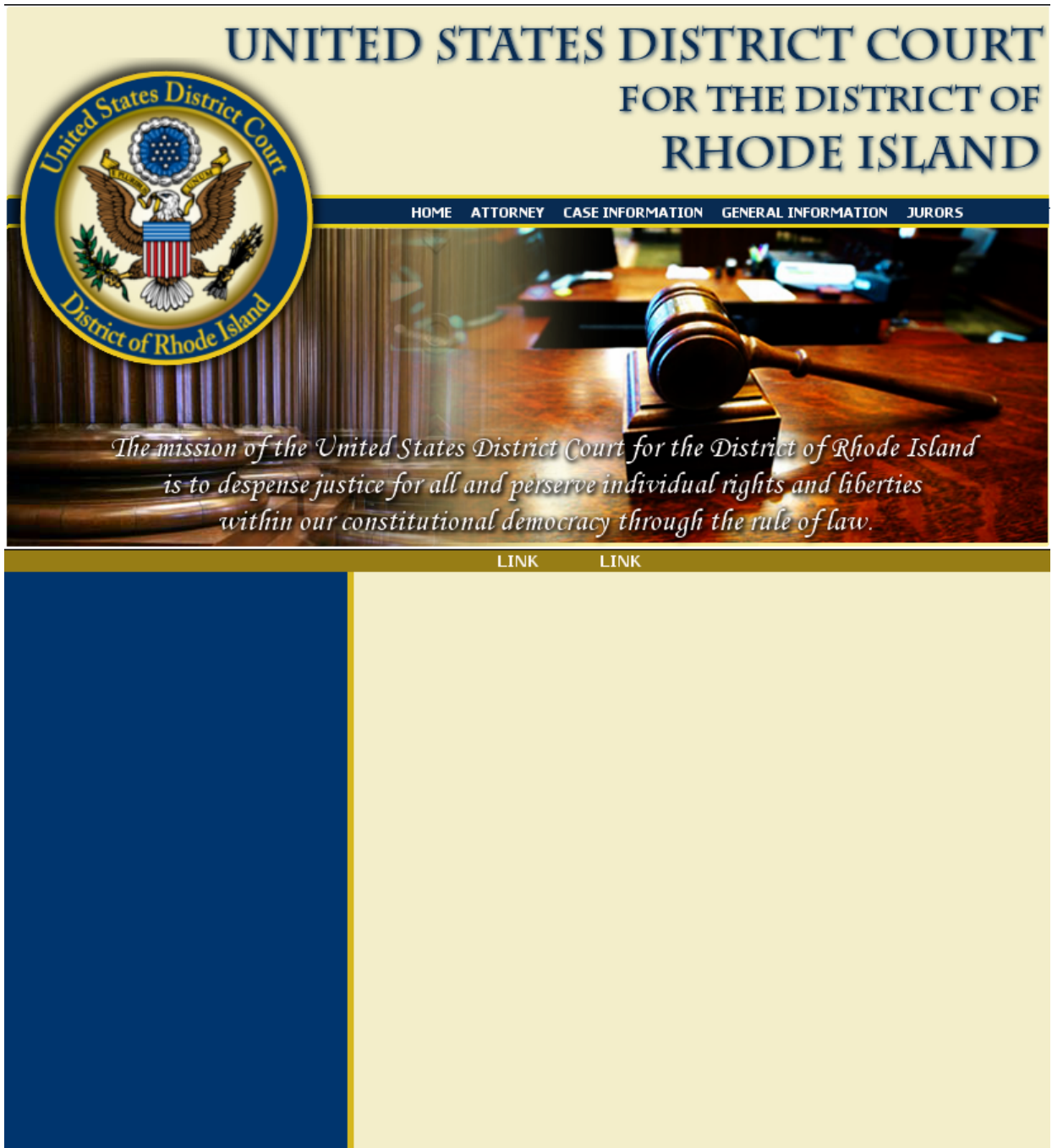


Figure 3-2 - Sample Template for USDC of RI Website



UNITED STATES PROBATION AND PRETRIAL OFFICE OF THE DISTRICT OF RHODE ISLAND

[HOME](#) [REPORTS & INVESTIGATION](#) [SUPERVISION](#) [TREATMENT PROVIDERS](#) [GENERAL INFORMATION](#) [FORMS](#)



*"We are outcome driven and strive to make our communities safer,
and to make a positive difference in the lives of those
we serve"*

[LINK](#)

[LINK](#)

Figure 3-3 - Sample Template for USDC of RI Probation Website

After showing the Office of the Clerk and the Probation Office the templates, we developed and received positive feedback. Both the Office of the Clerk and the Probation Office stated that they found the site templates aesthetically pleasing and functional. Both parties felt that the new designs upheld the image of professionalism that both offices desired. Mr. Barry Weiner requested that the photos on the Probation Office’s site were lightened, for he believe that the images were too dark. Overall, the feedback was positive and reassured our team that we were heading in the right direction. At this step we needed both offices to provide us with the information necessary to generate the tabs that would be seen in the drop-down menus. From this information we then restructured both site’s content. Figures 3-4 and 3-5 show what each website’s tabs would be and which sections would be included under each tab in the drop down menu.

<i>Attorney</i>	<i>Case Information</i>	<i>General Information</i>	<i>Juror</i>	<i>Judges</i>
Admission/Registration	CMECF Info	Contact Us	Federal Juror Info	Judicial Officers
CMECF Registration	Electronic Filing	About Us	Directions/Maps	Staff
CJA Info	PACER	Mission Statement	Inclement Weather	Opinion
Rules and Procedures	Opinions	Directory	eJuror-under construction	Calendars
Interpreters	ECF Registration	Directions/Map		Judicial Misconduct
ADR	Calendars	Rules and Procedures		Public Disclosure System
Miscellaneous Info	Filing Procedures	Fees, Payments and Interest Rates		
	Forms	Forms		
		Judges		
		ADR		
		Employment		
		Security Policies		
		Interpreters		
		Federal Process Servers		
		Pro Se Litigants - under construction		
		Historical Info		
		Other Related Links		

Figure 3-4 - Tabs for USDC of RI Website

Home	About Us	Pretrial	Presentence	Supervision	Links & Resources	Contact Us
(Link to FAQs – on page)	Mission	What is Pretrial Services?	What is Presentence Investigation?	What is Supervision?	Employment Opportunities	Location & Hours
(Frequently Used Forms- on page)	A National System	The Pretrial System	Sentencing Guidelines	The Probation System	Employment Info & Training	Directions
(Color Code Schedule- on page)	History	The Pretrial Process	Federal Sentencing	Orientation to Supervision	Volunteer Opportunities	Staff Directory
(Search Feature- on page)	Officers	The Pretrial Officers	The Presentence Report	Understanding Your Case	Community Resources	Federal Holidays
(Link to Court Calendar-from District–on page)	Charter For Excellence	Orientation to Supervision	Understanding Your Case	Understanding the Requirements	Federal & State Agencies	Federal Courts Finder
	Commonly Used Terms	Understanding Your Case	Presentence Forms	Directions for completing your Monthly Report	Frequently Asked Questions	Employment Opportunities
	Inside the Courts	Understanding the Requirements		Firearm Possession Prohibition	ABCs to the BOP	
	Probation Educational References	The Color Code Program		Supervision Forms	Forms	
		The Bail Reform Act			Substance Abuse Treatment Providers	
		Bail Conditions & Alternatives			Mental Health Treatment Providers	
		Pretrial Diversion			Inpatient Services Treatment Providers	
		Pretrial Forms			Sex Offender Information	
					Residential Program Handbooks	

Figure 3-5 - Tabs for USDC of RI Probation Office Website

Following the requirements gathered from the planning and analysis phases of the project, we were ready to show the court our proposed website ideas. On Wednesday November, 18, 2009 we met with our project sponsors, the IT Staff, the Clerk’s Office Staff, the Probation Office Staff and Judge William E. Smith to propose what we had come up with in regards to the design of the websites. We explained to them the phases that we had completed so far, the templates that we developed for the websites and handed them the proposal document with a sign-off sheet attached. In order to move onto the design phase we needed our project sponsors, Mr. David DiMarzio and Mr. Barry Weiner to sign the sheet seen in Appendix J acknowledging that we have met the necessary business requirements, completed a comprehensive analysis, and were in agreement with what we had in the proposal document. Our project sponsors were pleased with the progress that we had made so far and supported our proposed templates for each

website. Once we received some feedback on minor changes in the document, which included mostly issues with the way things were worded and incorrect terminology, we made the necessary changes and the sign-off form was signed. We were ready to begin the design/coding phase.

3.4 Design

The design phase of our project consisted of us developing the interface of the websites as coding the content of each website into html. We knew this would be a time consuming portion of the project but were also sure that this was the most important phase of the project. The methodology of throwaway prototyping was applied and we used multiple prototypes before coming to the final product of each website. The following sections outline everything that went into the design phase of the project.

3.4.1 Interface

Based on the feedback received from the analysis stage, an interface design was created to suit the needs of the court and probation office while satisfying the basic rules of Human Computer Interaction (HCI). The interface of the website serves as the face of the design embodying: Dignity, Impartiality, Dedication to Justice, Fairness and Openness. The *Throwaway Prototyping* methodology was applied to the creation of the interface. This allowed for the clientele to be thoroughly involved by providing their opinion which in turn allowed the finished interface to be exactly what was expected.

3.4.2 Header

Similar to the northern Texas probation office website, the header of both the USDC of RI and Probation Office site includes a header made up of a picture accompanied by their

respective seal. The same structure and color theme is used for the courthouse and probation office's websites but the picture used for either site differs from each others, highlighting the difference between the two entities. The picture for the courthouse portrays service and integrity, while the picture for probations site portrays trust and caring relationships. The header sits above the body which includes the navigation and frame where the content appears.

3.4.3 **Body**

The colors of the body were chosen from the colored seal seen in Figure 3-2, which is also included on the site within the header. The choice of neutral, subtle colors for the background and maybe a brighter color for highlighting was seen most suitable for both the USDC of RI website as well as the website we developed for the RI Probation Office. The idea of drop-down menus discussed within the analysis stage also accompanies the interface, directly in between the header and the body frame, where the content appears.

3.4.4 **Footer**

Directly following the body is the footer. The footer of any website usually serves as the reference section which includes a copyright statement, webmaster name, and terms of service. For the courthouse and probation office this format is followed by inputting the disclaimer and acknowledgements.

3.4.5 **Image Editor**

The interface was created with Adobe Photoshop as well as CorelDRAW for some fine tuning. Adobe Photoshop was chosen as the ideal image editor for this interface because of the versatility described in Section 2.4.1. It allows users to create images completely from scratch in either vector or raster format with an abundance of tools available, helping to customize each

project. Specific tools and effects such as the Gaussian Blur, Gritty Photo Effect, and Colorization came in handy when editing the picture chosen for the header of the interface. Tools such as image splicing and image mapping allowed for links to be created easily within the image, aiding to the drop down menus creation. All in all Adobe Photoshop allows for users to create an array of images, in many different formats, with tools to assist in the creation and the IT staff was also in support of this.

3.4.6 Coding

On campus, with the help of WPI's Academic Technology Center, team member Yetunde Ajayi-Obe received training for the Adobe Dreamweaver software. She was taught basics such as image slicing, style sheets, simple formatting and scripting which would come in handy for the tab drop down menus.

After solidifying and finalizing the content going onto the website, the third and final step, Coding, took place. We decided to use a WYSIWYG Html Editor, specifically Dreamweaver, to execute this final step. Dreamweaver was chosen because the IT staff at the USDC of RI had this software package and were familiar with the product. Dreamweaver also provides the same services as the late Microsoft FrontPage. Users are able to view all pages created and published with ease, and the software saves a local copy of the website onto the hard drive. Dreamweaver also maintains links and link changes, therefore removing the option of dead-links. Last but not least, those who are not HTML-Savvy are still able to make edits to the website, create new pages, and more with the Dreamweaver Software.

For this website, we tackled the structure of website first. The image created for the template was centered and made the background of the website and the font, font color and font size was selected and made recurrent throughout the site with the use of a style sheet. After

finishing the structure, the drop-down menus were then created. Research was needed for the drop down menus because in order for them to be incorporated into the site and function as they should, a JavaScript would need to be put into use. It was decided that we would use “NAMED” drop-down menus script from “NAME” website.

3.4.7 Content

We needed to get some additional information from the Clerk’s Office as well as the Probation Office before we could complete the design. We had to gather the content that would be on each page of the websites to understand what they wanted to be included on the websites.

In order to ensure that we could begin to add the content of the websites as soon as coding was complete we let the Clerk’s Office and Probation Office know that we needed all of the documentation for each page of the website. This included the text on each page, any links on that page as well as any PDF form that was on the page.

The Probation Office had already told us what the tabs on their website would be but had not yet told us what links and pages would fall under each tab as well as the content that would be included on each page. This information was necessary for us to begin figuring out where everything would be located on the website and which tab each piece would fall under. We asked the Probation Office to organize that information for us and send it to us by December 16, 2009. In addition to the organization of the tabs, pages and content of each page we asked the Probation Office to complete their list of FAQ’s and give any form they need converted to PDF to the IT staff. The IT staff had created the PDF versions of forms for the Clerk’s Office in the past and had offered to do the same for Probation. We wanted to make sure that the tabs, forms and all content was solidified before the coding was complete to make the design phase run

smoothly. The final breakdown of the content under each tab for the probation website can be seen in Figure 3-5 on page 72.

The Clerk's Office had also given us their tabs with the specific links that were to go under each one. However, we still needed them to tell us what is staying from the old website and where that content would be placed on the new website. We asked Lisa Quartino, our liaison, to give us the content of each website in a specific format. For each website, we asked her to create a folder. In each of these folders, there would need to be a separate folder for each individual tab. In each of these folders for the tabs, there would need to be yet another folder for each page that is listed under the tab. By doing this it allowed us to know where they wanted the content to be placed on each website with no confusion. The same format was asked to be followed by the Probation Office as well. We requested that they provide us with this information by December 16, 2009 in order to stay on track with our timeline. This organization of content allowed us to be ready to plug in the content when we completed the coding.

3.4.8 Customer Feedback

Once we had completed the first versions of the websites, it was time to show our initial working prototypes to the District Court as well as the Probation Office. We met with the staff of the District Court and the Probation Office on January 21, 2009 to get feedback on what we had produced for them so far. After showing the working drop down menus, the pages that they linked to and the general interface that we created there were changes that needed to be made to both sites.

The District Court had asked us to move the main title at the top of the page to the center as opposed to being left aligned. In addition to this they wanted the content in the drop down menus to be alphabetized for easy navigation of the site. The home page had not yet been

defined but the format and content was given to us during this meeting as well. Finally, the quick links section on the left side of the site was asked to be made smaller to allow for more room in the content section to the right.

The Probation Office also had some corrections that they wanted made to their site. Due to the fact that the District Court wanted all content alphabetized and the quick links section made smaller, the Probation Office requested these changes as well. The link bar directly below the picture was asked to be removed as well because they would have the link to the District Court in the quick links section.

There was a concern from both parties about the amount of space on each page for content so we suggested that we create a second page with a header reduced in size. This would allow for more content to be visible on all pages besides the home page. We thought that this would work smoothly with the coding but found out very shortly afterwards that this was not the case. If we were to have the images change between the home page and all other pages we would have to change all the code and go against one of the reasons we were re-designing the site, simplicity. We wanted the code to be easily maintained and realized very quickly that if the images on each page was going to be different, the code would be much more complex. We attempted to use JavaScript for switching between the two differently sized images but struggled to do this successfully and realized how complex this JavaScript was making the code. To mitigate the issue, our team held a conference call, on February 12, 2010, with select members of both the staff of the USDC of RI and the Probation Office to discuss the issue. Our team thoroughly explained the options to the staff members which allowed them to make the ultimate decision on this design problem. Both parties felt that the issue should be mitigated by not migrating from a larger image to a smaller image, and instead keeping one sole image throughout the site. This

eliminated the necessity of the IT staff to manage a more complex JavaScript; it also eliminated the need to create duplicate files which would open the site to a greater chance of human error when site edits were made.

Most of the corrections were made and we returned two weeks later to show them the progress that we had made. Although our sponsors wanted the different size images on each page, they understood our reasoning behind keeping the image static throughout the website in regards to the simplicity of the code and how it would be much easier to maintain for the IT staff. The compromise was made that instead of changing the size of the header on each page, we would reduce the size by a set amount chosen by each sponsor to be the set header for each website. The District Court chose to cut out the mission statement from the image and cut it at the bottom of the first pillar. The Probation Office chose to resize their seal and cut their image down from the top and keep the quote in the image. These changes were made and can be seen in more detail in Figure 3-6. The websites were complete and the final interfaces can be seen in Figure 3-7 and Figure 3-8. We were then ready to begin the implementation phase of our project.

	Complete?
Things that need to be done for Probation	
Resize the Seal to show skyline in photo	x
Create Frequently Used Forms Page	x
Fix Typos in Dropdowns	x
Remove District Court from Yellow Bar	x
Indent names on Home Page	x
Add disclaimer to home page	x
Add color of the day section to blue region	x
Acknowledgements	x
Fix IE issues (dropdowns not functioning properly)	x
Alphabetize drop down menus	x
	Complete?
Things that need to be done for USDC	
Supply separate images that were spliced	x
Opinions pages (responsibility taken on by John Etchells)	x
Add disclaimer to home page	x
Acknowledgements	x
Fix Internet Explorer issues	x
Alphabetize drop down menus	x
Change title position from right align to center	x
Change main image (remove quote)	x
Add names to home page	x
Make blue space thinner	x

Figure 3-6 – Correction Checklist



Figure 3-7 - Final District Court Interface

The changes that can be seen in Figure 3-7 are as follows: the page's title was centered and not right aligned, the elimination of the quote on the image, the blue region was reduced in width to allow for more space in the tan region, a disclaimer and acknowledgments were added to the bottom of the home page (note that the acknowledgments are not visible in Figure 3-7),

and the PACER button was added to the Quick Links. After making these changes the home page was finalized and approved by Mr. David DiMarzio.

Upon completion of these changes some responsibility shifted from our team over to the IT staff. Specifically regarding the Opinions, located under the Judges tab. John Etchells agreed to implement his own code into the site to allow this application to run. Also minor changes regarding the site's content were agreed to be fixed by members of the IT staff. These changes consisted of minor adjustments to content and the updating of new PDF files.

