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Administrative Support - Task Management System

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Graduate Project

Administrative Support - Task Management System

By

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Submitted in partial Fulfillment of the requirements

For the Degree Master of Science,

With a Major in Computer Science

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University Park, IL 60484

2014

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ABSTRACT

Administrative Support - Task Management System (ASTMS) is a web application by which any university can manage tasks among its employees. This project has various small parts like commenting on task, upload and download files, task forwarding, editing existing and creating new project, task, employee, user etc . ASTMS is an automation system, which is used to store the Work tasks information of a university.

The task management system eliminates manual request and assignment of work. Faculty can request any work tasks online. Administrative staff can review the incoming work tasks and assign them to appropriate personnel

Development process of the system starts with System analysis. System analysis involves creating a formal model of the problem to be solved by understanding requirements.

ACKNOWLEDGEMENTS

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1.0 Introduction

Administrative Support - Task Management System (ASTMS) deals with the university can manage tasks among its employees.

The task management system is an automated support tool to be used by administrative staff of various departments. Currently all work tasks requests from faculty are handled manually over the telephone. The task management system automates the process by streamlining the handling of the work tasks requests thereby reducing the manual intervention.

There will be three different types of users that use this system – faculty, administrative staff, personnel that are assigned the work tasks. When a faculty member places a work tasks, administrative staff receives the work tasks. The work order will include all necessary information including the availability schedule of the faculty member. Administrative staff then assigns the work task to appropriate personnel. When the work task gets done, the personnel that finished it will update the status of the work task to complete. Both the faculty and administrative staff will have various reports available to view the pending/completed work tasks, the average processing time of the work tasks and so on.

This report is followed with Methodology part which explains Scope of the project, software system description, functional requirements along with user case screenshots, Data management covers the database relationships, Non-functional requirements and conclusion are outlined.

2.0 Overall Description

2.1 Scope of the Software

The main function of the software will be to provide quick and easy access for administrator and user for overseeing tasks. The system will be therefore designed to allow a user and admin to perform the following functions:

- Log on either as an administrator, or user.
- Register as an administrator or user.
- View both administrator and user accounts.
- Admin can create task, edit task information and close task
- All types of user must log in by user ID and password. According to their type there will be different privilege.
- Administrator view allows adding tasks and editing existing tasks.
- Administrator can manage tasks.

2.2 Software System Description

- Every project has some number of tasks and employees. All tasks under a project can only be handled by these employees.
- A task is assigned to only one employee at a time. Task can be forwarded to other employee of that project.
- An employee can comment on his task, attach file with task, forward the task to other employee of its project and also can download attachment of his task.
- There are two types of employee, named Admin and User. Both of the type must be an employee.
- An Admin user has some extra privilege including all privilege of a user.

- Admin can create project, edit project information, add / remove employee to a project and can close a project.
- Admin can create task, edit task information and close task.
- Admin can create employee, edit employee information.
- Admin can set user type.
- Admin can view project, task , task history, employee reports
- **While creating a project Admin will be a member of the project by default.
- **A project can only be closed if its entire tasks are close.

All types of user must log in by user ID and password. According to their type there will be different privilege.

