

NORTHERN ILLINOIS UNIVERSITY

Web Design Principles

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By

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ABSTRACT (100-200 WORDS):

A website that explores the principles of web design to assist amateur web designers in creating professional looking websites without needing extensive design experience. Utilizing skills obtained in Interactive Media Production classes and extensive research I have designed a website that explains web design while acting as a supporting example. I created the website by hand-coding using HTML, JavaScript, and CSS.

Web designers can use this website as a guide for the planning of a website, choosing a website structure, and designing individual pages. Each page has a "My Design" feature which allows the user to view my design choices and planning stages for that page.

Capstone: Website Design Principles

The topic I have chosen for my senior capstone project is web design. I will explore the principles of an effective website and research the steps necessary in creating a superior site. I will study and compare numerous websites to find designs that are of high quality. I will consider the overall presentation of the website, the organizational style, and design choices. To display my findings I will create a website outlining the principles of web design. I will use knowledge and skills obtained in my Interactive Media Production classes, Adobe Photoshop class, and other communication classes to assist me in this project. Both quantitative and qualitative methods were utilized in the creation of this site. It is quantitative in the sense that the HTML and JavaScript coding must be correct in order to receive the desired result. It is qualitative in the creation of the design and aesthetics of the site.

The *Principle's of Web Design* website outlines the main concepts in planning and designing a website. The target audience for this site is amateur web designers looking to design professional looking sites on their own. The site is designed as a step-by-step guide to be used by the designer in the planning stages of a website. In order to turn my design ideas into a fully functional website I hand coded HTML, CSS, and JavaScript. I also utilized Adobe Photoshop to design professional looking buttons, headers, graphics, and backgrounds.

The content is divided into three main categories. These categories are brainstorming, site structure, and page design. Each of these categories are then broken down further into more specific subcategories. My website is unique from other websites because it focuses specifically on the design principles. The majority of websites that

discuss web design focus on the coding of the website. These sites assist designers in actually implementing their design ideas. However, there are few sites purely devoted to discussing the aesthetic design of a site.

In creating this site I began by researching and analyzing each aspect of design, in order to find a recipe for a successful website. A successful website must be both highly functional and eye catching. The first stage in creating the *Principles of Web Design* website was to research and gather information. Both primary and secondary sources were used in researching this topic. I gathered information from secondary sources such as books, articles, and websites that discuss web design. Using the knowledge I obtained from my research I began analyzing the designs of preexisting websites, which are primary sources. After I gathered a sufficient amount information, I organized the information into a step-by-step guide for designing effective websites.

Next, I began to design a website using this guide to assist me along the way.

Brainstorming is the first major topic covered in the *Principles of Web Design* site. In this phase of the creation the purpose, audience, and content should be determined. Web Design Principles was the broad topic that I chose to cover. I did not want to include any information about HTML coding, as there are numerous websites on this topic already available. The intention of my site is that it be used alongside coding websites in order to create a more aesthetically pleasing design, while maintaining functionality. The audience my project is geared toward is amateur web designers. My audience is assumed to be, both male and females of all ages. The majority of users are likely to be high school or college aged however, the site is designed with all age groups in mind. The users should understand everything on this site assuming they have a basic understanding

of website creation and are able to surf the web adequately. Therefore, the overall purpose of this website is to outline the principles of web design to assist beginning designers in creating professional looking websites.

The content should be determined based upon the purpose of the site and the intended audience. The designer must decide what aspects of a topic they will focus on, and how in depth the website will cover the topics. The content that is included should be both relevant to the user, and reflect the goals of the client. The specific goals I have for this site is that it was easy to navigate, includes supporting examples, acts as step-by-step guide, includes my own design choices, emphasizes the importance of design, inspires designers, and is updated regularly. This website explores the same principles that professionals designers use. However, the principles are explained in simple terms and supported by numerous examples. Each design principle is broken down into bullet points for quick referencing, and simple comprehension. This site includes numerous examples of specific design elements. Links to websites that portray these elements effectively or websites that further assist designers in utilizing design elements are included. However, the grandest example of all, is the website itself. Each step in the planning of the *Principles of Web Design* is documented on the site, and can be accessed by the user. The user simply has to click the “My Design” icon to take a peak behind the scenes and see what went into the planning for each page. All of my flow charts, outlines, and storyboards are viewable on the website. Using this feature the viewer can see design choices for each element on the site with just one easy click.