**UNITED STATES PROBATION AND PRETRIAL SERVICES OFFICE
DISTRICT OF RHODE ISLAND**

HOME ABOUT US PRETRIAL PRESENTENCE SUPERVISION RESOURCES CONTACT US

*"We are outcome driven and strive to make our communities safer,
and to make a positive difference in the lives of those we serve"*

**The Color for Tuesday Feb. 23 is...
QUICK LINKS**

FAQ's
FORMS
DISTRICT COURT
COURT CALENDAR

John O. Pastore Federal Bldg.
2 Exchange Ter, 3rd Floor
Providence, RI 02903
Phone: (401) 752-7300
Fax: (401) 752-7399

Welcome to the official website of the United States Probation and Pretrial Services Office for the District of Rhode Island

Join us in our mission to facilitate the administration of justice and provide continuity of services throughout the judicial process. The desired outcome of our efforts are the execution of the sentence and the protection of the community by reducing the risk and recurrence of crime and maximizing offender success during the period of supervision and beyond.

Barry J. Weiner
Chief U.S. Probation Officer

Kurt E. O'Sullivan
Deputy Chief U.S. Probation Officer

Disclaimer
This web site may contain hypertext links to information created and maintained by other public and private organizations. These links are provided for the user's convenience. While the information may be valuable, the U.S. District Court for the District of Rhode Island does not control or guarantee the accuracy, relevance, timeliness, or completeness of this outside information. Further, the inclusion of links to external sources is not intended to reflect their importance, nor is it intended to endorse any

The changes that can be seen in Figure 3-8 are as follows: the page's main title was centered and not right aligned, the seal was resized, the blue region was reduced in width, the names in the tan region were indented, a disclaimer and acknowledgment were added, and the color of the day feature was added above the quick links in the blue region. After making these changes the home page was finalized and approved by Mr. Barry Weiner.

3.5 Implementation/Conversion

Once we finished redesigning the websites and both the USDC of RI and the Probation Office were in agreement that the sites met their needs, we began to implement the site. During this phase we tested the site and trained the IT staff on using and maintaining the site. This stage was critical to the overall success of the project and had to be taken just as seriously as any other stage.

3.5.1 Testing

Once our project sponsors approved the websites, we began testing the site to ensure that everything was functioning properly. We planned to keep things fairly simple and test to make sure that each link leads you to the correct page on the website. We also needed to test to make sure that all of the forms we added to the sites worked properly and were accessible by the public. We did this by opening the forms ourselves and checking to see that they were the correct form and opened properly. Our testing for both websites can be seen in greater detail in Figure 3-9.

	Internet Explorer 8	Mozilla Firefox	Safari	Google Chrome
Does the interface render correctly	x	x	x	x
Drop Down Menu's Function	x	x	x	x
All External Links Open Properly	x	x	x	x
All Internal Links Open Properly	x	x	x	x
All PDF's Open Properly	x	x	x	x

Figure 3-9 – Testing checklist

All of the links worked successfully but we ran into one issue when testing everything across multiple browsers. Our site was working fine in Mozilla Firefox, Google Chrome and Safari but do to an error in our JavaScript, the drop down menus were not working in Internet Explorer. We went back and changed the JavaScript to allow the drop down menus to work properly in each browser. This caused minor change to the code but did not affect it enough to significantly impact the project.

3.5.2 Conversion

Upon the mitigation of these errors our team needed to transfer the final copy of each website onto the server at the USDC of RI. Our team met with the IT staff who aided us in this conversion. The transfer of the sites was successful and we again tested the sites across each of the browsers, discussed in Figure 3-9. Although the sites were successfully transferred, the sites were not yet published to their designated URL's. John Etchells of the IT staff was still awaiting confirmation on the URL designated for the Probation Office. The publishing of the site's will be completed by the IT staff after a thorough examination of the site's content and the confirmation on the Probation Office's URL. Once the site was successfully installed on the server, we had to train the IT staff of the District Court on how to maintain the website in the future.

3.5.3 Training

It was important to train the IT staff due to the fact that they would be making any changes or updates to the sites in the future, not us. We wanted to approach this training in the simplest way possible. We met with the IT staff at the courthouse after the installation of the websites and wanted to show them the basics first. We first explained to them how the main code for the sites works and where each individual page/link was being called from. That way if there was something they wanted to change on a particular page, they would know exactly where to locate the code for that page and make the necessary changes. Once they understood where everything was located, we went into greater detail in regards to maintaining the site.

We instructed them on how to edit an individual page as well as create a new page. We gave specific examples of how to create a page and how to make edits to that page. One of the biggest things we wanted to accomplish through this project was sites that were easy to maintain. We felt that this was accomplished by the responses that we received from the IT staff. They were all very pleased to see that the code was easy to follow and any updates would be relatively easy to make. In addition to the on-site training that we gave to the IT staff, we also provided them with a training video and training manual, Appendix K, to go along with it. The video and manual go into detail on the format of the code as well as how to create/edit any page within the websites. Upon the completion of training, we provided one last presentation of the final products to the staff members of the court to conclude our project.

4 Conclusion

Overall this project was a learning experience for everyone in our group. The group had some programming background and a small amount of knowledge of web design, but took the

time necessary to acquire the knowledge needed to complete the site. We were able to conduct a thorough analysis of the court system, the USDC of RI, U.S. Probation Office, court websites from other states and web design in general. This allowed us to be able to produce two unique websites that met the needs of both offices.

The uniqueness of the websites can be seen when analyzing them against other court websites. We were able to interview the court officials, find out what they wanted to see in the new websites, and show them what other court sites were doing on their websites to open their eyes to the functions that could be implemented on their new websites. Based on this feedback, we were able to base the interface off of the northern Texas Probation website. This meant incorporating a picture representing the court as well as the seal for the court into the header of the website. In addition to this, we also designed the websites to have drop down menus to aid in the navigation of the website. While interviewing the staff, everyone wanted to incorporate the drop down menus after seeing how easy it made the Massachusetts District Court website so easy to navigate. The final unique factor of the websites was the similarity between the two.

The website for the USDC of RI and the Probation Office had very similar layouts; the only real difference was in the header of each site as well as the content found within the site. This was the first state to have such similar websites for their USDC of RI and Probation Offices. To the end user, this makes switching back and forth from each site much easier, but it also was perfect for the IT staff maintaining the websites. The reason for this was that the code for each was almost identical. By training them on how to maintain one, they could easily maintain the other. This made training much easier as well as the maintenance of the site in the future.

Upon the completion of this project we were able to take what we had learned about the Systems Development Life Cycle and apply it to a real world project. This meant developing a

detailed plan of how we would complete the project, conducting thorough research and analysis to define what the final product would be, and finally we had to fully develop and implement two functional websites that would be later used by the United States District Court of Rhode Island and the U.S. Probation Office of Rhode Island.

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Glossary

Agile Development

Agile development is heavily focused on the programming aspect of the development lifecycle.

Back-end

The back-end of a system refers to the administrator side of it, mostly concerning data storage and manipulation.

Business Process Automation (BPA)

The operations of the business will remain unchanged; however computer technology will take on some of the daily workload.

Business Process Improvement (BPI)

BPI results in making moderate changes to the current business process by taking advantage of technological processes currently offered.

Business Process Reengineering (BPR)

BPR means that the former operational methods of the organization are completely redesigned, discontinuing the former operational techniques of the organization.

Computer Aided Software Engineering (CASE)

Computer Aided Software Engineering is software that was created specifically for automating a systems development process and often times helps to speed up the overall tracking process of the SDLC.

Change Management

The managing of resistance to change and inspiring those being resistant to accept the change.

Custom Development

Custom development is the option that allows the developers and users to have complete control over what the system looks like and how it is going to function.

Data Flow Diagram (DFD)

A DFD is broken down into four components of the system; entities, processes, data stores and data flows and shows how the information flows through the system.

Data Model

A data model is used to describe how the data will be stored in a given system.

Entity Relationship Diagram (ERD)

An ERD is used to describe how the data will be stored within the given system and how the data will tie together and interact within the system.

Front-end

The front-end of a system refers to the user side of it, mostly involving a user interface.

HTML Editor

An HTML editor is an application that aids in the creation of websites by taking the next step up from text editors such as Notepad and providing users with website management tools and even editing other website related languages.

Human Computer Interaction (HCI)

HCI examines the planning and design of what happens when humans interrelate with machines and if the interaction is effective and useful.

Installation

Installation is the process by which the old system is turned off and the new one is turned on.

Interviewing

The process of interviewing is the most commonly used technique for information gathering.

Joint Application Development (JAD)

JAD is an information gathering technique, which allows the project team, system users, and the organization's management staff to work together to indentify the requirements of the system.

Outsourcing

Outsourcing is the hiring of an external vendor, developer, or service provider to create a system.

Packaged Software

Packages software is a software program that has already been written.

Process Model

A process model is a way to depict and describe a given business process.

Pseudocode

Pseudocode is a structured language that can assist the programmer with the coding being that it is a generic way of saying what needs to be programmed and can be done by the programmer in any language they choose.

Rapid Application Design (RAD)

RAD attempts to eliminate the weaknesses of structured design which include the long length of time it takes to complete the system and the difficulty that comes along with

understanding everything that is on paper. RAD tries to complete one part of the system and get it into the hands of the users as soon as they can.

Requirement

A requirement is defined as a statement of what the system must do and also what characteristics must be part of the system in order for the system to meet its objective.

Scope Creep

Scope creep is the addition of new requirements to a system during the development stage of the SDLC.

Structured Design

Structured design methodologies follow a formal step by step version of the Systems Development Life Cycle.

Survey

A survey is a set of written questions design by the analysts in order to obtain needed information from a large number of interviews.

Systems Development Life Cycle

The SDLC is most commonly comprised of four main phases: planning, analysis, design and implementation.

Use Case

A use case is a set of activities that result in a desired output from the system.

Appendix A: System Request

Project Name: Web Development for the USDC of Rhode Island

Project Sponsor(s):

Name: David A. DiMarzio

Position: Clerk of the Court

Organization: United States District Court of Rhode Island

Phone: (401) 752-7246

E-mail: david_dimarzio@rid.uscourts.gov

Name: Barry J. Weiner

Position: Chief U.S Probation Officer

Organization: United States District Court of Rhode Island, Probation Office

Phone: (401) 752-7300

E-mail: Barry_Weiner@rip.uscourts.gov

Business Need:

The Rhode Island District Court is in need of a newly redesigned website to improve both the ease of use of the website as well as the image that the website portrays to the public.

In addition to the USDC of RI needing a new website, the Probation Office is also in need of a website.

Functionality:

The website for the USDC of RI will provide online access to the courts information such as; court dates/calendars, forms that can be filled out electronically, case management and electronic case filing for attorneys, historical information, jury information, judge information and search capabilities.

The website for the Probation Office will provide online access to their information such as; commonly used forms, FAQ's, and any defendant information.

Expected Value:

- A site with much greater functionality
- Easy to use and portrays the proper image of the USDC of RI
- Aid the court officials in their day to day use of the site
- Aid citizens/defendants who utilize the court website
- Save the Probation Office \$15,000 annually

Special Issues or Constraints:

- We must create a separate site for the probation office that will link to the main site
- We have a 21 week timeline to develop and implement the new website

Appendix B: Feasibility Analysis

Technical Feasibility: Can We Build It? (Medium)

Familiarity with Application (Low):

- The MQP team has little experience with how the court uses the current website
 - More research will be done during the project regarding the use of the USDC of RI website
 - The team will work with the IT staff and the court officials to understand all uses of the site

Familiarity with Technology (Medium):

- The MQP team has moderate experience with web development and design
 - The team will analyze other USDC websites to aid in our design
- The IT staff has minimal web design experience and designed the original site in Microsoft FrontPage
 - We are familiar with FrontPage and will also look into other easy to use web design software

Project Size (Medium):

- We estimate that the project size is average and can be completed in the given 21 week period

Compatibility (Medium):

- We feel that the courts information already on the site will be easily integrated into the newly redesigned website

Economic Feasibility: Should we build it? (Excellent)

Tangible Costs and Benefits:

- Software for web design is already available on and off site
- Cost to pay WPI for MQP team is \$15,000
- Save the Probation Office \$15,000 annually

Intangible Costs and Benefits:

- Aiding the Office of the Clerk in daily operations
- Aiding the Probation Office in daily operations
- Allows for new technology to be added to the site in the future with ease
- Time taken to maintain and update the system in the future

Organizational Feasibility: If We Build It, Will They Come? (Excellent)

Project Champion(s):

- Mr. David DiMarzio, Clerk of Courts
- Mr. Barry Weiner, Chief US Probation Officer

Senior Management:

- There is strong support for the project from the court officials
- The IT staff for the court is highly supportive of the project as well

Users:

- We know that court staff wants the site to be redesigned and we plan to conduct surveys to see how the public feels about the change

Alignment with the Business:

- We feel that the website is aligned with the business already but the redesign will allow for all the users to perform tasks more efficiently

Appendix D: Meeting Minutes

September 3, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo

Agenda:

1. Critique Court Website
2. Next Meeting at Courts

Minutes:

- I. Critique Court Websites
 - a. Critique form will include:
 - i. Group Member Name
 - ii. Site URL
 - iii. District
 - iv. HCI – easily accessible, readable etc?
 - b. Each member will view 15 each (10 – district court / 5- probation offices)
 - i. Corey will view sites from circuits: 1-4
 - ii. Mark will view sites from 5-7
 - iii. Yetti will view sites from 8-11
 1. *Number may increase depending on what we find*
 2. *Make sure Florida middle district, New Jersey, New Hampshire probation sites are looked at.*
- II. Next Meeting at Court:
 - a. Identify Stakeholders
 - i. For US District
 1. Judges
 2. IT Managers
 3. Attorneys
 4. Jury
 - ii. For Probation Office:
 1. Probation officers
 2. Person on Probation (1st time offender)
 3. Person on Probation (Repeat Offender)
 - iii. For Both
 1. Researchers

2. Family Members
 3. Employers/Employees
 4. Etc
- b. Schedule Interviews
 - c. Tours
 - i. Gain more info on courts and operations
 - d. Staff Meeting (8:30)

Deliverables:

- **September 7, 2009:** Site reviews due
- **September 9, 2009:** Discuss vision of website and collect stakeholders with Mr. David DiMarzio and Mr. Barry Weiner
- **September 10, 2009:** Brainstorm interview questions.

September 8, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo

Agenda:

1. Website Critiques
2. Background Discussion

Minutes:

- I. Website Critiques
 - a. Corey
 - i. Top Site: Massachusetts
 1. Maine was okay short sweet and simple
 2. New Hampshire was okay not as pleasing to the eye as Mass' though.
 - ii. Worst site: Philadelphia, Puerto Rico, Delaware (disclaimer was a turn off)
 - b. Mark
 - i. Top Site: Northern District of Texas
 - ii. Worst Site: Eastern District of Texas
 - c. Yetti
 - i. Top Site: None
 - ii. Worst Site: Alaska
 1. They were all bad for the most part. Content was there but severely lacked organization.
- II. Background
 - a. Discussed "Understanding The Federal Courts"
 - b. HCI will be a part of the background.
 - i. Yetti will look into it.

Deliverables:

- **September 14, 2009:** Background

September 14, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

Agenda:

- I. September 9th Meeting
 - a. Tour
 - b. Meeting with Dave and Barry
 - c. Interview Questions
 - d. Jury Survey
- II. Website Reviews
 - a. Basic Vision of website template
- III. Background Discussion
 - a. Understanding the Fed Courts
 - b. HCI
 - c. History of website
- IV. Open Discussion
- V. Clear the Air / Deliverables.

Minutes:

1. September 9th Meeting
 - a. Tour
 - i. Staff meeting
 1. Mr. David DiMarzio introduced us to everyone and the project
 - ii. Lisa took us around the courts and probation office.
 1. Saw picture worthy locations
 - b. Meeting with Dave and Barry and John
 - i. Barry was more organized and understood the scope.
 - ii. Dave's vision is still slightly blurry
 1. Take advantage of "storyboarding".
 - iii. Johns walk through of site
 1. Showed lack of organization
 2. Use HCI to back up organization
 - a. Identify principles
 - b. Example: If something changes in one are it should also change in another.
 - iv. Make sure everyone understands the scope.
 - v. Look into standards/

- c. Interview Questions
 - i. Group RI stuff together before switching to other sites
 - ii. Ask what tasks they use the website for, (interactions too)
 - 1. They refer people to the site (etc)
 - iii. Use this to gather info on what they like, what they using what they're not using.
 - 1. Look for repetition
 - 2. Take the info and use it in the proposal presentation and the document to back up information
 - iv. Stakeholders
 - 1. Make sure we ask to follow up with them.
 - 2. Judge's staff
 - 3. Ask for family member contacts and offenders
 - a. Maybe give the P.O's the questions to survey the offenders.
- d. Jury Survey
 - i. Remove MQP Blurb
 - ii. Turn the "very easy etc" into a table
- 2. Website Reviews
 - *W3C

- WEB ACCESSIBILITY INITIATIVE.

- a. Basic Vision of website template
- 3. Proposal
 - a. 50 to 60 pages
 - i. Background
 - ii. Workplan
 - iii. Choices - Methodology
 - 1. Waterfall
 - 2. Protoyping
 - iv. Diagrams
 - v. Requirement Gathering
 - vi. Design
 - vii. Implementation
 - b. Will eventually turn into the MQP paper
- 4. Open Discussion
 - a. Put things into the appendices
- 5. Clear the Air / Deliverables.