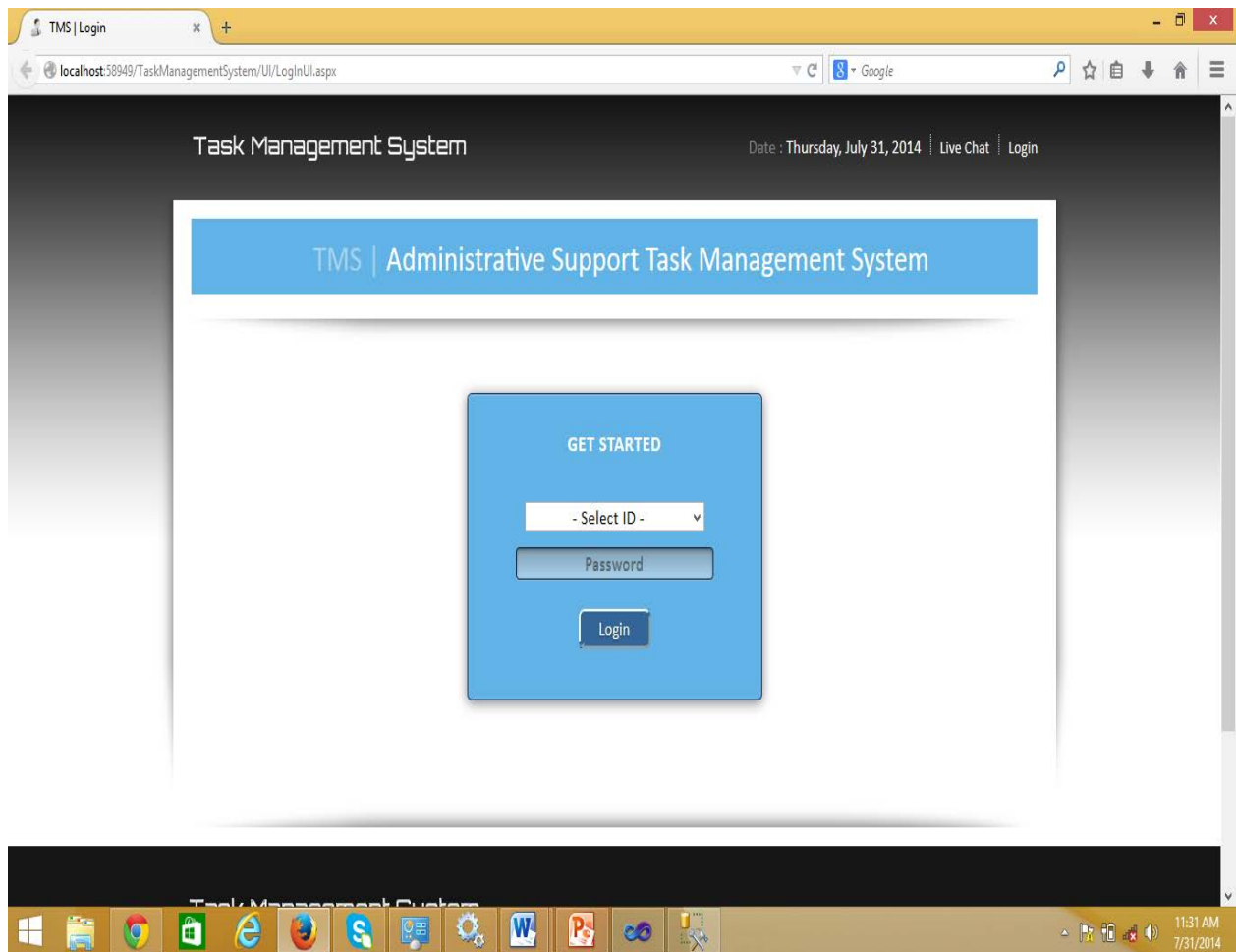
3.0 Functional Requirements

3.1 Software context

This software will be designed for Graduate student employees at university level. This will allow to eliminate manual request and assignment of work orders. Faculty can request any work orders online. Administrative staff can review the incoming work orders and assign them to appropriate personnel.

3.1.1 Log In page

Every user must login by his user name and password. After clicking on Log in button codes behind the page will call a method of UserManager class, CheckUserIdAndPassword(userID,password), which takes user ID and password as parameter check it with database if any match found returns user type. If no match found this method will return empty string and which conclude as wrong password. Code also adds a session variable which is user id.



Code behind log in page.

```
using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;
using System.Data.SqlClient;

public partial class UI_LogInUI : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!Page.IsPostBack)
        {
            Session.Abandon();
            LoadUserId();
        }
    }

    protected void logInButton_Click(object sender, EventArgs e)
    {
        string userType = null;
        try
        {
            UserManager userManagerObject = new UserManager();
            userType =
userManagerObject.CheckUserIdAndPassword(employeeIdDropDownList.SelectedItem.Value,
passwordTextBox.Text);
        }
        catch (SqlException sqlExceptionObj)
        {
            Label4.Text = sqlExceptionObj.Message;
        }
        catch (Exception exceptionObj)
        {
            Label4.Text = exceptionObj.Message;
        }

        switch (userType)
        {
            case "Admin":
```

```

        Session["userID"] = employeeIdDropDownList.SelectedItem.Value;
        Response.Redirect("AdimHomePage.aspx");
        break;
    case "Normal":
        Session["userID"] = employeeIdDropDownList.SelectedItem.Value;
        Response.Redirect("NormalUserUIPage.aspx");
        break;
    default:
        Label4.Text = " Invalid Password! Please retype the Password";
        break;
    }
}

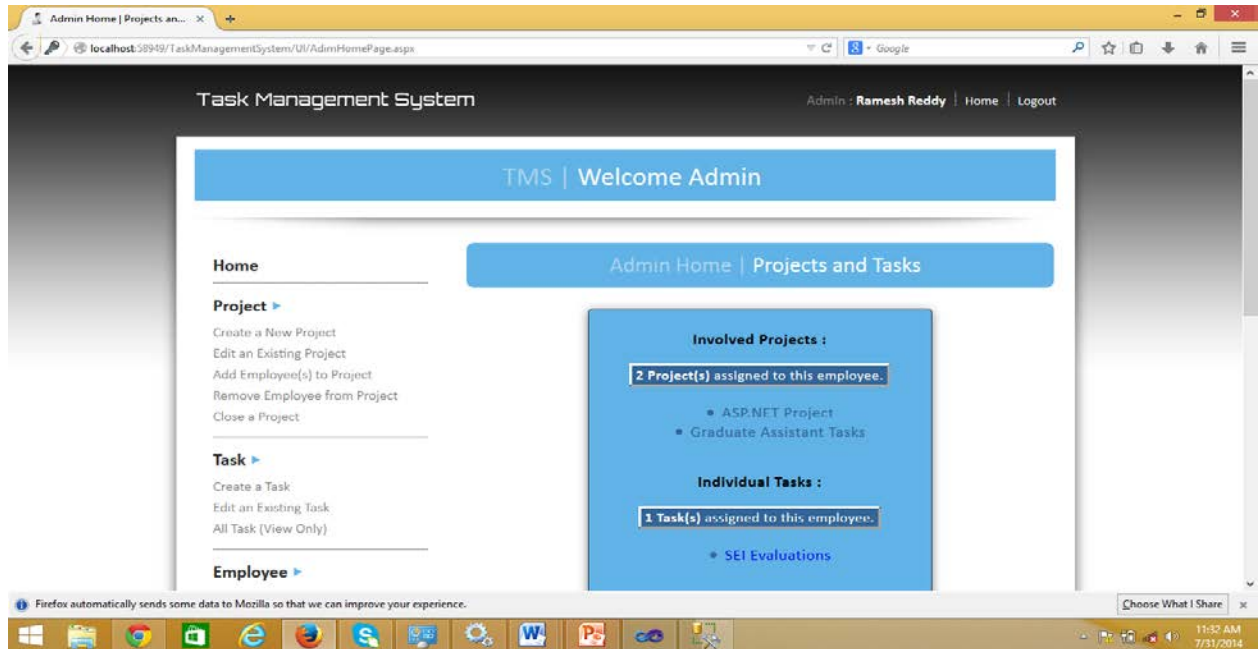
/// <summary>
/// Load employeeIdDropDownList with existing users
/// </summary>
private void LoadUserId()
{
    try
    {
        UserManager userManagerObject = new UserManager();
        employeeIdDropDownList.DataSource = userManagerObject.GetUserTable();
        employeeIdDropDownList.DataTextField = "user_Employee_Id";
        employeeIdDropDownList.DataValueField = "user_Employee_Id";
        employeeIdDropDownList.DataBind();
    }
    catch (SqlException sqlExceptionObj)
    {
        Label4.Text = sqlExceptionObj.Message;
    }
    catch (Exception exceptionObj)
    {
        Label4.Text = exceptionObj.Message;
    }
}
}
}