After the content is determined, the next stage in creating a website is choosing the overall structure and navigational features. In this stage the designer must determine

the most effective method of organization for the site. Content can be organized in a variety of ways, but depending upon the content a specific method may be logical than another. For instance, content can be organized chronologically or alphabetically. If you are unsure what method of organization is best for your website it is helpful to look at preexisting websites for inspiration. By using these sites as a guide you will be able to determine what works best and what doesn't. The most common method of organization is to use categories and subcategories. Such is the case with this website. I first divided the information into categories which each could then be converted into potential pages. Next, I removed any pages that were redundant and combined similar pages with common information. Then I used flow charts to determine the best way to links these pages. I was able to create three broad categories labeled brainstorming, site structure, and page design. Under each of these broad categories there were subcategories. The Brainstorming category included defining a purpose, determining the target audience, and gathering content. Navigation and methods of organization were a part of the site structure category. And finally, the page design category included the following subcategories: animation, video, graphics, font choice, designing home pages, page layout, audio, and color choice. After determining the basic flow of information I created a universal navigation menu. This included the three broad topics along with a home page, about the site page, and a resources page.

The final phase of website creation is designing individual pages. I started the design process by looking at other websites and creating storyboards of possible layouts. By sketching designs on paper I was able to explore numerous ideas without having to spend unnecessary time coding layouts that wouldn't be chosen for the final design. I

determined the pros and cons of various layouts and chose a style that matched the overall mood of my website. The mood of the site I was looking to portray was a professional looking website that is creative, yet free from distractions.

After looking at multiple options I choose a simple layout. To provide consistency and to make the individual pages appear connected to one another, I used the same layout for all the pages. I kept navigation menus in the same location to make the site user friendly and consistent. I chose the top half of the right edge of the screen for the navigational menu because it allows for the content, the most important part, to be closer to the left side of the page. Since, in western culture we read from left to right, our eyes naturally look at the left side first. Also, the scroll bar is on the right side of the screen so it makes sense for the navigation menu to be on the right as well so the user doesn't have to move the mouse as far to browse the site. Thus, allowing them to access information quicker. I limited the number of colors I used on the site to make it appear more professional and reduce distractions. I chose to use black text on a white background for the main content so that it would be easy to read. I used graphics to further explain text in a visual medium. To create the graphical content for this site I used Adobe Photoshop, the industry's standard program for graphic design. Utilizing the numerous tools Adobe Photoshop has to offer I created a custom background, headings, buttons, and other graphics.

The final page I designed was the home page so that it would be a true representation of the content and feel of the overall site. I made the layout of the homepage slightly different to separate it from the rest of the site, but not so different that it seemed unconnected to the rest of the pages. One of the most unique features of

websites is the ability for dynamic content. Taking advantage of this feature I created a “Quick Tips” feature, which gives users a new quick tip each time the home page is refreshed. Dynamic content on the home pages will give returning visitors a reason to visit the homepage. I also included a site map on the home page to give users another way to navigate the site, in addition to the navigational menu.

The topic of website design principles is so broad that more pages and information could be easily incorporated. The simple design I chose allows for additional pages to be added with ease. While minor adjustments are likely to be needed, this design does not in anyway limit the growth of this site. Future additions to this site could include a message board that would allow users to interact with one another and share ideas. Users would be able to post links to their own websites so that others could see the design principles in action and provide feedback for one another.

Throughout the designing stages it is necessary to receive feedback from an outside source, in order to make the most of your design. When designing a site for a client, it is important to check with the client to be sure the design matches their expectations. User testing should also be performed in order to improve functionality. Feedback regarding the overall design is helpful in making websites user-friendlier and visually appealing. While, creating this website I asked peers and my advisor to look at the site and provide verbal feedback about design choices and ease of navigation.

While the principles of design have stayed relatively the same for the life of the Internet thus far, it is important to keep web information current. Websites can be easily updated and altered, in order to stay current with trends and every changing technology. In the future I plan to keep this site up to date as design trends shift, and new technology

emerges. As the web changes, new examples of these basic principles can be added to show the versatility of web design. Unlike books, websites have the ability to transcend time because they can avoid becoming outdated. Regularly updated websites can be easily accessed across the world by an endless amount of people for years to come.