September 21, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

Agenda:

1. September 21st Meeting
 - a. Interviews
2. Plan for Next Week
3. Open Discussion
4. Clear the Air / Deliverables.

Minutes:

- I. September 21st Meeting
 - a. Interviews
 - i. Went well and gathered a lot of needed information
 - ii. Need to have a more content driven interview with probation.
- II. Plan for Next Week
 - a. Career Fair so no meeting in Rhode Island
 - b. Work on background
 - i. Intro, background, and outline should be provided on Friday
 1. Very extensive background
 - a. Options table for website design platform.
 - b. Do systems request - attach as appendix
 - c. Discuss it in background as objective.
 - d. Total cost and savings – appendix
 - e. Gant chart
 - f. Planning phase
 - g. USE Chapters based on systems development life cycle
 2. Incorporate Change Management
 - a. How to incorporate change management
 - b. Age differences
 - i. Aiding both generations
 - c.
- III. Open Discussion
- IV. Clear Air/Deliverable

Deliverables:

- **Background due next week**

September 28, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

Agenda:

1. Background Discussion
 - a. Professor Loiacono's Comments
 2. September 30th 2009
 - a. Follow up meetings
 3. Open Discussion
- Clear the Air / Deliverables

Minutes:

- I. Background Discussion
 - a. Project Objectives Sections
 - i. Explain why
 - b. Begin to identify people
 - i. Dave – Sponsor / Champions
 - ii. Barry – “ “
 - iii. Liaison – Lisa
 - c. Random Background Notes
 - i. Just say what we're going to be doing
 - ii. ***USDC-RI – change to
 - iii. Remember to add page numbers
 - iv. Add diagrams
 - v. Discuss the 2 branches of government
 1. Fed court org chart
 - vi. Smoother Conclusion / Transition
 - vii. Cite sources / appendices
 - d. Literature Review
 - i. Italicize different types of structures
 - ii. Smoother transition to HCI
 1. Table
 - e. HCI
 - i. Talk about key things in general
 - ii. Choose 10. Ten
 - f. OTHER
 - i. Make sure to identify the users – Requirements Gathering but touch upon the users in HCI

- ii. Actually document make sure to refer to them as Mr. and Mrs.
 - iii. Describe systems request
 - iv. Quantify the results of the website
 - v. Sage publications – for survey info
 - vi. Input into lit review
 - vii. Website review process – under methodology planning
 - viii. List of Review – sites
 - ix. Page number
- II. September 30th Meeting
- a. Meeting with Probation
 - b. Meeting with Dave
- III. Open discussion
- a. Come up with solid plan and schedule for gym
- IV. Clear the Air

Deliverables:

- **Background Redo due Friday.**

Meeting with Probation – September 30, 2009

Header

- Okay links are fine
 - o Tabs across top
 - Link to site under it and centered
- Picture for header background
 - o Ideas
 - Building
 - Someone in office or court rooms
 - Meeting, shaking hands.
- FAQ's
 - o Get questions from them.
 - o Also have frequently used forms.
- Quote for homepage
 - o Something to do with serving community
- Contact Info / Directory
 - o Photo to go along with each person
 - o Or just a table

October 05, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

Agenda:

1. Review of 9/28/09 Meeting Notes.
 2. Background Discussion
 - a. Professor Loiacono's Comments
 3. October 7th 2009
 - a. Follow up meeting with Dave
 4. Open Discussion
- Clear the Air / Deliverables

Deliverables:

- **Background Redo due Friday.**

October 15, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

- Appendices
 - What do we need/ what don't we need
 - Examples vs. Actual
- Corrections (editing)
 - Electronic?
 - Track changes
 - Her availability
 - Corey will be in Worcester
 - Will she be on campus?
 - Corey pieces everything together and brings her hard copy, if electronic submission is inadequate
- Presentation
 - PPT?
 - What should be included
 - Examples?
 - Analysis?
 - Whole SDLC?

October 27, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

1. Discuss our document
 - a. All corrections made
 - b. New parts added
 - c. Professor Loiacono will receive this afternoon
2. Our presentation to the Court
 - a. Should be professional
 - i. Each member should take a designated aspect of the presentation to cover
 - ii. Obviously dress professionally
 - b. Slideshow
 - i. How long should it be
 - ii. What material should be covered
 1. Literary review
 2. Methodology
 3. Combination
 - a. Introduce a topic and provide explanation
 - b. Then describe our methodology for the given item
 - c. Prototype
 - i. One vs. Many
 - ii. Just basic layout
 1. Photoshop
 2. Should we print out copies to hand out?
 3. Where will the presentation take place
 - a. Conference room
 - b. Use large screen and podium
 - d. Document
 - i. Any major pieces missing
 1. Not counting our analysis for that was recently incorporated
 - ii. Copies should be made for all of our stake holders
 1. Do we know a total number
 2. This should also be discussed with David
3. Our next move
 - a. Document/slideshow/prototype
 - b. Move into second phase once our proposal has been signed
 - c. Anything we're missing?

November 3, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Dr. Eleanor T. Loiacono

Document

- All corrections are made
- Tables have all been recreated from scratch

Mock ups

- Submission to David

Slideshow

- When should we have the slides complete
- How long, time wise, should our presentation be
- Presentation
- Date/Time

Meeting with USDC of RI Staff - November 4, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Mr. David DiMarzio, IT Staff,

Paulette Dube

Agenda:

1. Discuss our process (SDLC, Methodology)
2. Show the first template
 - a. Add common links and general information to blue section of left of homepage
 - b. Send them the table to fill out for the tabs
 - c. No site map necessary

Clear the Air / Deliverables

Meeting with Probation Office - November 4, 2009

Attendees: Yetunde Ajayi-Obe, Corey Graves, Mark Cirillo, Mr. Barry Weiner, IT Staff,
Katrina Mooney, Brian Pletcher, Kim

Agenda:

1. Discuss our process (SDLC, Methodology)
2. Show the first template
 - a. Like the tan and blue
 - b. Need to find a picture for their website
 - c. Look at Richard Benjamin pictures

Clear the Air / Deliverables

Appendix E: Daily Summaries

September 2, 2009

This was our first time actually traveling to the Rhode Island District Court, and upon arrival we attended a meeting with the stakeholders of the project. After a debriefing with Dr. Eleanor T. Loiacono, we conveyed to the stake holders the project's scope and timeframe. After bringing everyone up to speed on our methods of operation we listened to Mr. David DiMarzio, the Clerk of the Court, give a synopsis of the operations of the District Court. David also iterated the message that he would like to put forth through the redesigning of the Court's current website. Mr. Barry Weiner, the Chief U.S. Probation Officer, also conveyed the need for a probation portion of the website and some of the desirable functionalities that his department would like to see in the design of the new site.

September 9, 2009

Our group arrived on-site at 8:30 AM to attend the weekly staff meeting held by the District Court. This meeting was orchestrated by Mr. David DiMarzio and was attended by members of both the Clerk's Office and the Probation Office. David utilized this time to introduce our group to the staff. After the meeting we were given a tour of the entire facility, including the Probation Office. During this tour we were given an idea of the individuals within the Court System that would be beneficial to meet with and discuss our plans for the new website. We also used this time to request a list of functionalities and general ideas pertaining to the site from Mr. Barry Weiner.

After the tour we reported to the conference room in the Clerk's Office which will be our main center of operation while on-site at the Rhode Island District Court. The team discussed the necessity for a common survey to be used during the interviewing process of the members of the Court. We constructed the survey and scheduled several meetings to be held next week, September 16, 2009, with our liaison, Lisa Quartino. John from the IT department provided us with a copy of the current website and also gave us a walk-through of the basic layout and structure of the current site. Upon completion of this walk-through the group was finger-printed for our ID's, which we will be given September 16th.

September 16, 2009

Our group arrived on site around 9am to meet with the Probation Office. This was our first formal meeting with Probation to discuss the content and layout of their website. We met with Mr. Barry Weiner, Brian, Kim, and Katrina. We asked them the interview questions that we had developed prior to the meeting. This can all be seen in Appendix H with their responses to the questions asked. We also discussed other probation websites and got their opinion on what they liked and disliked about them. After the interview we had a much better idea of what they were looking for and they knew what we needed from them.

In addition to interviewing Probation, we interview several other members of the court including: Paula Farrell Fletcher the Case Management Administrator, Connie Zinni the Data Quality Administrator/Court Reporter Supervisor, Berry Mitchell the ADR Administrator, and Ron Fortes the Jury Administrator. All of these interviews went very well and we were able to understand what needed to be done to the website.

September 30, 2009

This day was a work day at the court house. We began doing some major corrections to the proposal and it is coming together nicely. We all corrected the sections of the proposal that we had been working on and collaborated to put everything back together. We talked with Lisa about the plan for next week and we felt that no more interviews were necessary. Overall the day was a very productive work day.

October 7, 2009

When we arrived at the court house we were given the results of some of the surveys. The results came from online as well as in the mail and we were now able to analyze the results of our survey. The majority of the morning was spent on this analysis and the rest of the day was mainly a work day continuing to work on the proposal. We are planning on presenting the proposal next week but that will depend on what needs to be done to the proposal and our time frame.

October 14, 2009

By today we had realized that we would not be presenting the proposal until the week after break or even the second week back. The reason for this is that we need to finalize some key points of the proposal before it can be presented to the court. We spent the day making corrections to the proposal as well as developing ideas for the website and reviewing more surveys that had come in the mail. We are on break next week and plan to work on the proposal during break to finalize corrections.

October 28, 2009

On the 28th of October we went to the courthouse to continue to revise our proposal as well as work on the first draft of the template for the websites. Overall this was a very productive day and we accomplished everything that we needed to. Our proposal is near in completion but will not be able to present the proposal next week due to a scheduling conflict with Dr. Eleanor T. Loiacono. The template is very professional looking and we plan to show them the progress we have made so far next week.

November 4, 2009

This day was sort of a pre-proposal meeting with the staff of the Clerk's Office as well as the Probation Office. In both meetings we gave a brief overview of our approach to completing this project. We discussed our timeline, planning, analysis, and how we came to chose throwaway prototyping for our methodology. In addition to this we gave them the first template of the websites. This made us feel great when both groups were very pleased with how everything looked. Getting this semi-approval is a huge step in the right direction for us. We still need to establish which tabs are going to be used for each site and the exact content for each site as well. Overall the day was a success and the court seems to be pleased with our progress so far.

November 18, 2009

On this date we went to the court house to give our proposal presentation to the court. We had completed our proposal document as well as a prototype for each website. We gave a formal presentation to the staff of both the USDC of RI and the Probation Office. In addition to the staff that we had been working with, a few judges were in attendance as well to view our

progress. Overall the presentation went very well and it was time to await their approval of the proposal in order to begin the coding of the websites.

December 9, 2009

Today we went to the court with the newest proposal with the changes that had been made per the request of the court. After making these changes, the court had approved our proposal. We were ready to begin coding the websites and it was clear that because of several delays, we would need to do some of this coding over our holiday break. This was told to the court staff and we also let them know that we would not be in attendance at the court over our vacation.

January 21, 2010

This was the day that we had some finished prototypes of the website to show the staff. We met with both the District Court staff as well as the staff of the Probation Office. We expected to get some feedback, both positive and negative, on the sites and that is exactly what happened. There were many things that needed to be changed on the site but due to our chosen methodology of throwaway prototyping, this was a good thing. We knew what needed to be changed on the sites and left the court feeling confident that those changes could be made.

February 4, 2010

We returned to the court on this day to show them the progress that we had made in regards to the changes that they had requested. Overall we got a positive response and they were very happy with the changes that had been made. However, there was an issue with switching between two different images in the header. We initially suggested that to save space, the pages

containing content would have a smaller header to allow for more content room. This was not working correctly and we let the courts know about our situation. They wanted us to try to get the image to change so we left the court knowing that we had work to do.

February 18, 2010

At this point we had realized that the two image website would not be possible in the time frame we had remaining. In addition to this, we also explained that if we were to make it work, the code would become much more complex to maintain in the future. In the best interest of all parties, we came to the conclusion that the image would remain static no matter where you went on the website. Because of this the District Court chose to reduce the size of their image by eliminating the quote at the bottom and the Probation Office decided to modify their image as well by reducing the size of their seal and cutting their image from the top. We returned to school to make these changes.

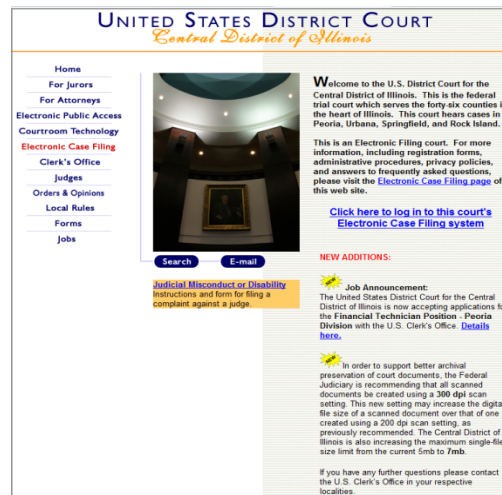
February 25, 2010

Today we went to the court house to install the website on their server and train the IT staff. We had made the changes requested and felt that each site was ready for installation. We started the day by training the IT staff on how to maintain and create new pages on the website. This went smoothly and the IT staff easily grasped everything that we taught them. Following the training, we were able to install the websites onto their test server. Everything went smoothly and they would be converting the sites over when they were ready to go live.

Appendix F: Web-Site Reviews

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.ilcd.uscourts.gov/>

District: Central District of Illinois

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Great

Interactive Features (Y/N): Y

If So, What?

- CM/ECF
- Interactive Forms (Word Perfect)
- Search Capabilities

What we liked:

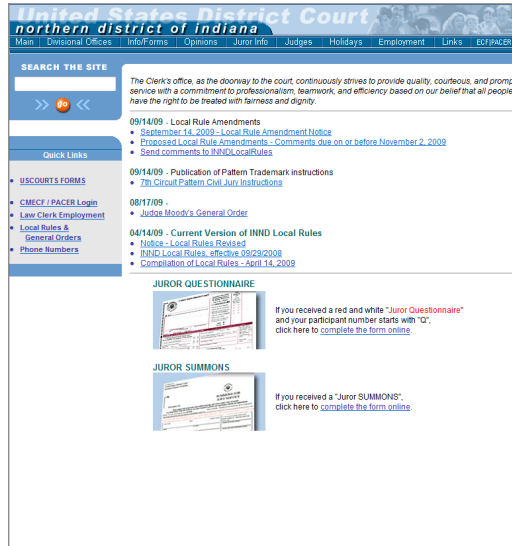
- Great Site Design
- Links on left side bar are organized by group and easy to navigate and follow
- Pleasing aesthetics
- Search Capabilities

What we disliked:

- Some forms were not interactive with Word Perfect and only came in PDF format
- Search and E-mail buttons are in an awkward location

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.innd.uscourts.gov/>

District: Northern District of Indiana

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- CM/ECF
- Search Capability
- Interactive Forms

What we liked:

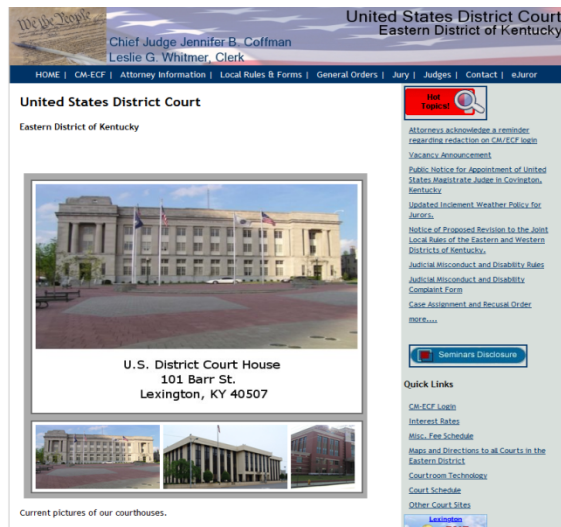
- Tabs and Search capability
- Updated homepage with recent notifications
- Quick links (Changes when you navigate to another page)

What we disliked:

- Very dull interface
- Somewhat difficult to navigate
- Too much text and not enough visual imagery to direct the user

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.kyed.uscourts.gov/>

District: Eastern District of Kentucky

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Current pictures of the courthouses
- Interactive forms
- Weather application
- Court Schedule

What we liked:

- Very simple and easy to look at homepage
- Hot Topics and quick links on sidebar of homepage
- Tabbed navigation is simple and easy to follow
- Forms are editable online
- Easy to navigate the site and things are kept simple

What we disliked:

- Would like to see a list from the tabs drop down

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.lamd.uscourts.gov/>

District: Louisiana Middle District Court

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Adobe Acrobat forms (Editable online)
- Search capabilities
- Google Maps

What we liked:

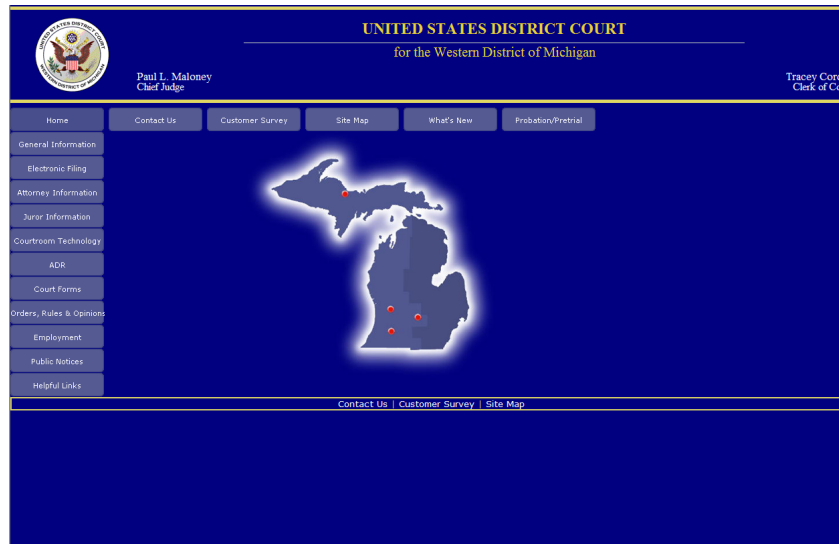
- Interactive forms
- Easy to use (Sidebar tabs)
- Basic Information right on main page (Court Details, Current Day Schedule)
- Interactive map with directions

What we disliked:

- Dead links
- Not very eye-catching

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.miwd.uscourts.gov/index.htm>

District: Western District of Michigan

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Interactive Forms
- Contact Us tab
- Customer Survey

What we liked:

- Easy to navigate the site
- Interactive forms
- Very simple design

What we disliked:

- Nearly blank homepage (besides tabs)
- Tabs lead to pages with dull lists
- Not very appealing to the eye

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.msnd.uscourts.gov/>

District: Northern District of Mississippi

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Only one interactive form

What we liked:

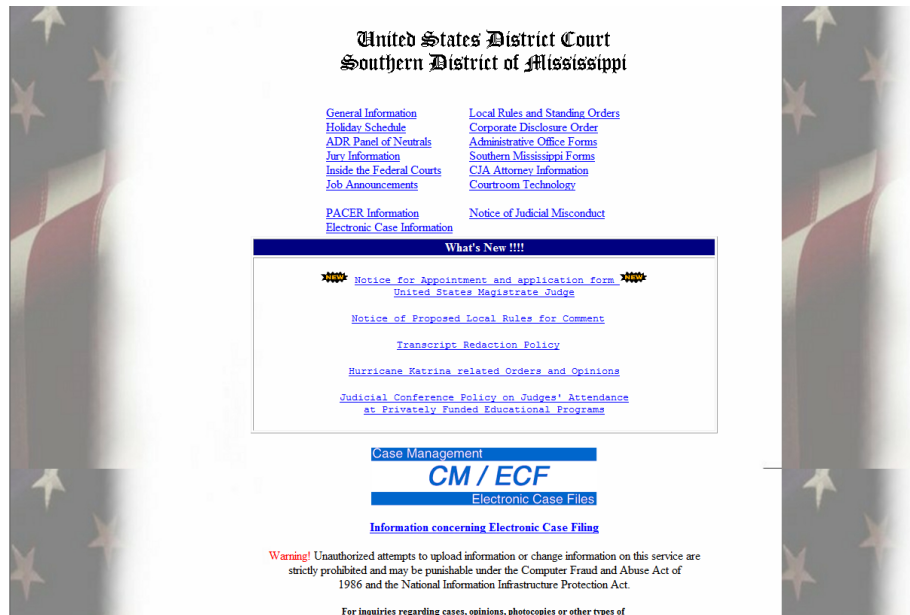
- News on home page
- Quick Links
- Simple top toolbar of tabs

What we disliked:

- Sloppy look, lots of text
- Not all forms are editable online
- Tabs do not drop down with list, only link

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.mssd.uscourts.gov/>

District: Southern District of Mississippi

Ease of Use (1-5): 2

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- CM/ECF

What we liked:

- Very plain and simple
- Not overloaded with information
- What's New section on homepage

What we disliked:

- Very unorganized
- Not interactive forms
- No tabs, just links in a list on homepage
- No visual aids or eye catching material

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.ohnd.uscourts.gov/>

District: Northern District of Ohio

Ease of Use (1-5): 2

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Interactive Forms
- CM/ECF

What we liked:

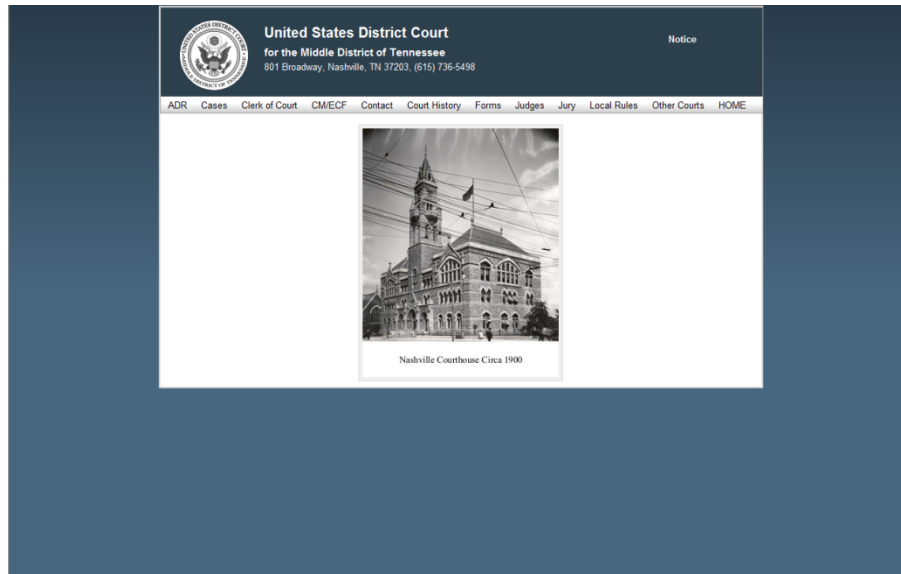
- Updated homepage with notifications

What we disliked:

- Very unorganized homepage
- Not appealing to the eye
- Small text / hard to navigate
- Homepage should be separated into more visible “groupings”

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.tnmd.uscourts.gov/>

District: Middle District of Tennessee

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- CM/ECF

What we liked:

- Very basic homepage that is easy to navigate through
- Design is simple with no distractions
- Color scheme works nicely
- Tabs with drop down menus

What we disliked:

- Forms are there but not editable online
- Homepage shows no notifications or recent news

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.txed.uscourts.gov/>

District: Eastern District of Texas

Ease of Use (1-5): 2

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- CM/ECF
- Interactive forms

What we liked:

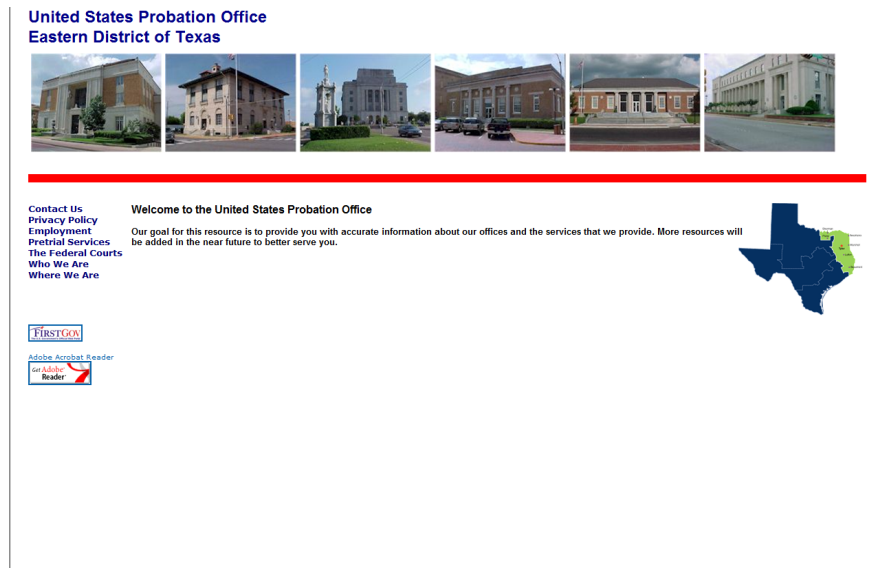
- Tabs at top of page to navigate
- Notices section of homepage
- Expandable table on homepage

What we disliked:

- General Aesthetics of site
- Not appealing to the eye
- Tabs at top of page do not stick out enough
- Not user friendly enough for an average user

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.txep.uscourts.gov/>

District: Eastern District of Texas (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): N

If So, What?

What we liked:

- Very basic site
- Easy to get around the site

What we disliked:

- Blank/White Space very prominent
- Not a lot of information/content
- Should really be a separate tab for the main Eastern District Court Site

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.innp.uscourts.gov/>

District: Northern District of Indiana (Probation)

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Interactive Forms
- Interactive Maps

What we liked:

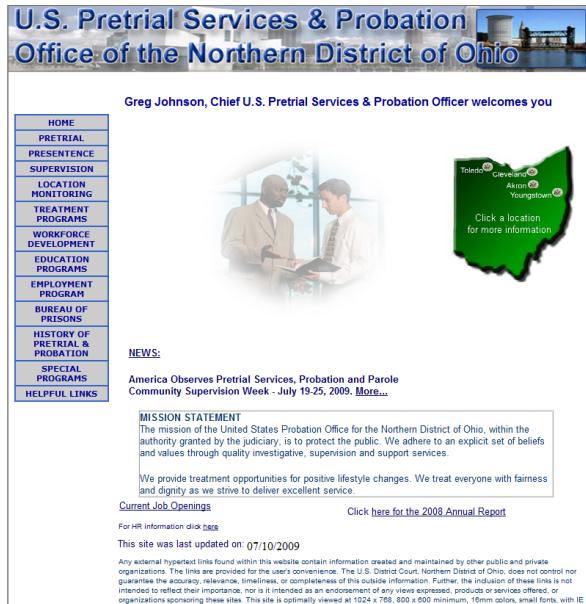
- Very simple design, perfect for this site
- Easy to navigate the site
- No unnecessary information is taking up space
- Color scheme works

What we disliked:

- Information on tabs could be organized in a more visually appealing manner
- The tabs and text could be bigger due to the minimal information, would make the user experience much easier

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.ohnp.uscourts.gov/index.html>

District: Northern District of Ohio (Probation)

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Interactive Forms
- Interactive Map

What we liked:

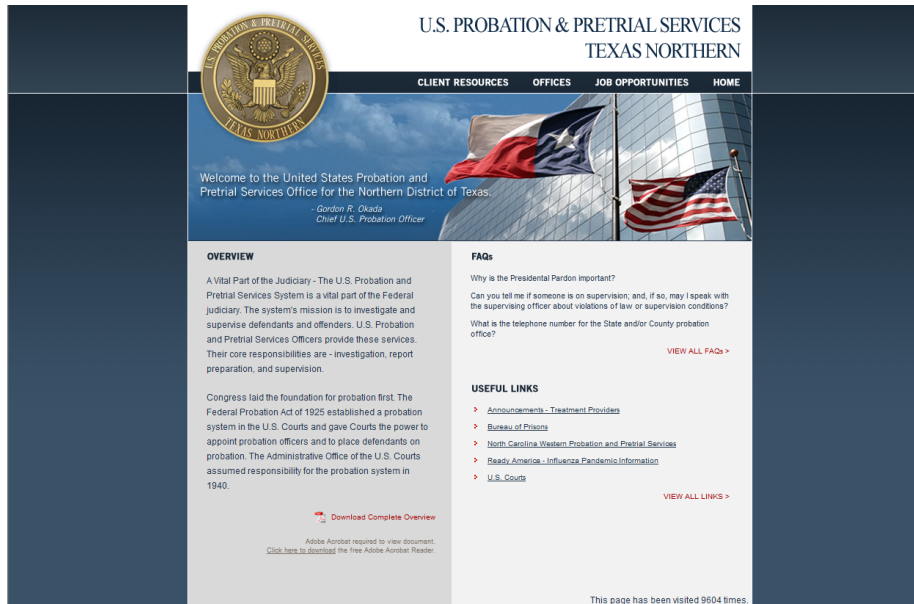
- Mission Statement on homepage
- Lists off of tabs
- Fairly easy to navigate

What we disliked:

- Blank/White Space very prominent
- Not appealing to the eye
- Not organized well, things overlapping on the homepage

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.txnp.uscourts.gov/>

District: Northern District of Texas (Probation)

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Great

Interactive Features (Y/N): Y

If So, What?

- Interactive Forms

What we liked:

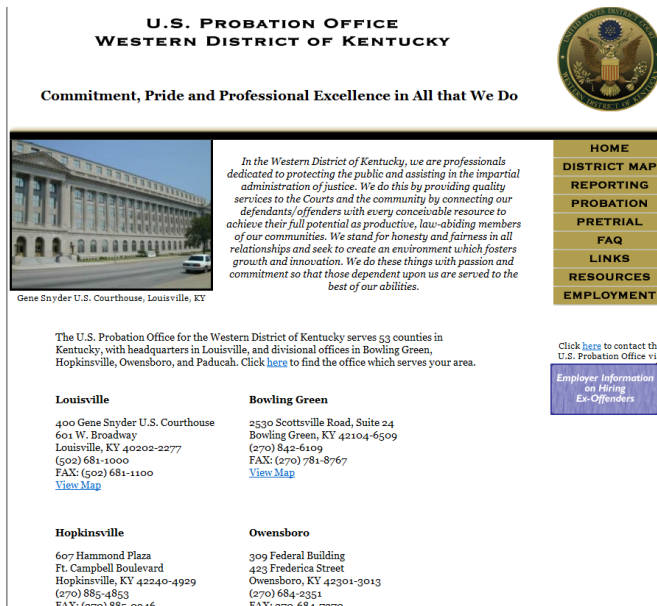
- Very pleasing to the eye
- Great use of the space given
- Simple yet conveys all the necessary information
- Not too many tabs
- Great overview and links included on the homepage
- Nothing distracting you, perfect page for the content provided

What we disliked:

- N/A

Group Member: Mark Cirillo

Screenshot:



Site URL: <http://www.kywp.uscourts.gov/>

District: Western District of Kentucky (Probation)

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Interactive Forms

What we liked:

- Easy to navigate
- Professional look/appeal
- Simple design
- FAQ Section and lots of information

What we disliked:

- Homepage is cluttered with locations of offices, should be its own tab
- Some pages contain excessive text
- Not too much useful information sticks out on the homepage, most of the information you need is included in the tabs which should have more focus

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.gand.uscourts.gov/>

District: Northern District of Georgia

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Great

Interactive Features (Y/N): Y
If Yes, What?

- Notices “ticker” automatically updates itself

What we liked:

- Great organization
- Template not too busy but not too bland
- All necessary information is easily accessible

What we disliked:

- N/A

Group Member: Yetunde Ajayi-Obe

Screen Shot:

United States District Court for the District of Colorado
Local Rules of Practice

Please be advised that the District Court, as of November 19, 2008, has adopted the proposed Amendments to the Local Rules of Practice (Civil and Criminal) of the United States District Court for the District of Colorado. The Amended Local Rules become effective December 1, 2008. They may be found below. The rules are available as an entire set, with a hyperlinked table of contents, index, appendices and attachments, or without hyperlinks, for printing purposes.

The Advisory Committee on the Local Rules of Practice also invites your participation in the 2009 Local Rules revision cycle. The Advisory Committee welcomes comments from everyone working in and for the Court, court users, members of the bar and the public at large. Comments and suggestions for rule revisions and additions should be sent to and will be collected in a central e-mail clearinghouse. The clearinghouse address is: LocalRule_Comments@cod.uscourts.gov

Although comments can be sent at any time, those received by July 1, 2009 will be considered in the 2009 cycle. The Advisory Committee will review such comments, and draft proposed revisions for court review and, if endorsed, then published for public review and comment period during September 2009. After consideration of comments on the proposed rule revisions, the proposed rules with any necessary changes will be considered by the court, with an anticipated effective date of December 1, 2009. This date corresponds with the effective date of Federal Rule changes.

[General Order 2002-1 Adopting Local Rules of Practice Effective April 15, 2002](#)

2009 Local Rules and Summary
[Summary and Notes on 2009 Local Rules Revisions](#)
[Download 2009 Local Rules with Appendices and Attachments - with Hyperlinks](#)
[Download 2009 Local Rules with Appendices and Attachments - without Hyperlinks for printing](#)

You may download the complete Local Rules, together with appendices and attachments, by selecting the appropriate link above. Alternately, each appendix and/or attachment may be downloaded separately by selecting the appropriate link below.

Local Rules of Practice - Appendices		
Appendix A	Civil Cover Sheet	PDF
Appendix B	Supplemental Civil Cover Sheet for Notices of Removal	PDF
Appendix C	Schedule of Fees	PDF
Appendix D	Facsimile Cover Sheet	PDF

Site URL: <http://www.cod.uscourts.gov/>

District: District of Colorado

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): N

What we liked:

- Easy to navigate
- Internal links open within the main frame.
- Font usage was consistent
- No broken links!

What we disliked:

- The layout seems a little bland
- External Links should open outside of the page.
- They should Modernize the layout/template

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.casd.uscourts.gov/>

District: Southern District of California

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): N

What we liked:

- Easy to navigate
- Internal links open within the main frame.
- Font usage was consistent
- No broken links!

What we disliked:

- The layout seems a little bland
- External Links should open outside of the page.

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.gasd.uscourts.gov/>

District: Southern District of Georgia

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If Yes, What?

- Notices “ticker”

What we liked:

- Great organization
- All necessary information is easily accessible

What we disliked:

- Color Scheme
- Links are hard to see
- Alignment is not done properly

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.ganp.uscourts.gov/>

District: Southern District of Iowa

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- CM/ECF

What we liked:

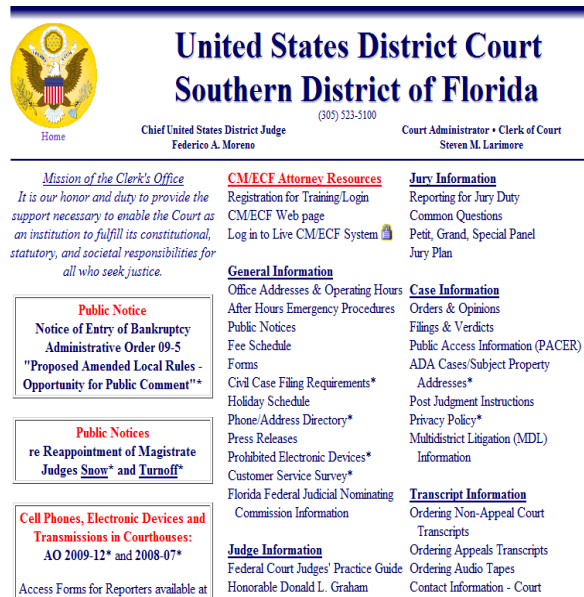
- Nothing

What we disliked:

- The whole layout is not really professional or appealing
 - Bunched everything onto one page.
- Links are not needed since everything is on the front page

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.flsd.uscourts.gov/>

District: Southern District of Florida

Ease of Use (1-5): 2

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If Yes, What?

- CM/ECF

What we liked:

- Nothing

What we disliked:

- Offered way too many links on the front page
- Hard to maneuver through the links because the header's blend into the links
- No layout/template, just a blank page full of links.
- Have to search to find the mission of the court

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.oked.uscourts.gov/>

District: Eastern District of Oklahoma

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If Yes, What?