```

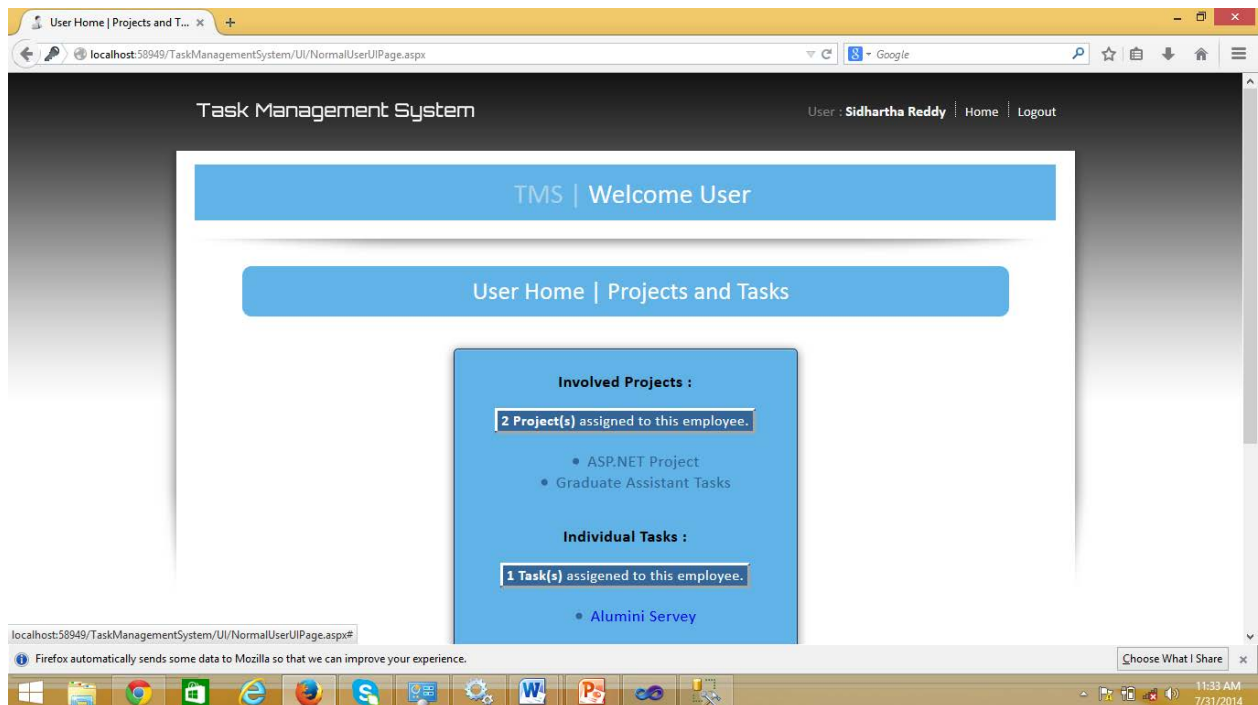
After log in Admin user and user will see different type of home page according to their user type.

Admin home page:

I used two different Master pages for two different user types. Admin master page has a manu which provides administrative privilege.



User home page:



Both Master page retrieve the user id from session variable and populate users task and project list.

```
using System;
using System.Data;
using System.Configuration;
using System.Collections;
using System.Web;
using System.Web.Security;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Web.UI.WebControls.WebParts;
using System.Web.UI.HtmlControls;

public partial class UI_MasterPage : System.Web.UI.MasterPage
{
    string employeeId = null;
    string employeeName = null;
    protected void Page_Load(object sender, EventArgs e)
    {
        try
        {
            employeeId = Session["userID"].ToString();
            employeeName = GetEmployeeName();
            userNameLabel.Text = "Admin user : " + employeeName;
            Session["userName"] = employeeName;
        }
        catch (NullReferenceException nullReferenceExceptionObject)
        {
            userNameLabel.Text = "Cant find User Id. Session time may out.
"+nullReferenceExceptionObject.Message;
            mainContentPlaceHolder.Visible = false;
            menuMain.Visible = false;
            homeHyperLink.Visible = false;
        }
    }

    private string GetEmployeeName()
    {
        EmployeeManager employeeManagerObject = new EmployeeManager();
        Employee employeeObject= employeeManagerObject.SelectEmployee(employeeId);
        return employeeObject.Name;
    }
}
```

Task

If a user clicks a task, page is redirect to another page, where he will be able to see task detail, comments, and attachments with this task. He can comment on the task, attach files, and download files attached with the task. If user wants to forward the task to any other employee he can also forward the task.

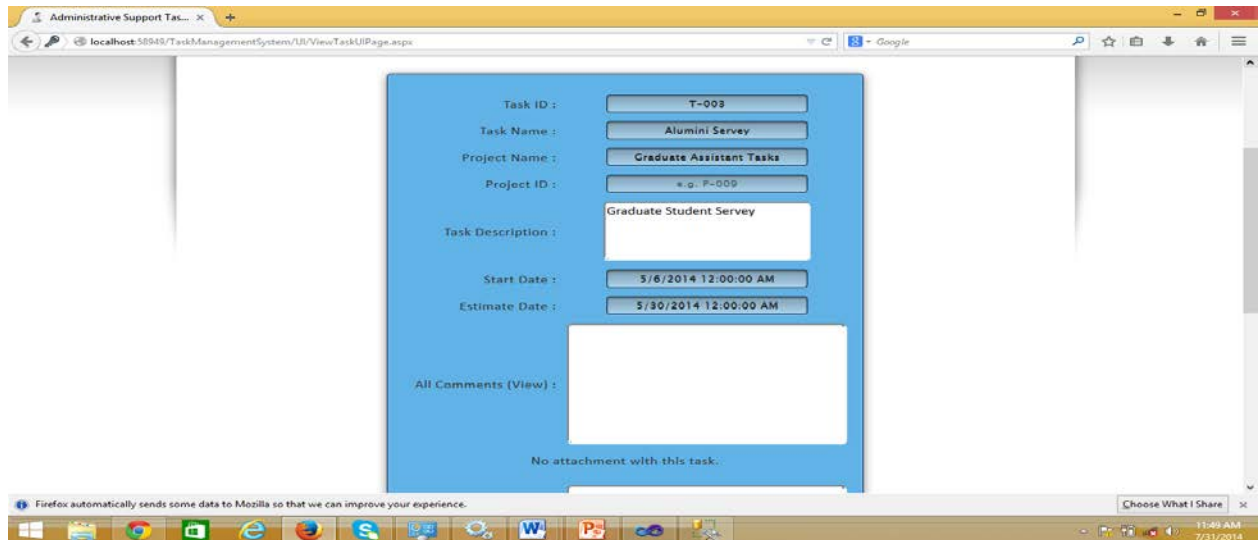
This is the main business part of this project.