- They had a “kids corner” which leads to another site that is geared for kids, in helping them understand the courts and all other aspects pertaining to it.
- CM/ECF

What we liked:

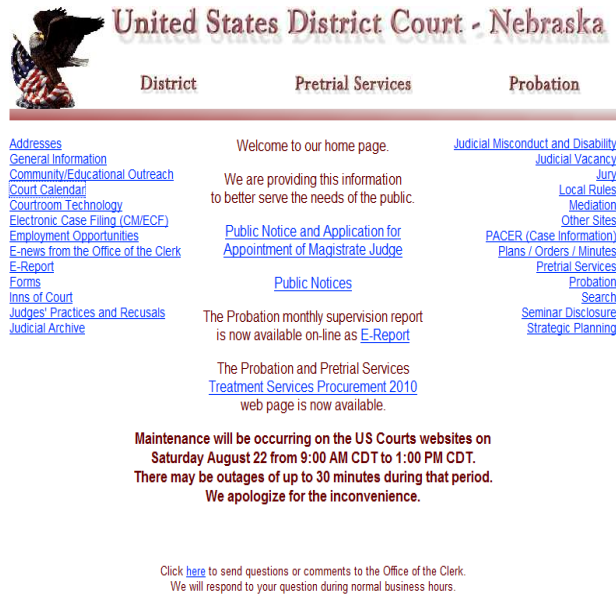
- Easy to navigate
- Font usage was consistent
- Kids Corner
- Color Scheme

What we disliked:

- The layout is too simple

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.ned.uscourts.gov/>

District: District of Nebraska

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): N
If Yes, What?

What we liked:

- Nothing

What we disliked:

- Color Scheme
- Too many links on the front page
- Each page opens up in a completely new page with no back link.
- Font is not consistent

Group Member: Yetunde Ajayi-Obe

Screen Shot:



For All Notices, please click on the "Announcements/Public Notices" button on the left.

Please select from the menu above or from the text links below (if your system will not allow JavaScript, you may not see the graphical menu above).

Site URL: <http://www.akd.uscourts.gov/>

District: District of Alaska

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- CM/ECF

What we liked:

- Easy to navigate

What we disliked:

- The layout seems a little bland
- Everything is aligned to the right

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <https://www.sdd.uscourts.gov/>

District: District of South Dakota

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- CM/ECF

What we liked:

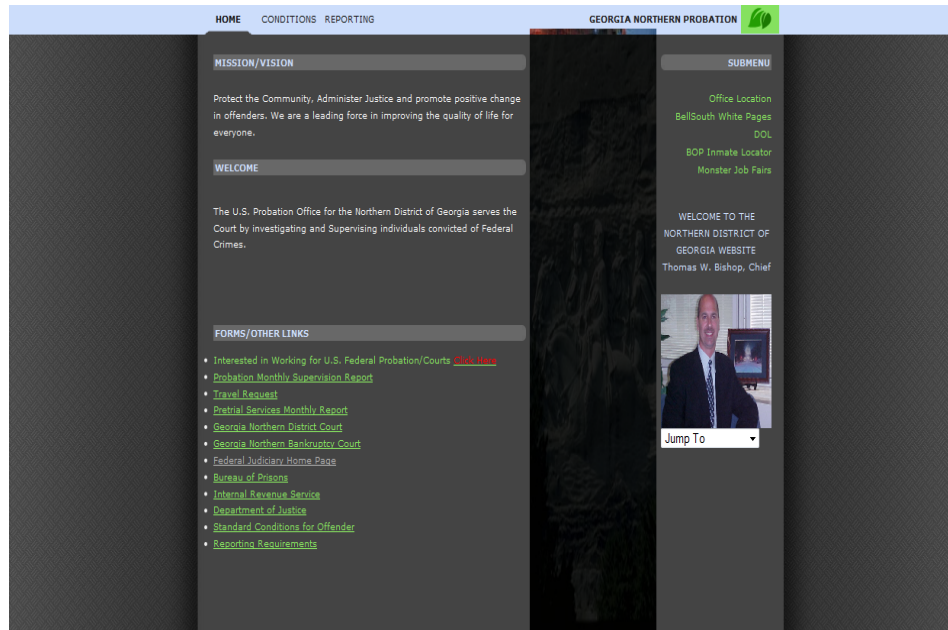
- Easy to navigate
- Great organizations

What we disliked:

- The layout seems a little bland
- Everything is aligned to the right
- The two set of links (on the top and the right)
 - Redundant

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.ganp.uscourts.gov/>

District: Northern District of Georgia (Probation)

Ease of Use (1-5): 2

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Extremely pixelated animation column

What we liked:

- Nothing

What we disliked:

- The whole layout is not really professional or appealing
 - Reminds me of MySpace.com
- Too spread out
- Not enough information displayed on the website.

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.ksp.uscourts.gov/>

District: District of Kansas (Probation)

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Flash menu's

What we liked:

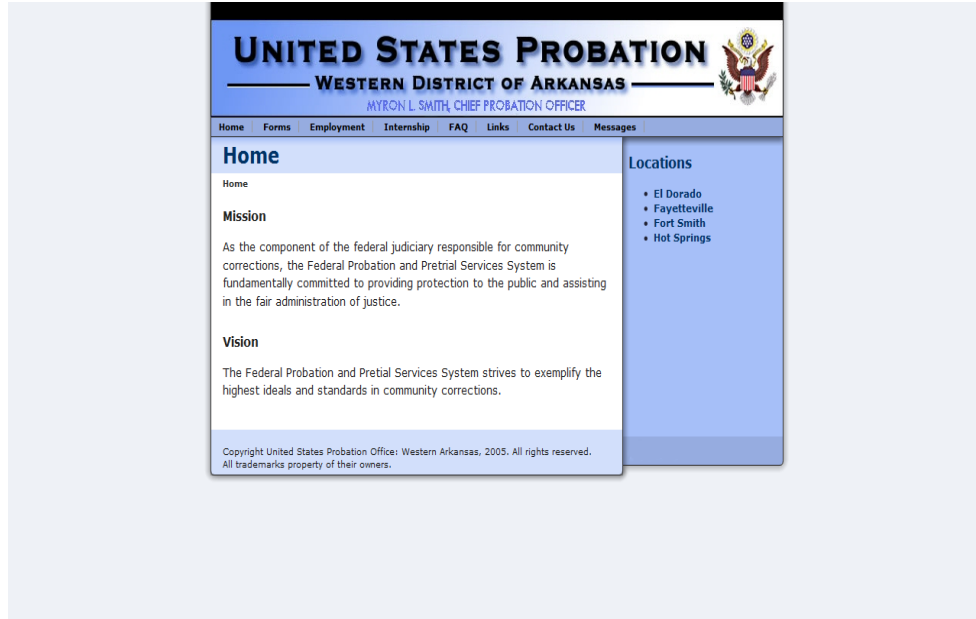
- Layout is nice, the background should be faded out a little more.

What we disliked:

- Has a lot of filler information that doesn't seem necessary to the probation system, thought some articles are interesting.
- All links are linked to a PDF file, instead of the information showing up right there on the website page.
- Using the back button doesn't work, neither does refresh.
- Colors come out a little too strong.

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.arwp.uscourts.gov>

District: Western District of Arkansas (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Great

Interactive Features (Y/N):

No, but it suffices. Gives all the necessary information, which is fine. Template is designed well, simple yet intriguing.

If So, What?

What we liked:

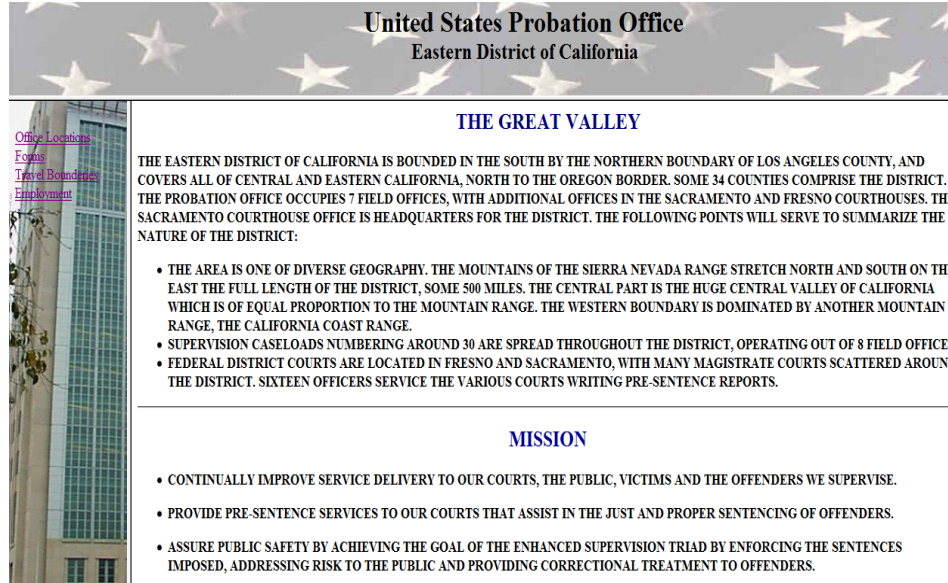
- How easy it was to maneuver around the site, everything was straight forward. No broken links

What we disliked:

- Too much blue.

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.caep.uscourts.gov/>

District: Eastern District of California (Probation)

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): N
If So, What?

What we liked:

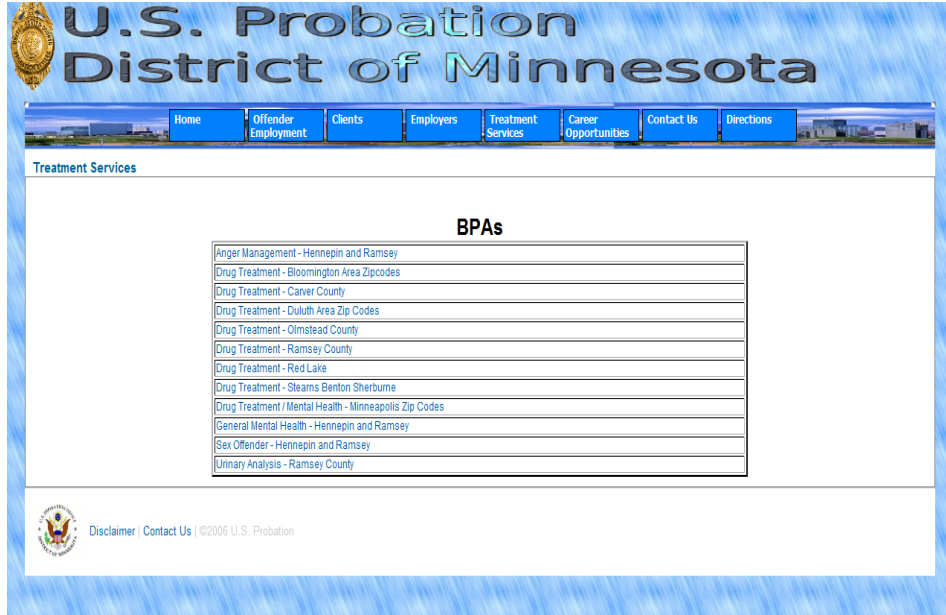
- Nothing

What we disliked:

- The template is ugly
- Link color can't be seen against the template
- Font is in bold and uppercase letters
- Font and font-size isn't consistent
- Div box used for main box is too big for the website layout, things fall off the side.
- Lacking basic information found on all the other probation websites.

Group Member: Yetunde Ajayi-Obe

Screen Shot:



Site URL: <http://www.mnp.uscourts.gov/bpa.html>

District: District of Minnesota (Probation)

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Flash and animations included on the home page as well as the drop down menus for the navigation.

What we liked:

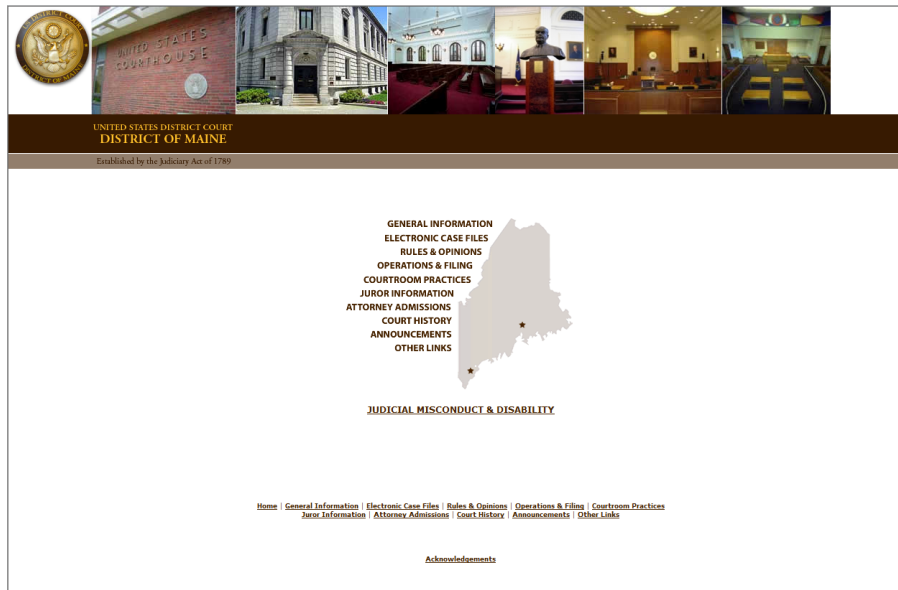
- Easy to maneuver around the site.
- No broken links.

What we disliked:

- Template is not appealing, too bright, too busy.
- Links don't open in a new window,
 - They open within the page which takes the attention away from the original page.
- Repeat of links and forms on the website... redundant.

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.med.uscourts.gov/>

District: Maine

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Great

Interactive Features (Y/N): Y

If So, What?

- Different Applications/Forms
- A help desk

What we liked:

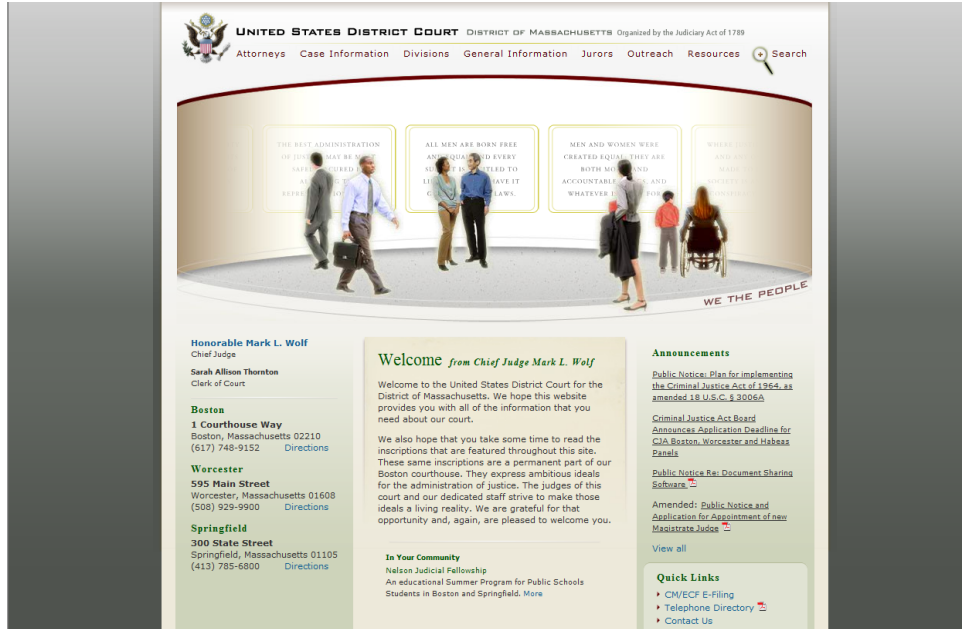
- Site header is very clean & aesthetically pleasing.
- The site is very well done, I would say that it's extremely easy to use and find the things that you would need.

What we disliked:

- Not very much, this is a well-done site. Basic but complete

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.mad.uscourts.gov/>

District: MA, Boston

Ease of Use (1-5): 5

Aesthetics (Poor, Satisfactory, Great): Great

Interactive Features (Y/N): Y

If So, What?

- E-Filing
- Record searches

What we liked:

- Colors are very classic.
- Flash display
- Very Professional

What we disliked:

- N/A

Group Member: Corey Graves



Site URL: <http://www.nhd.uscourts.gov/>

District: NH District Court Concord

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Great (Strong Colors)

Interactive Features (Y/N): Y

If So, What?

- Electronic Form downloads and fill outs

What we liked:

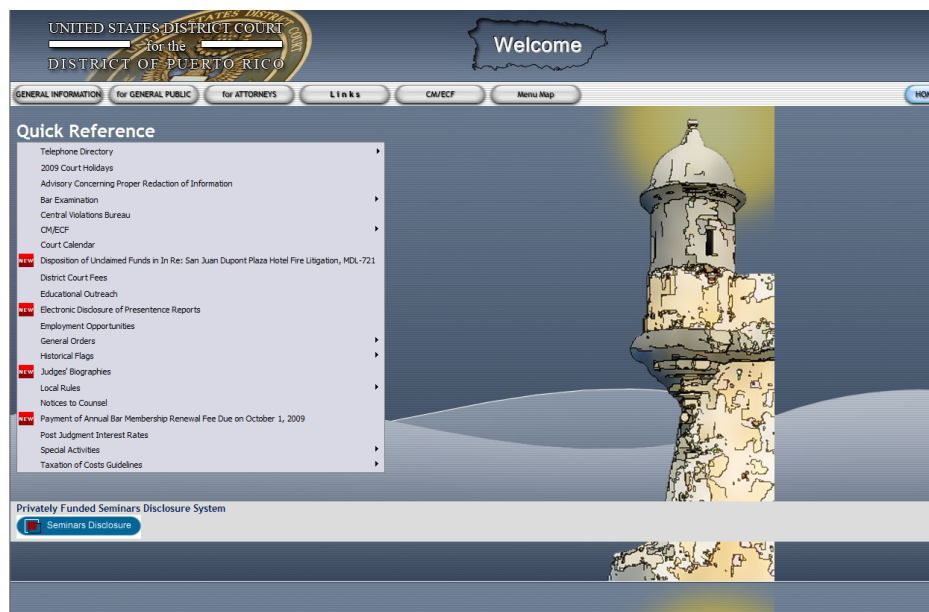
- Easy to use and very clean looking.

What we disliked:

- N/A

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.prd.uscourts.gov/CourtWeb/Welcome.aspx>

District: Puerto Rico District Court

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Downloadable PDF's

What we liked:

- Well organized in terms of site layout and navigation

What we disliked:

- Color scheme
- Also the site has rather poor resolution, they could have made better use of photographs.

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.ctd.uscourts.gov/>

District: Connecticut District Court, Hartford

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's

What we liked:

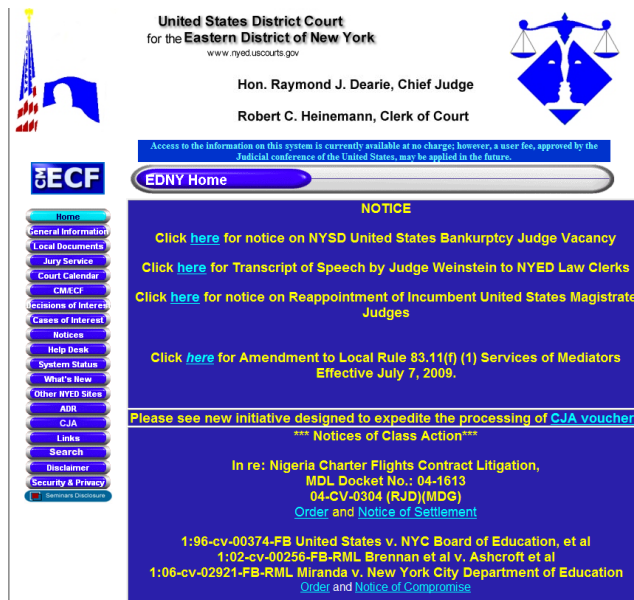
- Nothing

What we disliked:

- Color scheme
- The site is basically a page of links
- Too much white space

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.nyed.uscourts.gov/>

District: New York Eastern District Court

Ease of Use (1-5): 3

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's
- Electronic Case Filing

What we liked:

- Nothing

What we disliked:

- Color scheme
- Very similar to the RIDC site
- Lots of links, too much to sift through

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.nynd.uscourts.gov/>

District: New York Northern District Court

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's
- Electronic Case Filing

What we liked:

- Good use of pictures

What we disliked:

- The site doesn't look very professional
- The site's format isn't that bad, but it doesn't look like a Court website.

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.vtd.uscourts.gov/>

District: Vermont District Court

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's
- Electronic Case Filing

What we liked:

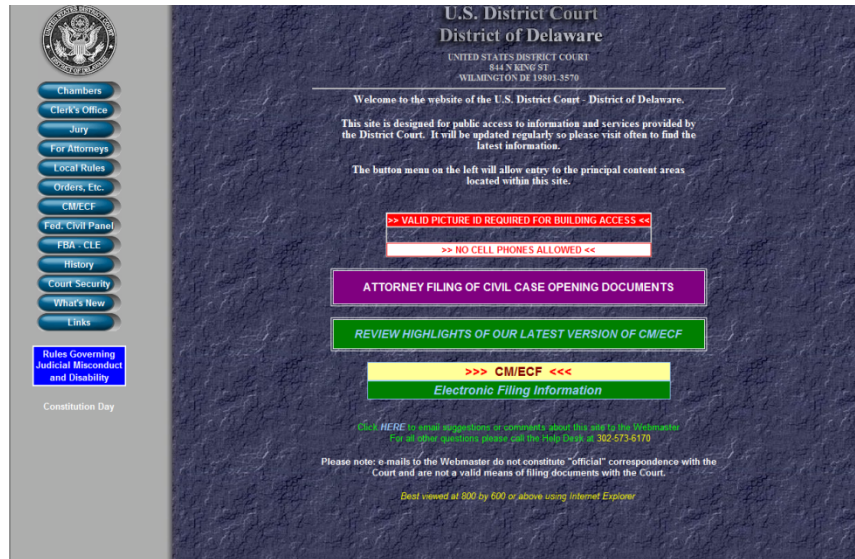
- Site looks very clean

What we disliked:

- Everything is a link

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.ded.uscourts.gov/>

District: Delaware District Court, Wilmington

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's
- Electronic Case Filing

What we liked:

- Site layout is simple and functional

What we disliked:

- The site has a disclaimer before you can enter
- Color scheme is awful

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.paed.uscourts.gov/>

District: Pennsylvania District Court, Philadelphia

Ease of Use (1-5): 2

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's
- Electronic Case Filing

What we liked:

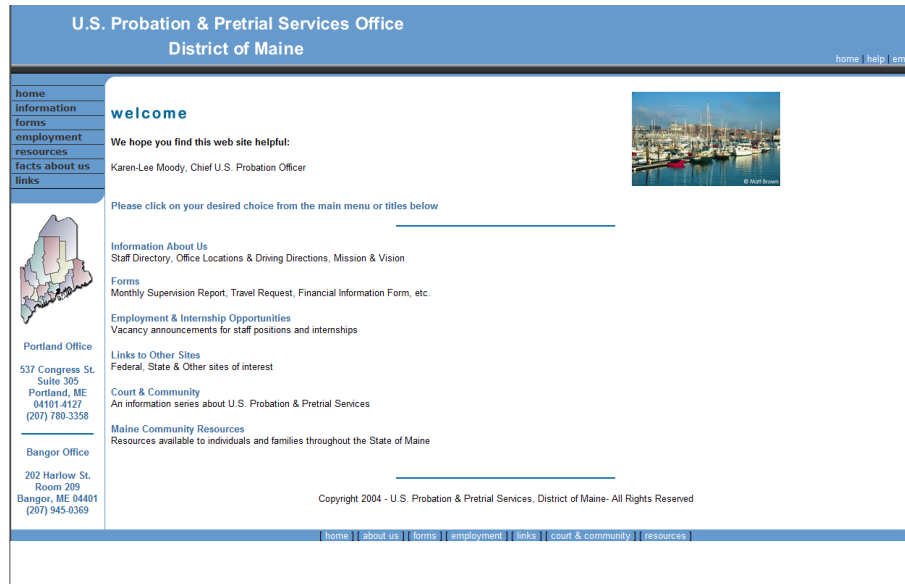
- Nothing

What we disliked:

- Layout is terrible
- Color scheme is borderline non-existent
- The site is pretty terrible

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.mep.uscourts.gov/>

District: Maine (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Monthly supervision form.
- Travel requests

What we liked:

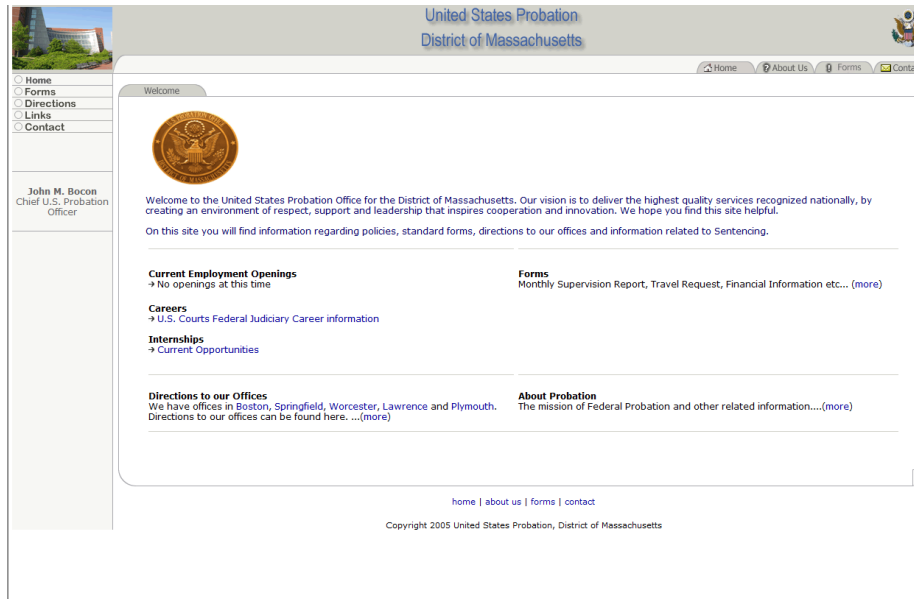
- Similar to the District Court site for Maine. Less aesthetically pleasing, but still easy to use. Forms load right up and information is quite easy to retrieve.

What we disliked:

- Not very much, the site is again complete. Color scheme is lacking in comparison with the Maine District website, but the functionality is up to par.

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.map.uscourts.gov/>

District: MA, Boston (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): Y

If So, What?

- Electronic Form downloads and fill outs

What we liked:

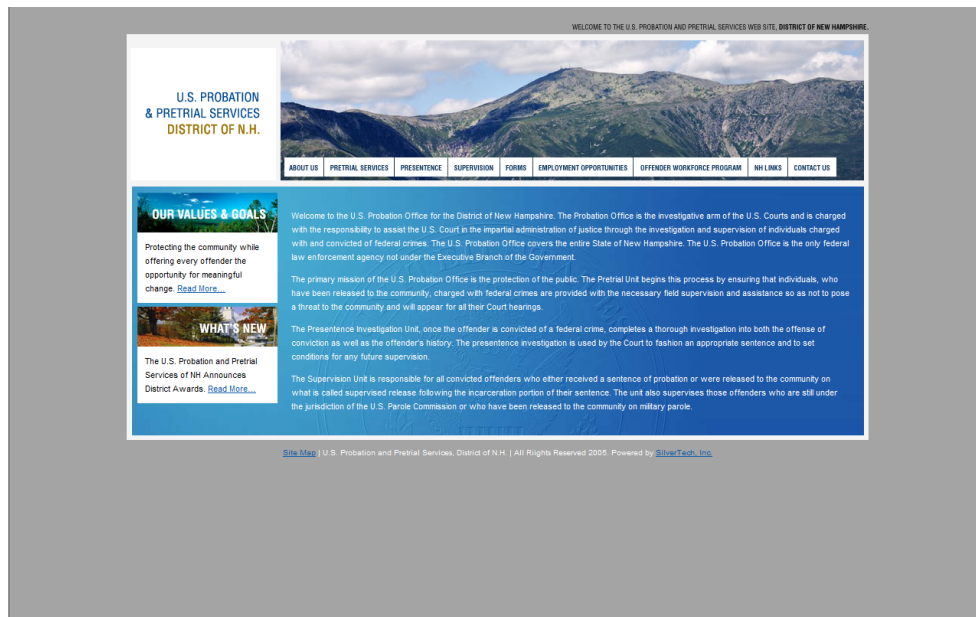
- Easy to navigate and easy to retrieve information.

What we disliked:

Colors aren't the best, site is a definite downgrade from the District Court of Boston, but still has all the necessary functions.

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.nhp.uscourts.gov/>

District: NH Concord (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Great (Strong Colors)

Interactive Features (Y/N): Y

If So, What?

- Downloadable PDF's

What we liked:

- Easy to use and very clean looking.

What we disliked:

- Small font on the links, could be troublesome with large age demographic.

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.prp.uscourts.gov/uspopt/Welcome.aspx>

District: Puerto Rico (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Satisfactory

Interactive Features (Y/N): N

If So, What?

What we liked:

- Simple, clean

What we disliked:

- Color scheme
- Also the site has rather poor resolution, they could have made better us of photographs.
 - Very similar to the District Court

Group Member: Corey Graves

Screenshot:



Site URL: <http://www.ctd.uscourts.gov/ctp/default.htm>

District: Connecticut (Probation)

Ease of Use (1-5): 4

Aesthetics (Poor, Satisfactory, Great): Poor

Interactive Features (Y/N): Y

If So, What?

- Basic downloadable PDF's

What we liked:

- Nothing

What we disliked:

- Color scheme
- The site is extremely basic
- Simple and cheesy

Appendix G: Probation Website Ideas

Thoughts About Website Development

US Probation, District of Rhode Island

*Important to distinguish Probation portions of website from District Court given the vast difference in the anticipated user population.

- Have its own drop down menu from header
- Not a completely separate page, although they may try to argue this, we are here to build one site and this is not a necessary item.
- In anticipation for the demographic using this part of the site, should we work with the translators to make the site available in Spanish?

*Navigating site must not be too complex as it can easily overwhelm and frustrate our offenders/defendants.

- HCI
- This they should not be overly concerned with, we obviously want to make the site easier to navigate than the endless list of PDF's they call a site

*Start with a Mission Statement - go on to explain what we do - our functions and unit breakdown.

- Although accessible through the drop down menu, this portion of the site will have its own "home page" this can have the mission statement on it
- A couple pictures or something also

*Agreement that we have a few population groups our website will target (below) and the understanding that each will be looking for some different things.

- Further define population groups
 - Do you mean linguistic groups
 - Ethnic groups?
- What will be the primary reason to visit the Probation site?
 - Families of these individuals
 - Defendants
 - Attorneys?

Offenders/Defendants

Address, Directions, Hours

Pretrial Procedures for Checking In

Color Code

Links to Court Calendar

List of Treatment Providers - Address, Direction, Phone

Employment Resources

“What to expect at court”

Feedback/Suggestions Tab

Explanation of Conditions of Supervision

Ability to Access Commonly Used Forms

LIST OF FORMS NEEDED

Ability to Complete Forms and send them electronically

Ability to Request Location Monitoring Schedule Changes

Ability to Submit a Monthly Report to Officer

Ability to Submit a Request to Travel (Nationally or Internationally) (Including travel regulations/requirements.)

Links to Other Federal/State Agencies - BOP, US Atty, State Probation, etc.

Links to Non-Profits for Community Service Opportunities

Links to Employment Resources for Offenders/Defendants

Family Members

Overview of Expectations of Family Members

How you can work cooperatively with probation officer

Links to Access Community Services

Public/Press

Our Function in the Judiciary

Who are we - What we Do

Employment Opportunities

Explanation of Location Monitoring - What it is; What it can do; and What it Can't Do

Information about Sex Offenders in Federal System - Laws, Regulations, Registration

Basic Criminal Justice Statistics

FAQ's

Students

Benefits of Community Supervision

Benefits of Treatment

Why supervision makes sense over incarceration

Appendix H: Interviews

Website Questionnaire

Interviewee: _____

Interviewer: _____

What do you like about the current website?

What do you not like about the current site?

What do you think the website needs the most?

Would you consider the layout of this site to be “user-friendly”?

Would you consider the Massachusetts site to be aesthetically pleasing?

If so, why?

Would you consider the Massachusetts site to be “user-friendly”?

Would you consider the Northern Texas site to be aesthetically pleasing?

If so, why?

Would you consider the Northern Texas site to be “user-friendly”?

On a typical homepage do like to see pictures or text?

Would you agree that sites with pictures are more captivating and inviting to the user?

What images do you feel would portray the Rhode Island District Court?

Do you find drop-down menus to be confusing or intuitive?

Do you feel that the Attorney's page on the current RIDC site has too many links?

Would you like the overall color scheme to contain strong colors (ex. Northern Texas) or softer colors (ex. Massachusetts)?

When you are looking for a search bar on a website, where do you look first?

On the site for the District Court of Maine, do you find its simplicity appealing?

What things typically deter you from a website?

If you had to list the primary users of this website, who would they be and what information would they be trying to retrieve?

Do you feel that there is any information on the current website for the RIDC that is unnecessary and/or redundant?

Do you feel that there is any information that is missing from the current website and should be included in the new site?

Interview with Probation

Interviewee: Brian, Kim, Katrina and Barry

Interviewer: TEAM

What do you like about the current website?

District Court

- Kim: likes the tabs across the top
- ** All agree less can be more.

Probation

- More appealing, no white space.
-

What do you not like about the current site?

- Brian: Page is too busy
- Katrina: scrolling down to see the whole content

Probation

- Links tab: bunch of things under one tab
- Needs more guidance
- No new screen when you click on a tab

What do you think the website needs the most?

- Tabs on top
- Drop down menu's against the top.
- **NEW JERSEY** – resources, forms, etc
 - o Professional yet simple.
- Font for probation
- Office to the direction
- Forms made interactive
 - o Do it via online
 - *** FORM due the 5th of every month
 - Travel Permit
 - Community service logs, etc may not be needed.
- Contract treatment agencies (address info etc).
- NJP.uscourts.gov – a site they liked.
 - o Likes:
 - Links across the top
 - Drop down menus
 - Did you know sections
- Same layout for both
 - o Shows the relationship

Would you consider the layout of this site to be “user-friendly”?

- Confusing
- Lowly ranked for their target audience
-

Would you consider the Massachusetts site to be aesthetically pleasing?

If so, why?

- Professional feel, they like this.

Would you consider the Massachusetts site to be “user-friendly”?

- Like “Site Map”.

Would you consider the Northern Texas site to be aesthetically pleasing?

If so, why?

Would you consider the Northern Texas site to be “user-friendly”?

On a typical homepage do like to see pictures or text?

- Pictures are a yes

Would you agree that sites with pictures are more captivating and inviting to the user?

What images do you feel would portray the Rhode Island District Court?

- The seal

Do you find drop-down menus to be confusing or intuitive?

Do you feel that the Attorney’s page on the current RIDC site has too many links?

Would you like the overall color scheme to contain strong colors (ex. Northern Texas) or softer colors (ex. Massachusetts)?

When you are looking for a search bar on a website, where do you look first?

- Top Right.
- Search buttons are not useful unless it actually brings up pertinent information
- *** Look into searches
 - o **EXACT** searches, not word relations.

On the site for the District Court of Maine, do you find its simplicity appealing?

- Katrina felt it was a little too clustered, but the simplicity was nice.
-

What things typically deter you from a website?

- Too cluttered too technical
 - o Will take too long to load
-

If you had to list the primary users of this website, who would they be and what information would they be trying to retrieve?

- Primary Users:

- Defendants
- Families
- Attorneys
- Press
- College Students / research purposes

Do you feel that there is any information on the current website for the RIDC that is unnecessary and/or redundant?

-

Do you feel that there is any information that is missing from the current website and should be included in the new site?

U.S Probation and Pretrial services

FAQ'S

- For the press.
- Awareness Before Confinements: Illinois Southern

Interview with Case Management and Case Reporter

Interviewee: Paula Farrell Pletcher – CM / Connie Zinni – Case Reporter

Interviewer: TEAM

What do you like about the current website?

- Like that the button says CM/ECF
- That it's off to the side
 - o Attorneys primarily use it
- Like how it is already

What do you not like about the current site?

- Hard to find things for the court reporters
- Transcript schedule and cost of it are not easily found and no found together
- Better organization and grouping.
- Need to be slightly more professional
- Attorney Info needs to more organized, maybe categorized differently.
- PDF sign is redundant

What do you think the website needs the most?

-

Would you consider the layout of this site to be “user-friendly”?

- Can't find local rules, things are not easy to find.
 - o Should go straight to local rules.
 - o Go straight to the point

-

Would you consider the Massachusetts site to be aesthetically pleasing?

If so, why?

- Not user friendly
- Not straight forward enough
- Distracting

Would you consider the Massachusetts site to be “user-friendly”?