The screenshot displays a web browser window with the following details:

- Browser Tab:** Task | All Tasks (View Only)
- Address Bar:** localhost:58949/TaskManagementSystem/UI/TaskUIPage.aspx
- Page Header:** TMS | Welcome Admin
- Page Title:** Task | All Tasks (View Only)
- Left Sidebar:**
 - Home**
 - Project**
 - Create a New Project
 - Edit an Existing Project
 - Add Employee(s) to Project
 - Remove Employee from Project
 - Close a Project
 - Task**
 - Create a Task
 - Edit an Existing Task
 - All Task (View Only)
 - Employee**
 - Create a New Employee
 - Edit an Employee Information
 - Add Employee(s) to Project
 - Remove Employee from Project
- Main Content Area (Task Detail Form):**
 - Project:** Graduate Assistant Tasks
 - Task:** SEI Evaluations
 - Description:** Evaluate Reports and send to ITS Department
 - Start Date:** 7/30/2014 12:00:00 AM
 - Estimate Date:** 8/14/2014 12:00:00 AM
 - Employee Name:** Ramesh Reddy
 - Employee ID:** E-002
 - All Comments:**
 - Sidhartha Reddy : evaluated and send the reports to department. on 7/30/2014 2:20:32 PM.

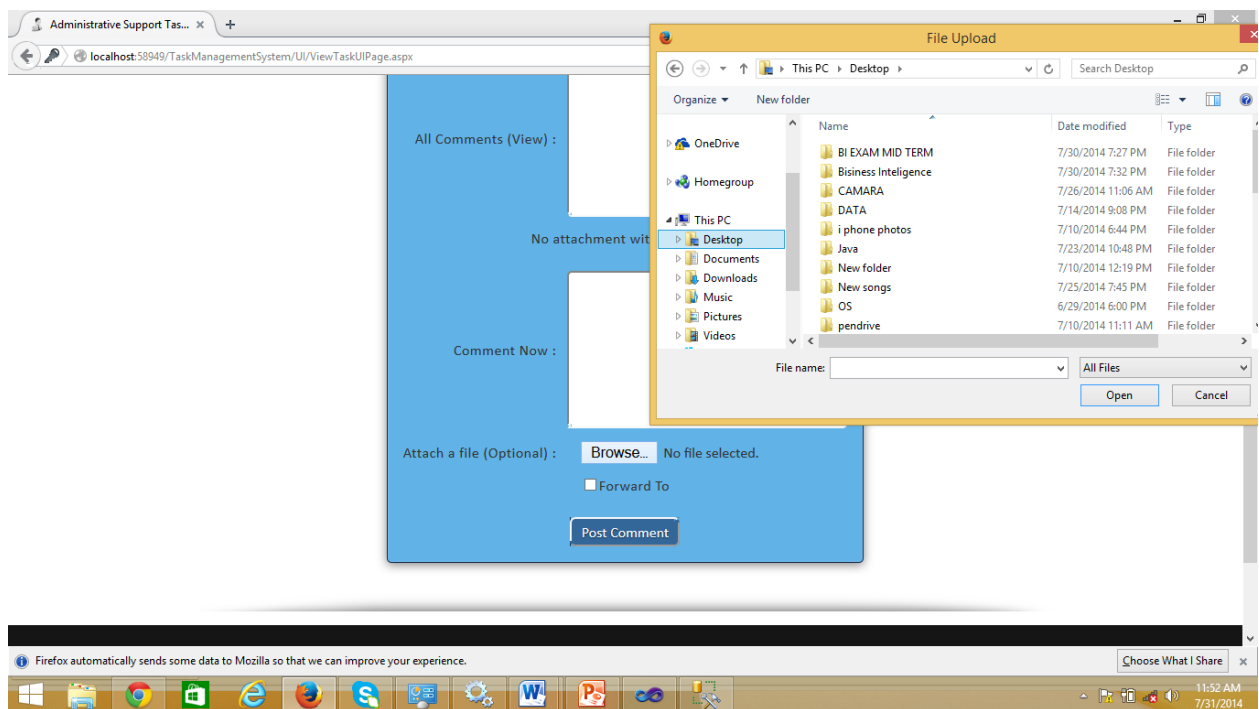
Commenting on task page

User can comment on this task. This comment can be used as a note or as an instruction.



Upload File page

User can also attach file with the task



Code behind posting a comment and upload a file (attachment).

```
protected void postCommentButton_Click(object sender, EventArgs e)
{
    if (DataValidator.IsEmpty(commentTextBox.Text))
    {
        errorLabel.Text = "No comment to post";
        return;
    }
    SaveComment();
    commentTextBox.Text = "";
}

/// <summary />
/// Save a comment
/// If there a attachment upload it
/// </summary />
private void SaveComment()
{
    try
    {
        Comment commentObj = new Comment();

        if (attachmentFileUpload.PostedFile.FileName != "")
        {
            UploadAttachment();

            string fileName = attachmentFileUpload.FileName;
            string fileDestinationPath = @"Attached files\" + fileName;
            //In DB attachment File location will be "Attached files\+ fileName"
            //while downloading the file virtual path will be added to create full path
            commentObj.CommentAttachment = fileDestinationPath;
        }

        commentObj.CommentTaskId = taskObj.Id;
        commentObj.CommentEmployeeName = taskObj.Employee_AssignTo;
        commentObj.CommentEmployeeId = taskObj.Employee_Id;
        commentObj.CommentDate = System.DateTime.Now;
        commentObj.Comments = commentTextBox.Text;
        CommentManager commentManagerObject = new CommentManager();
        commentManagerObject.SaveComment(commentObj);
        LoadAllComments();
    }
    catch (PrimaryKeyException primaryKeyExceptionObj)
    {
        errorLabel.Text = primaryKeyExceptionObj.Message;
    }

    catch (SqlException sqlExceptionObj)
```

```
    {
        errorLabel.Text = sqlExceptionObj.Message;
    }
    catch (Exception exceptionObj)
    {
        errorLabel.Text = exceptionObj.Message;
    }
}
```

```
/// <summary />
/// Upload a attachment
/// </summary />
```

```
private void UploadAttachment()
{
    /* All attachment will be saved in
    * virtual path + \Attached files\ + file name
    */

    Try

    {
        string fileSourcePath = attachmentFileUpload.PostedFile.FileName;
        string fileName = attachmentFileUpload.FileName;
        string fileDestinationPath = Server.MapPath("~/");
        fileDestinationPath = fileDestinationPath + @"Attached files\" + fileName;
        WebClient webClientObj = new WebClient();
        webClientObj.UploadFile(fileDestinationPath, fileSourcePath);
    }

    catch (SqlException sqlExceptionObj)

    {
        errorLabel.Text = sqlExceptionObj.Message;
    }

    catch (Exception exceptionObj)

    {
        errorLabel.Text = exceptionObj.Message;
    }
}
```