Would you consider the Northern Texas site to be aesthetically pleasing?

If so, why?

- Doesn't do much for Paula

Would you consider the Northern Texas site to be “user-friendly”?

On a typical homepage do like to see pictures or text?

- Likes the court seal.

Would you agree that sites with pictures are more captivating and inviting to the user?

What images do you feel would portray the Rhode Island District Court?

Do you find drop-down menus to be confusing or intuitive?

- Don't like drop downs unless it has a complete separate link/menu for it

Do you feel that the Attorney's page on the current RIDC site has too many links?

Would you like the overall color scheme to contain strong colors (ex. Northern Texas) or softer colors (ex. Massachusetts)?

- Pastels
-

When you are looking for a search bar on a website, where do you look first?

On the site for the District Court of Maine, do you find its simplicity appealing?

- Don't like it
- Too busy
- Too many pictures, distracting.

What things typically deter you from a website?

- Too busy
- Too many links, usability
- Colors
- Flash distracting
-

If you had to list the primary users of this website, who would they be and what information would they be trying to retrieve?

- Attorneys
- Attorneys Staff
- Prisoners

Do you feel that there is any information on the current website for the RIDC that is unnecessary and/or redundant?

- Multiple links to one place from different tabs
- PDF sign

Do you feel that there is any information that is missing from the current website and should be included in the new site?

- Make sure things are described properly.

EXPANSION

- Maybe take in Electronic ECF Registration.

Interview with Jury Administrator

Interviewee: Ron Fortes

Interviewer: TEAM

What do you like about the current website?

- Doesn't use it very often
- Drop down will help a lot

What do you not like about the current site?

- Correct underscore in email
- Website looks 1960 ish
- Doesn't like contact list.

What do you think the website needs the most?

- Likes appearance to be the same

Would you consider the layout of this site to be "user-friendly"?

Would you consider the Massachusetts site to be aesthetically pleasing?

If so, why?

Would you consider the Massachusetts site to be "user-friendly"?

- Likes links on the top, d-d- menus

Would you consider the Northern Texas site to be aesthetically pleasing?

If so, why?

- Likes the colors of the texas. No white space

Would you consider the Northern Texas site to be "user-friendly"?

On a typical homepage do like to see pictures or text?

- Likes pictures. The seal.

Would you agree that sites with pictures are more captivating and inviting to the user?

What images do you feel would portray the Rhode Island District Court?

Do you find drop-down menus to be confusing or intuitive?

Do you feel that the Attorney's page on the current RIDC site has too many links?

Would you like the overall color scheme to contain strong colors (ex. Northern Texas) or softer colors (ex. Massachusetts)?

- Prefers texas site, (darker tones)

When you are looking for a search bar on a website, where do you look first?

- Top right

On the site for the District Court of Maine, do you find its simplicity appealing?

What things typically deter you from a website?

If you had to list the primary users of this website, who would they be and what information would they be trying to retrieve?

Do you feel that there is any information on the current website for the RIDC that is unnecessary and/or redundant?

- Petit/grand etc- not what it is
 - o Really a letter sent for summons.

Do you feel that there is any information that is missing from the current website and should be included in the new site?

- E-jury has been implemented by us courts. Not sure when its coming to Rhode Island


Interview with ADR Administrator Berry Mitchell

IMPROVING THE ADR HOME PAGE

I. The Court's Current Home Page and ADR: What It Has Now

A. What we have now: The Court's Home Page and ADR

1. The Home Page ADR Icon Link: The Link is set forth alphabetically among other icons on the home page, is plainly visible to the user as it should be in order for easy access.

2. Court Bulletin Board: I am not sure why this appears as the first link on the page. It appears on each of the 16 icon links that appear on the court's home page.
3. Message from ADR Administrator: This greeting/introduction should remain.
 - a. Recommendation:  Some districts have their Chief Judge introduce the ADR program. Judges' support for the use of ADR can enhance attorneys' views of the value and appropriateness of ADR.¹ A brief introductory statement regarding the court's ADR program and the value of its use might strengthen and encourage the use of ADR by attorneys and litigants alike.
4. Links
 - a. ADR Program Summary: This should remain as an important introduction to ADR as a concept and the various ADR options that are made available to litigants through the auspices of the ADR Program.
 - b. Notice of Adoption of Amended Alternative Dispute Resolution Plan:
 - (1) Recommendation: This should be deleted and replaced with a direct link to the Court's Local Rule 53, followed by a

¹ Roselle L. Wissler. *Barriers To Attorneys Discussion and Use of ADR*, 19 Ohio St.J. on Disp. Resol. 459, 470 (2004).

sublink to the court's ADR Plan.

- c. **The ADR Plan:** See above. The Plan in its entirety should be made available on the website and should follow the link to the Local Rule 59.
- d. **Panel of Neutrals:** Here, there is great variation among districts in terms of what information is provided to counsel and litigants.

(1) See District of Rhode Island ADR Panel link

(2) Other examples include:

- (a) Western District of Washington
- (b) Central District of California
- (c) Northern District of California*
- (d) District of Kansas
- (e) Western District of Oklahoma

(3) **The importance of ADR qualifications and experience:**

It is my opinion it is far more important that persons seeking the assistance of an arbitrator/mediator have a clear sense of what ADR experience and ADR training a neutral has than whether they are an attorney, admitted to practice or that they have tried a lot of cases.⁹ It is also important to know the subject areas that a neutral has experience arbitrating or mediating.

- (a) See Northern District of California; also the District of Kansas

- e. **ADR Panel Application:** Currently the application can not be filled in online and submitted via e-mail.

(1) **Recommendation:** In my opinion this should be changed to make it possible to do so. The application itself should remain unchanged.

- f. **Suggested ADR Briefing Guidelines:** The guidelines are generic enough to be used by all panel members, though not all panel members require the submission of briefs or statements.

Appendix I: Juror Survey



David A. DiMarzio
Clerk of Court

UNITED STATES DISTRICT COURT
District of Rhode Island

Paulette J. Dube
Chief Deputy Clerk

October 5, 2009

Dear Juror:

In the last two months, you have been selected for jury duty at the United States District Court for the District of Rhode Island. When many individuals find out that they are called for jury duty, they often consult the Court's website for more information.

In the coming months, the Court, in partnership with students from Worcester Polytechnic Institute, will be redesigning the Court's website. In an effort to improve and update the website, the Court is looking for user input. If you visited the Court's website, please take a few moments and fill out the enclosed survey. A prepaid return envelope is enclosed.

Thank you for your assistance.

David A. DiMarzio
Clerk of Court



David A. DiMarzio
Clerk of Court

UNITED STATES DISTRICT COURT
District of Rhode Island

Paulette J. Dube
Chief Deputy Clerk

Website Review Survey

The United States District Court for the District of Rhode Island, in partnership with students from Worcester Polytechnic Institute, is revamping its website. Through this survey, we hope to gather information to aid us in making your website visit as simple and informative as possible.

1. When have you last viewed the website for the United States District Court for the District of Rhode Island? (Choose One)

- Within the Last Week
- Within the Last Month
- Within the Last Year

2. What information were you looking to find on the site?

3. Were you able to find this information? If you were, how easy was it to find?

- Very easy
- Easy
- Neutral
- Difficult
- Very difficult
- Could Not Find It

Comments: _____

4. Did you find the site appealing (design, colors, etc.)? Please explain why or why not.

Yes

No

Comments: _____

5. What additions, changes and/or improvements would you recommend to make the site more helpful?

Thank you for taking the time to participate in this survey. Your input is very valuable to us.

Appendix J: Proposal Sign Off Sheet

Worcester Polytechnic Institute
United States District Court of Rhode Island
Major Qualifying Project
Web Design for the USDC of RI

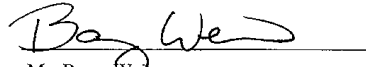
Yetunde Ajayi-Obe, Mark Cirillo, & Corey Graves

We, hereby, certify that the group has highlighted all of the major business requirements, provided us with a comprehensive analysis of our business needs and is ready to move on to the next phase of the project. We agree with all of the requirements that will be met, outlined in this proposal.




Mr. David DiMarzio

Clerk of Court



Mr. Barry Warner

Chief US Probation Officer of RI



Dr. Eleanor Loiacone

Project Advisor

Appendix K: Training Manual

Creating a new tab

- Open the main code for the website
- Select the region that you would like to add the new tab
- Create the tab using the following code as an example

```
</li><a href="#" class="menulink">JURORS</a>
<ul style="z-index: 999999;">
  <li><a href="menu/juror/directionsmaps/mapdirections.html" target="main">Directions/Map</a></li>
  <li><a href="menu/juror/ejuror/ejury.html" target="main">eJuror</a></li>
  <li><a href="menu/juror/federaljurorinfo/TrialJurorHandbook.pdf" target="_blank">Federal Juror Information</a></li>
  <li><a href="menu/juror/inclementweather/inclementweather.html" target="main">Inclement Weather - Juror Bulletin Board Info</a></li>
  <li><a href="menu/juror/jurorcontactinfo/jurorcontactinfo.html" target="main">Juror Contact Info</a></li>
</ul>
</li>
```

- To create a cascading menu item use the following code as an example

```
</li><a href="#" class="sub">Other Related Links</a>
  <ul>
    <li class="topline"><a href="menu/generalinformation/otherrelatedlinks/federallinks.html" target="main">Federal Judicial Links</a></li>
    <li><a href="menu/generalinformation/otherrelatedlinks/firstcircuitlinks.html" target="main">First Circuit Links</a></li>
    <li><a href="menu/generalinformation/otherrelatedlinks/localgovtlinks.html" target="main">Local Government Links</a></li>
  </ul>
</li>
```

- The a href=""#"" makes the link unclickable
- The class=""sub"" is what classifies the tab as a cascading subsection

Adding/Editing Content

- Locate the page you would like to edit in the main code to see where the html file is located
 - This code shows that the admission information is located in menu/attorney/admissioninformation/admissioninformation.html

```
</li><a href="#" class="menulink">ATTORNEY</a>
<ul class="sub_menu" style="z-index: 999999;">
  <li><a href="menu/attorney/admissioninformation/admininfo.html" target="main">Admissions/Registration</a></li>
```

- Once the html file for that specific page is located, open it in Dreamweaver
- The following code shows the outline that needs to be followed for each content page

```

<html>
<head>
<title>DISTRICTCOURT</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<link rel="stylesheet" href="../../content.css" type="text/css">

</head>
<body>
<h1>Admission Information </h1>

<a href="reinstatementapplication.pdf" target="_blank">Application for Reinstatement - 4/8/2008 </a> <br>
<br>
<a href="ProcedureforfilingProHacViceAdmissions.pdf" target="_blank">Procedures for Attorney Admissions - 10/15/2007</a> <br>
<br>
<a href="petitionforadmissioninstructions.pdf" target="_blank">Petition for Admission Pursuant to LR Gen 202(a)(2)(B) - Instructions - 10/15/2007</a> <br>
<br>
<a href="petitionforadmissionapplication.pdf" target="_blank">Petition for Admission Pursuant to LR Gen 202(a)(2)(B)- Application - 10/15/2007</a> <br>
<br>
<a href="lrgen204.pdf" target="_blank">Local Rule Gen 204 - Pro Hac Vice Counsel - 3/17/2008</a> <br>
<br>
<a href="procedureforfilingprohacviceadmissions.pdf" target="_blank">Procedure for Filing Pro Hac Vice Motions - 3/17/2008</a> <br>
<br>
<a href="prohacvicemotion3-17-08.pdf" target="_blank">Motion for Admission - Pro Hac Vice - 3/17/2008</a> <br>
<br>
<a href="prohacviceapplicationform3-17-08.pdf" target="_blank">Pro Hac Vice Application Form - 3/17/2008</a> <br>
<br>
<a href="generalorder-2003-03.pdf" target="_blank">General Order #2003-03 - 12/17/2003 (Re:Pro Hac Vice Application Fee)</a> <br>
</body>
</html>

```

- Note the code located above header 1, this is used to reference the style sheet and properly format the content
 - This code is closed at the bottom of the content
- If there is a link to a PDF on the page, you only need to reference the specific name of that PDF because it is located in the same folder as the html file
 - The target should be set to target=""_blank"" to ensure that the PDF opens in a new window
- If there is an internal link, the target should be set to target=""main"" to ensure that the link opens in the tan region of the page

Appendix L: Code for USDC of RI Website

```
<html>
<head>
<title>DISTRICTCOURT</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<!-- Save for Web Styles (DISTRICTCOURT.png) -->
<link rel="stylesheet" href="css/style.css" type="text/css" media="screen, projection"/>
  <!--[if lte IE 7]>
    <link rel="stylesheet" type="text/css" href="css/ie.css" media="screen" />
  <![endif]-->

  <script type="text/javascript" src="js/jquery-1.3.1.min.js"></script>
  <script type="text/javascript" language="javascript" src="js/hoverIntent.js"></script>
  <script
    type="text/javascript"
    language="javascript"
src="js/jquery.dropdown.js"></script>
<style type="text/css">
<!--

body{
  text-align:center;
  background-color:#003;
  background-image:url(siteimages/mqpbg.png)
}
#container {
  position:relative;
  margin: 0 auto;
  width:824px;
  text-align: left;
}
}
```

```
#DISTRICTCOURT-01 {  
    position:absolute;  
    left:0px;  
    top:0px;  
    width:824px;  
    height:131px;  
}
```

```
#DISTRICTCOURT-02 {  
    position:absolute;  
    left:0px;  
    top:131px;  
    width:268px;  
    height:237px;  
}
```

```
#DISTRICTCOURT-03 {  
    position:absolute;  
    left:268px;  
    top:131px;  
    width:556px;  
    height:28px;  
}
```

```
#DISTRICTCOURT-04 {  
    position:absolute;  
    left:268px;  
    top:159px;  
    width:556px;  
    height:208px;  
    z-index: -12322322;  
}
```

```
}
```

```
#DISTRICTCOURT-05 {  
    position:absolute;  
    left:0px;  
    top:367px;  
    width:824px;  
    height:14px;  
    z-index: -12322322;
```

```
}
```

```
#DISTRICTCOURT-05 a{  
    text-decoration: none;  
    text-transform: uppercase;  
    font-weight: bold;  
    color:#fff;  
    font-family:Verdana, Geneva, sans-serif;  
    font-size: 12px;
```

```
}
```

```
#DISTRICTCOURT-05 a:hover{  
    text-decoration:none;  
    text-transform:uppercase;  
    font-weight:bold;  
    color: #082b52;  
    font-size:12px;
```

```
}
```

```
#DISTRICTCOURT-06 {
```

```
position:absolute;
left:0px;
top:382px;
width:824px;
z-index: -1;

/* height:496px; */
background-image: url(images/DISTRICTCOURT_06.jpg);

}
```

```
#left-DISTRICTCOURT-06 {
    position: absolute;
    left: 0px;
    top: 0px;
    width:198px;
    color:#FFF;
    font-family:Verdana, Geneva, sans-serif;
    font-size: 12px;
}
```

```
#left-DISTRICTCOURT-06 a{
    text-decoration: none;
    color:#f1dc2d;
    font-family:Verdana, Geneva, sans-serif;
    font-size: 12px;
}
```

```
#left-DISTRICTCOURT-06 a:hover{
    text-decoration: none;
    text-transform:uppercase;
}
```

```

        color:#000000;
        background-color: #977d15;
        font-family:Verdana, Geneva, sans-serif;
        font-size: 12px;
        font-weight:bold;
    }

#left-DISTRICTCOURT-06 h1 {
    text-decoration:none;
    text-transform:uppercase;
    color:#f1dc2d;
    font-family: "Palatino Linotype", "Book Antiqua", Palatino, serif;
    font-size: 26px;
}

#right-DISTRICTCOURT-06 {
    position: absolute;
    left: 210px;
    top: 0px;
    width:527px;
    color:#00273d;
    font-size: 16px;
    font-family:Arial, Helvetica, sans-serif;
}
-->

</style>
<!-- End Save for Web Styles -->
</head>
<body style="margin-top: 0px; margin-bottom: 0px; margin-left: 0px; margin-right: 0px;">
<!-- Save for Web Slices (DISTRICTCOURT.png) -->

```

```

<div id="container">
  <div id="DISTRICTCOURT-01">
    
  </div>
  <div id="DISTRICTCOURT-02">
    
  </div>
  <div id="DISTRICTCOURT-03" style="background-color: #082b52">
<ul class="dropdown">
  <li><a href="DISTRICTCOURT.html" class="menulink">HOME</a></li>

  <li><a href="#" class="menulink">ATTORNEY</a>
<ul class="sub_menu" style="z-index: 999999;">
  <li><a href="menu/attorney/admissioninformation/admininfo.html"
target="main">Admissions/Registration</a></li>
  <li><a href="menu/generalinformation/adr/adr.html" target="main">ADR</a></li>
  <li><a href="#" class="sub">CJA</a>
    <ul>
      <li class="topline"><a href="menu/attorney/cja/info/CJAPlan-
070708.pdf" target="_blank">CJA Plan</a></li>
      <li><a href="menu/generalinformation/forms/cja/cjaforms.html"
target="main">Forms</a></li>
    </ul>
  </li>
  <li><a href="menu/caseinformation/cmecf/ecfregistration/ECF-RegistrationForm.pdf"
target="_blank">ECF Registration</a></li>
  <li><a href="menu/generalinformation/interpreters/interpreterservices.html"
target="main">Interpreters</a></li>
  <li><a href="menu/attorney/miscellaneousinfo/miscinfo.html" target="main">Misc.
Information</a></li>

  <li><a href="#" class="sub">Rules and Procedures</a>
  <ul>

```

<li class="topline">Federal Rules and Procedures

General Administrative Orders

Judges and Magistrates Pretrial Orders

Local Plans

Local Rules and Procedures

Local Rules Review Committee

CASE INFORMATION

<ul style="z-index: 999999;">

Calendars

CM/ECF

ECF Registration Form

<li class="topline">General Information for ECF

[Training For ECF](menu/caseinformation/cmecf/trainingforecf/ecftraining.html)

[Training Materials](menu/caseinformation/cmecf/trainingmaterials/trainingmaterials.html)

[Training Modules](menu/caseinformation/cmecf/trainingmodules/trainingmods.html)

[Fees, Payments and Interest Rates](#)