Download File

A user can download a attachment of the task by clicking on the file in the attachment Bulleted list. This will open a download window. User can save file in his hard disk or open direct.

Code behind download a file (attachment).

```
protected void attachmentBulletdList_Click(object sender, BulletedListEventArgs e)
{
    Try
    {
        ListItem listItemObj = attachmentBulletdList.Items[e.Index];
        string sourcePath = listItemObj.Value;
        Response.AddHeader("Content-Disposition", "attachment;filename=\"" + listItemObj.Text +
"\");
        Response.ContentType = "application/octet-stream";
        Response.WriteFile(listItemObj.Value);
    }

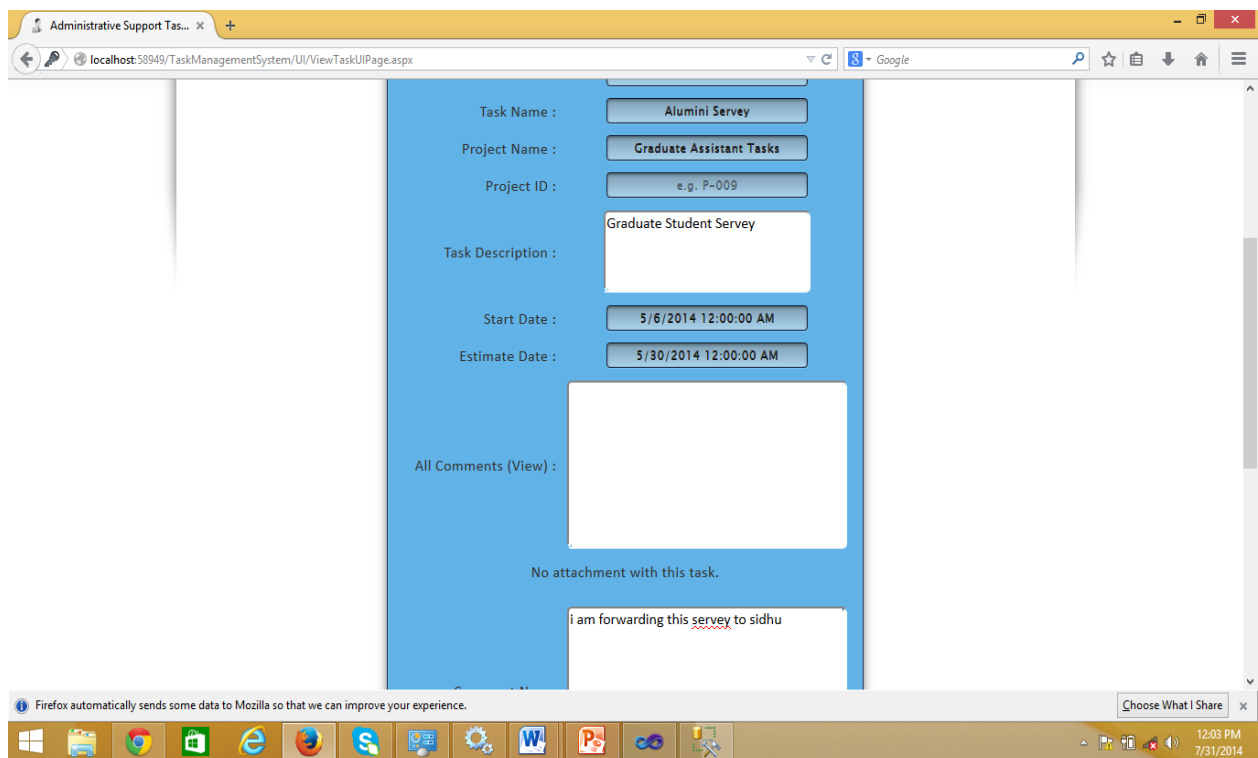
    catch (SqlException sqlExceptionObj)
    {
        errorLabel.Text = sqlExceptionObj.Message;
    }

    catch (Exception exceptionObj)
    {
        errorLabel.Text = exceptionObj.Message;
    }
}
```