[Electronic Public Access Fee Schedule](http://pacer.psc.uscourts.gov/documents/epa_feesched.pdf)

[Fee Schedule](menu/generalinformation/feespaymentsandinterestrates/feeschedule.html)

[Transcript Fee Schedule](menu/generalinformation/feespaymentsandinterestrates/transcriptfeeschedule.html)

[Filing Procedures](menu/caseinformation/filingprocedures/FilingProcedures.pdf)

[Forms](#)

[Attorney](menu/generalinformation/forms/attorney/attorney.html)

[Civil](menu/generalinformation/forms/civil/civilforms.html)

[CJA](menu/generalinformation/forms/cja/cjaforms.html)

[Criminal](menu/generalinformation/forms/criminal/FosterWarningForm-120805.pdf)

[Prisoner](menu/generalinformation/forms/prisoner/prisoner.html)

[Opinions](menu/judges/opinions/opinions.html)

[PACER](menu/caseinformation/pacer/pacer.html)

[GENERAL INFORMATION](#)

[About Us](menu/generalinformation/aboutus/aboutus.html)

[ADR](menu/generalinformation/adr/adr.html)

[Archive/Federal Record Center Forms](menu/generalinformation/forms/archivefederalrecordcenter/archivefedrecordcenter.html)

[Employment](menu/generalinformation/employment/employmentopps.html)

[Federal Process Servers](menu/generalinformation/federalprocessservers/FederalProcessServers.pdf)

[Fees, Payments and Interest Rates](#)

[Electronic Public Access Fee Schedule](http://pacer.psc.uscourts.gov/documents/epa_feesched.pdf)

[Fee Schedule](menu/generalinformation/feespaymentsandinterestrates/feeschedule.html)

[Transcript Fee Schedule](menu/generalinformation/feespaymentsandinterestrates/transcriptfeeschedule.html)

```

        </li>
        <li><a href="#" class="sub">Forms</a>
            <ul>
                <li><a
href="menu/generalinformation/forms/attorney/attorney.html" target="main">Attorney</a></li>
                <li class="topline"><a href="#">Civil</a></li>
                <li><a href="menu/generalinformation/forms/cja/cjaforms.html"
target="main">CJA</a></li>
                <li><a
href="menu/generalinformation/forms/criminal/FosterWarningForm-120805.pdf"
target="_blank">Criminal</a></li>
                <li><a
href="menu/generalinformation/forms/prisoner/prisoner.html" target="main">Prisoner</a></li>
            </ul>
        </li>
        <li><a href="menu/generalinformation/historicinfo/historicalinfo.html"
target="main">Historic Information</a></li>
        <li><a href="menu/generalinformation/interpreters/interpreterservices.html"
target="main">Interpreters</a></li>
        <li><a href="#" class="sub">Other Related Links</a>
            <ul>
                <li class="topline"><a href="menu/generalinformation/otherrelatedlinks/federallinks.html"
target="main">Federal
Judicial Links</a></li>
                <li><a href="menu/generalinformation/otherrelatedlinks/firstcircuitlinks.html"
target="main">First
Circuit Links</a></li>
                <li><a href="menu/generalinformation/otherrelatedlinks/localgovtlinks.html"
target="main">Local
Government Links</a></li>
            </ul>
        </li>
        <li><a href="menu/generalinformation/proselitigants/proselitigants.html"
target="main">Pro Se Litigants</a></li>
        <li><a href="#" class="sub">Rules and Procedures</a>
            <ul>

```

[Federal Rules and Procedures](menu/generalinformation/rulesandprocedures/federalrulesandprocedures/federalrules.html)

[General Administrative Orders](menu/generalinformation/rulesandprocedures/generaladministrativeorders/generaladministrators.html)

[Judges and Magistrates Pretrial Orders](menu/generalinformation/rulesandprocedures/judgesmagistratespretrialorders/judgesmagistratespretrialorders.html)

[Local Plans](menu/generalinformation/rulesandprocedures/localplans/localplans.html)

[Local Rules and Procedures](menu/generalinformation/rulesandprocedures/localrulesandprocedures/localrulesandprocedures.html)

[Local Rules Review Committee](menu/generalinformation/rulesandprocedures/localrulesreviewcommittee/localrulesreviewcommittee.html)

[Security Policies](menu/generalinformation/securitypolicies/securitypolicies.html)

[JURORS](#)

<ul style="z-index: 999999;">

[Directions/Map](menu/juror/directionsmaps/mapdirections.html)

[eJuror](menu/juror/ejuror/ejury.html)

[Federal Juror Information](menu/juror/federaljurorinfo/TrialJurorHandbook.pdf)

[Inclement Weather - Juror Bulletin Board Info](menu/juror/inclementweather/inclementweather.html)

[Juror Contact Info](menu/juror/jurorcontactinfo/jurorcontactinfo.html)

JUDGES

<ul style="z-index: 999999;">

Calendars

Judicial Misconduct

Judicial Officers

Opinions

Public Disclosure System

Staff

</div>

<div id="DISTRICTCOURT-04">

</div>

<div id="DISTRICTCOURT-05" style="background-color: #977d15">

<center>

Bankruptcy Court | Probation Office </center>

</div>

<div id="DISTRICTCOURT-06">

```

<div id="left-DISTRICTCOURT-06" style="padding:.5em;">
  <center><h1>Quick Links</h1>
  <a href="quicklink/cmecf/cmecf.html" target="main"></a>
  <a href="menu/caseinformation/pacer/pacer.html" target="main"></a>
  <a href="quicklink/multidistrictlitigation/mdlit.html" target="main"></a>
  <a href="quicklink/stationfire/stationfire.html" target="main"></a>
  <a href="menu/generalinformation/rulesandprocedures/localrulesandprocedures/localrulesandproce
dures.html" target="main"></a></center>

```

<p>This is a sample of text that is being used to fill this particular area of the page. This section will automatically adjust to the length of the text that is used (I removed the fixed height attribute up in the CSS).

```

</div>

```

```

<div id="right-DISTRICTCOURT-06" style="padding:.5em;">

```

```

<table cellpadding=0 cellspacing=0 style="position: absolute; top:2; left: 0;">
<col width=350><tr>
  <td valign="top" style="padding-top: 0; padding-bottom: 0; padding-left: 0; padding-right:
0;">
  <script>
    function resize_iframe() {
      var fr = document.getElementById('main_iframe');
      var dc = document.getElementById('DISTRICTCOURT-06');
      var height = 0;

      if (fr.contentWindow.document.height) {
        height = fr.contentWindow.document.height + 40;

```

```

        } else {
            height = fr.contentWindow.document.body.scrollHeight + 40;
        }
        if (height < 496) height = 496;
        dc.style.height = height + 'px';
        fr.style.height = height + 'px';
    }
</script>
<iframe src="home.html" name="main" id="main_iframe" onload="resize_iframe();"
width="610" height="470" allowTransparency="true"
style="background-color:transparent" border="0" frameborder="0"></iframe></center>
</td></tr></table>

```

```
</div>
```

```
</div>
```

```
</div>
```

```
<!-- End Save for Web Slices -->
```

```
<!-- FOR MENUS -->
```

```
<script>
```

```
    if (document.all) {
```

```
    } else {
```

```
        var el = document.getElementById('DISTRICTCOURT-06');
```

```
        el.style.zIndex = "0";
```

```
    }
```

```
</script>
```

```
<script>
```

```
    if (document.all) {
```

```
    } else {
```

```
        var el = document.getElementById('DISTRICTCOURT-05');
        el.style.zIndex = "0";
    }
</script>

</body>
</html>
```

Appendix M: Code for Probation Office Website

```
<html>
<head>
<title>PROBATION3</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<link rel="stylesheet" href="css/style.css" type="text/css" media="screen, projection"/>
  <!--[if lte IE 7]>
    <link rel="stylesheet" type="text/css" href="css/ie.css" media="screen" />
  <![endif]-->

  <script type="text/javascript" src="js/jquery-1.3.1.min.js"></script>
  <script type="text/javascript" language="javascript" src="js/hoverIntent.js"></script>
  <script type="text/javascript" language="javascript"
src="js/jquery.dropdown.js"></script>

<style type="text/css">
<!--

body{
  text-align:center;
  background-color:#003;
  background-image:url(siteimages/mqpbg.png)
}

#container {
  position:relative;
  margin: 0 auto;
  width:824px;
  text-align: left;
```



```
}
```

```
#PROBATION3-01 {  
    position:absolute;  
    left:0px;  
    top:0px;  
    width:824px;  
    height:131px;  
}
```

```
#PROBATION3-02 {  
    position:absolute;  
    left:0px;  
    top:131px;  
    width:255px;  
    height:281px;  
}
```

```
#PROBATION3-03 {  
    position:absolute;  
    left:255px;  
    top:131px;  
    width:569px;  
    height:27px;  
}
```

```
#PROBATION3-04 {  
    position:absolute;  
    left:255px;  
    top:158px;  
    width:569px;  
    z-index: -12322322;  
}
```

```
    height:254px;
}
```

```
#PROBATION3-05 {
    position:absolute;
    left:0px;
    top:412px;
    width:824px;
    height:14px;
    z-index: -9023974;
}
```

```
#PROBATION3-05 a{
    text-decoration: none;
    text-transform: uppercase;
    font-weight: bold;
    color:#fff;
    font-family:Verdana, Geneva, sans-serif;
    font-size: 12px;
}
```

```
#PROBATION3-05 a:hover{
    text-decoration:none;
    text-transform:uppercase;
    font-weight:bold;
    color: #082b52;
    font-size:12px;
}
```

```
#PROBATION3-06 {
```

```
position:absolute;
left:0px;
top:426px;
width:824px;
z-index: -1;
/*height:498px;*/
background-image: url(images/PROBATION3_06.jpg)
}
```

```
#left-PROBATION3-06 {
    position: absolute;
    left: 0px;
    top: 0px;
    width:199px;
    color:#FFF;
    font-family:Verdana, Geneva, sans-serif;
    font-size: 12px;
}
```

```
#left-PROBATION3-06 a{
    text-decoration: none;
    color:#f1dc2d;
    font-family:Verdana, Geneva, sans-serif;
    font-size: 12px;
}
```

```
#left-PROBATION3-06 a:hover{
    text-decoration: none;
    text-transform:uppercase;
    color:#000000;
```

```

        background-color: #977d15;
        font-family: Verdana, Geneva, sans-serif;
        font-size: 12px;
        font-weight: bold;
    }

#left-PROBATION3-06 h1 {
    text-decoration: none;
    text-transform: uppercase;
    color: #f1dc2d;
    font-family: "Palatino Linotype", "Book Antiqua", Palatino, serif;
    font-size: 26px;
}

#right-PROBATION3-06 {
    position: absolute;
    left: 210px;
    top: 0px;
    width: 527px;
    color: #00273d;
    font-size: 11px;
    font-family: Arial, Helvetica, sans-serif;
}

-->
</style>
<!-- End Save for Web Styles -->
</head>
<body style="margin-top: 0px; margin-bottom: 0px; margin-left: 0px; margin-right: 0px;">
<!-- Save for Web Slices (PROBATION3.png) -->
<div id="container">

```

```
<div id="PROBATION3-01">
    
</div>
<div id="PROBATION3-02"></div>
<div id="PROBATION3-03" style="background-color: #082b52">
<ul class="dropdown">
    <li><a href="PROBATION3.html">HOME</a></li>

    <li><a href="#">ABOUT US</a>
<ul class="sub_menu">
    <li><a href="http://www.uscourts.gov/fedprob/system.html"target="_new">A
National System</a></li>
    <li><a
href="rip/aboutus/charterforexcellence/CharterForExcellence.pdf"target="_new">Charter for
Excellence</a></li>
    <li><a href="http://www.uscourts.gov/fedprob/terms.html"target="_new">Commonly
Used Terms</a></li>
    <li><a
href="http://www.uscourts.gov/fedprob/history/index.html"target="_new">History</a></li>
    <li><a href="http://www.fjc.gov/federal/courts.nsf"target="_new">Inside the
Courts</a></li>
    <li><a
href="http://www.uscourts.gov/fedprob/mission.html"target="_new">Mission</a></li>
    <li><a
href="http://www.uscourts.gov/fedprob/officers.html"target="_new">Officers</a></li>
    <li><a href="rip/aboutus/probationedureferences/probationedurefs.html"
target="main">Probation Educational References</a></li>
</ul>
</li>

    <li><a href="#">PRETRIAL</a>
<ul style="z-index: 999999;">
    <li><a
href="rip/pretrial/bailconditions/bailconditions.html"target="main">Bail Conditions</a></li>
```

[Bail Reform Act](rip/pretrial/bailreformact/bailreformact.pdf)

[Color Code](rip/pretrial/colorcode/colorcode.pdf)

[Orientation to Supervision](rip/pretrial/orientationtosupervision/orientationtosupervision.html)

[Pretrial Diversion](rip/pretrial/pretrialdiversion/pretrialdiversion.html)

[Pretrial Forms](rip/pretrial/pretrialforms/pretrialforms.html)

[Pretrial Officers](rip/pretrial/pretrialofficers/PretrialServicesOfficers.pdf)

[Pretrial Process](rip/pretrial/pretrialprocess/pretrialprocess.html)

[Pretrial System](rip/pretrial/pretrialsystem/ThePretrialSystem.pdf)

[Understanding the Requirements](rip/pretrial/understandingthereqs/UnderstandingtheRequirements.pdf)

[Understanding Your Case](rip/pretrial/understandingyourcase/understandingyourcase.pdf)

[What is Pretrial?](rip/pretrial/whatispretrial/whatispretrial.html)

[PRESENTENCE](#)

[Federal Sentencing](rip/presentence/federalsentencing/federalsentencing.html)

- [Presentation Forms](rip/presentation/presentationforms/presentationforms.html)
- [Presentation Report](rip/presentation/presentationreport/presentationreport.html)
- [Sentencing Guidelines](rip/presentation/sentencingguidelines/sentencingguidelines.html)
- [Understanding Your Case](rip/presentation/understandingyourcase/understandingyourcase.pdf)
- [What is Presentation?](rip/presentation/whatispresentation/whatispresentation.html)

[SUPERVISION](#)

-

- [Directions for Monthly Supervision Form](rip/supervision/directionsformonthly/directionsformonthlysuper.html)
 - [Firearm Possession Prohibition](rip/supervision/firearmpossession/FirearmPossessionProhibition.pdf)
 - [Orientation to Supervision](rip/supervision/orientationtosupervision/orientationtosupervision.html)
 - [Supervision Forms](rip/supervision/supervisionforms/supervisionforms.html)
 - [The Probation System](rip/supervision/theprobationsystem/TheProbationSystem.pdf)
 - [Understanding the Requirements](rip/supervision/understandingthereqs/UnderstandingtheRequirements.pdf)

Understanding Your Case

What is Supervision?

RESOURCES

<ul style="z-index: 999999;">

ABC's to the BOP

Community Resources

Employment Opportunities

Employment Information and Training

FAQ's

Federal and State Agencies

Forms

<li class="topline">Authorization to Release Info Forms

Financial Forms

Presentence Forms

Pretrial Forms

Supervision Forms

Inpatient Treatment Providers

Mental Health Treatment Providers

Residential Handbooks

<li

class="topline">Coolidge House

Wyatt

Sex Offender Information

Substance Abuse Treatment Providers

Volunteer Opportunities

CONTACT US

- [Directions](rip/contactus/directions/directions.html)
- [Employment Opportunities](rip/contactus/employment/employment.html)
- [Federal Courts Finder](http://library.law.emory.edu/index.php?id=2997)
- [Federal Holidays](rip/contactus/federalholidays/federalholidays.html)
- [Location and Hours](rip/contactus/locationshours/locationshours.html)
- [Staff Directory](rip/contactus/staffdirectory/StaffDirectory.pdf)

</div>

<div id="PROBATION3-04">

</div>

<div id="PROBATION3-05" style="background-color: #977d15">

</div>

<div id="PROBATION3-06">

<div id="left-PROBATION3-06" style="padding:.5em;">

<h2>The Color for Tuesday Feb. 23 is...</h2>

<center><h1>Quick Links</h1>

</center>

<p>John O. Pastore Federal Bldg.

2 Exchange Ter, 3rd Floor

Providence, RI 02903

Phone: (401) 752-7300

Fax: (401) 752-7399</p>

<p> </p>

<p>

</div>

<div id="right-PROBATION3-06" style="padding:.5em;">

<table cellpadding=0 cellspacing=0 style="position: absolute; top:2; left: 0;">

<col width=350><tr>

<td valign="top" style="padding-top: 0; padding-bottom: 0; padding-left: 0; padding-right: 0;">

<script>

function resize_iframe() {

var fr = document.getElementById('main_iframe');

var dc = document.getElementById('PROBATION3-06');

var height = 0;

if (fr.contentWindow.document.height) {

height = fr.contentWindow.document.height + 40;

} else {

height = fr.contentWindow.document.body.scrollHeight + 40;

}

if (height < 496) height = 496;

```

                dc.style.height = height + 'px';
                fr.style.height = height + 'px';
            }
        </script>
<iframe src="home.html" name="main" id="main_iframe" onload="resize_iframe();"
width="610" height="470" allowTransparency="true"
style="background-color:transparent" border="0" frameborder="0"></iframe></center>
</td></tr></table>

```

```

</div>
</div>
</div>
<!-- End Save for Web Slices -->

```

```

<!-- FOR MENUS -->
<script>
    if (document.all) {
    } else {
        var el = document.getElementById('PROBATION3-06');
        el.style.zIndex = "0";
    }
</script>
<!-- <script type="text/javascript">
    var menu=new menu.dd("menu");
    menu.init("menu","menuhover");
</script> !-->
</body>
</html>

```

Appendix N: Final Sign Off Sheet

Worcester Polytechnic Institute

United States District Court of Rhode Island

Major Qualifying Project

Web Design for the USDC of RI

Yetunde Ajayi-Obe, Mark Cirillo, & Corey Graves

We, hereby, certify that the group has completed a thorough analysis of the requirements for the project and met all of those requirements by providing us with two fully functional websites for the USDC of RI and the US Probation Office of RI. We agree that the team has completed the project and we will take full control of the websites from this day forth.

Mr. David DiMarzio

Clerk of Court

Mr. Barry Weiner

Chief US Probation Officer of RI

Dr. Eleanor Loiacono

Project Advisor