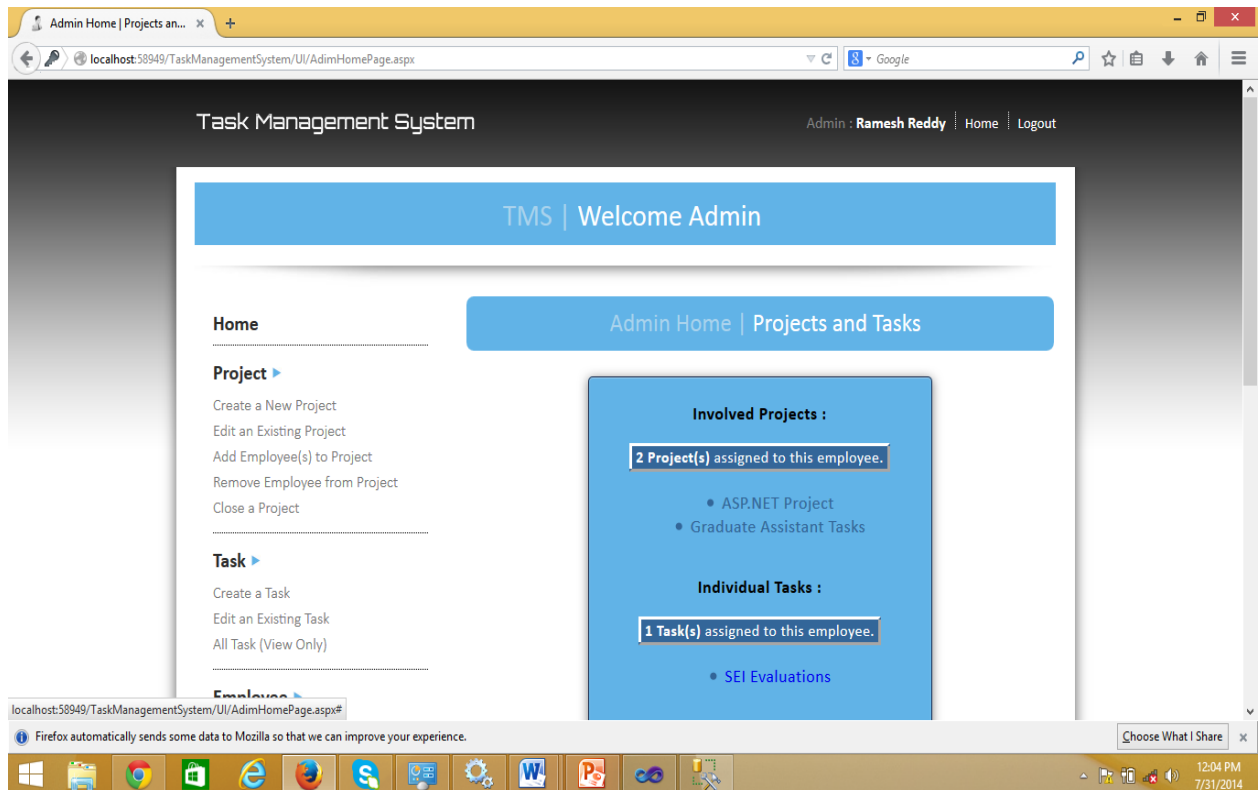
Forwarding a task

A user can also forward a task to other employees of the project. To forward a task user have to check on the "Forward to check box". While checked a DDL and a new button will appear with text on it "Post & Forward" and "post comment" button will disappear. DLL contains all employees of the project. If user unchecked the "Forward to check box", "Post & Forward" and DDL will disappear and "post comment" button will reappear.

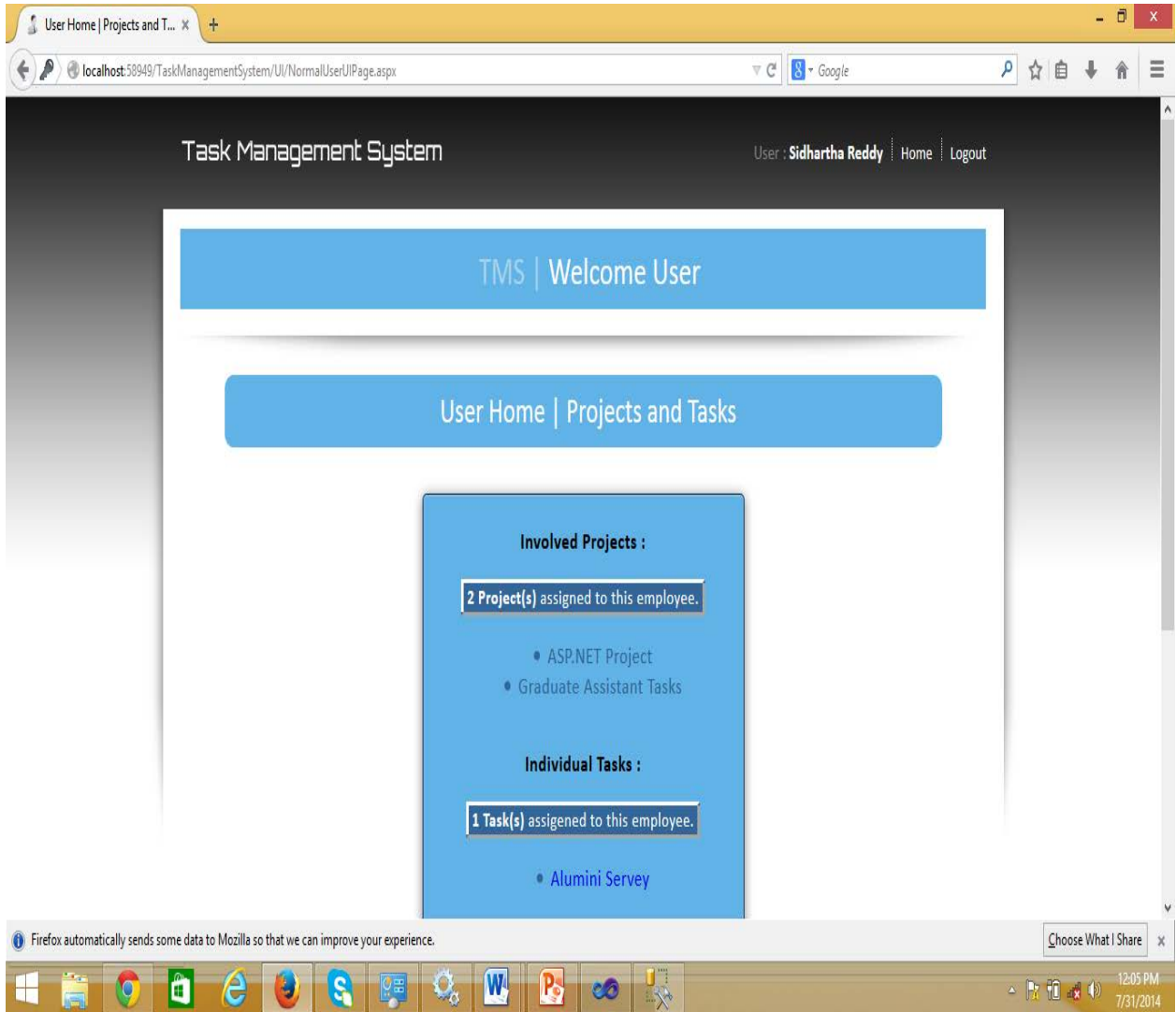
Notice that user is forwarding the task to another employee of the project named "Ramesh Avula". A task can only be forwarded to employees of the same project. Before forward a user must comment on the task telling what to do next or task status. It is also possible to attach a file during forwarding.



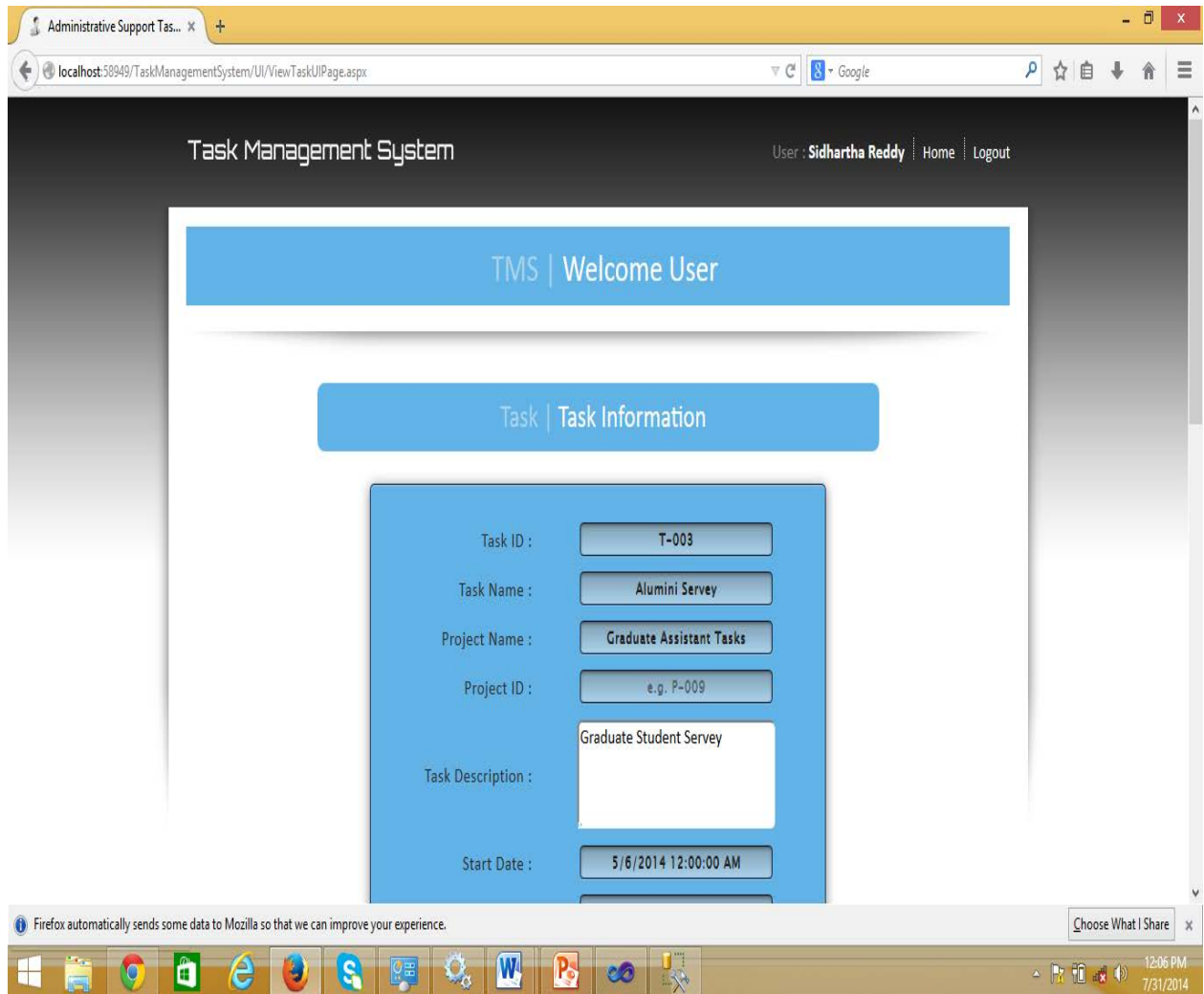
After forwarding a task the user is no longer handling the task. So the task will be removed from the task list of his home page.



When the new user of the task "Sidhartha Reddy" log in, he will see the task in his task list.



The new user can now work on the task.



Code behind forward the task to other employee of the project.

```
protected void postAndForwardButton_Click(object sender, EventArgs e)
{
    if (DataValidator.IsEmpty(commentTextBox.Text))
    {
        errorLabel.Text = "Please enter forwarding comment";
        return;
    }
    else if (employeeNameDropDownList.SelectedIndex.Equals(0)) // Item in index 0 is "-Select-"
and not a valid item. So must not use
    {
        errorLabel.Text = "Please select an employee";
        return;
    }
    SaveComment();
    ForwardTask();
    commentTextBox.Text = "";
    Response.Redirect("AdimHomePage.aspx");
}

/// <summary />
/// Forward the task to a employee of its project
/// </summary />
private void ForwardTask()
{
    try
    {
        TaskManager taskManagerObj = new TaskManager();
        Task taskObject = new Task();
        taskObject.Id = taskIdTextBox.Text;
        taskObject.Employee_Id = employeeNameDropDownList.SelectedItem.Value;
        taskObject.Employee_AssignTo = employeeNameDropDownList.SelectedItem.Text;
        taskObject.Employee_AssigenBy = taskObj.Employee_Id;
        taskObject.Project_Id = projectIdTextBox.Text;
        taskObject.StartDate = System.DateTime.Now;
        string forwardStatus = taskManagerObj.ForwardATask(taskObject);
    }
    catch (SqlException sqlExceptionObj)
    {
        errorLabel.Text = sqlExceptionObj.Message;
    }
    catch (Exception exceptionObj)
    {
        errorLabel.Text = exceptionObj.Message;
    }
}
```

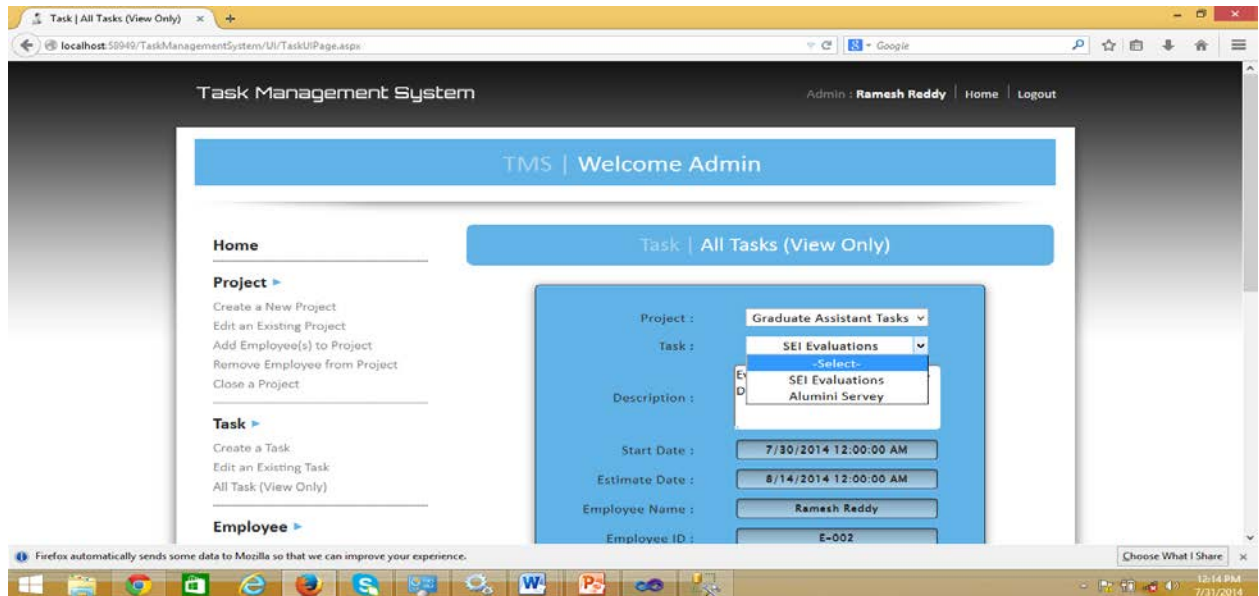
Closing Task: An admin can close any task that is assigned to him. Admin cannot close a task that is not assigned to him because any other employee may be working on the task.

Code behind closing a task

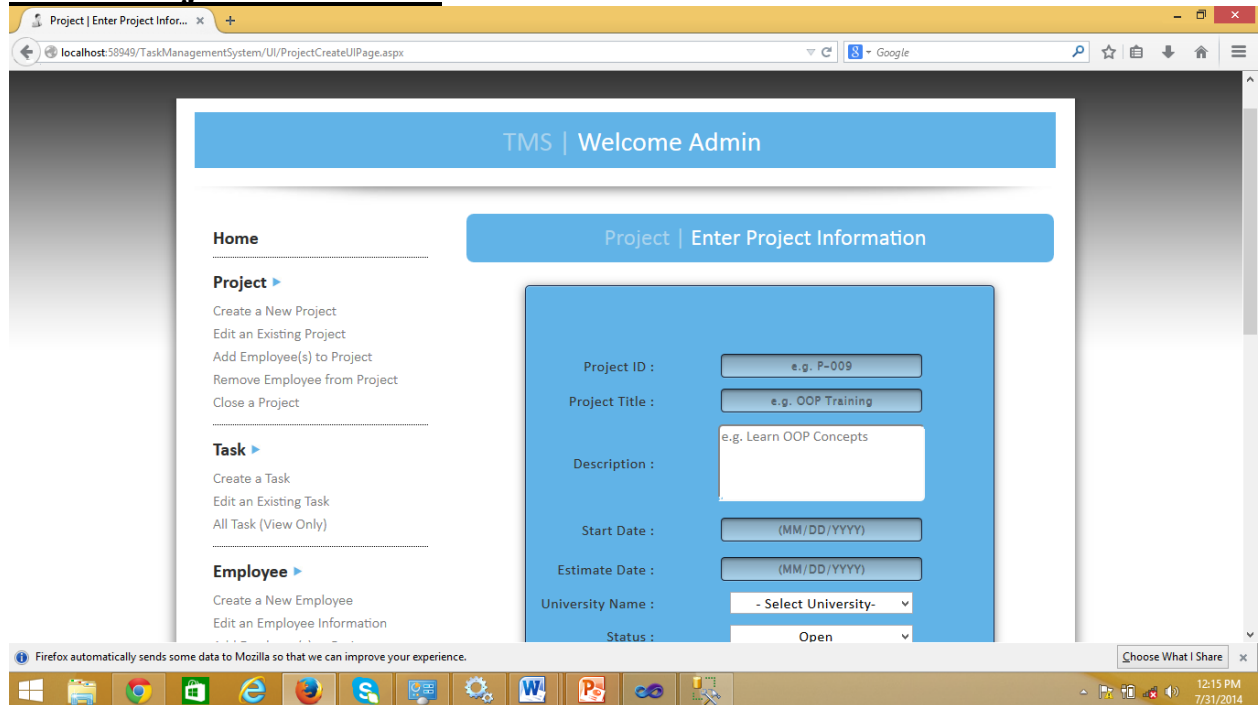
```
protected void closeTaskButton_Click(object sender, EventArgs e)
{
    try
    {
        TaskManager taskManagerObject = new TaskManager();
        taskObj = taskManagerObject.SelectTask(taskId);
        taskObj.TaskStatus = "Close";
        message = taskManagerObject.CloseTask(taskObj);
        SaveClosingComment();
        Response.Redirect("AdimHomePage.aspx?" + "&message=" + Server.UrlEncode(message));
    }
    catch (SqlException sqlExceptionObj)
    {
        errorLabel.Text = sqlExceptionObj.Message;
    }
    catch (Exception exceptionObj)
    {
        errorLabel.Text = exceptionObj.Message;
    }
}
/// <summary />
/// saves a comment that will say who and when closed the task
/// </summary />
private void SaveClosingComment()
{
    try
    {
        Comment commentObj = new Comment();
        commentObj.CommentTaskId = taskObj.Id;
        commentObj.CommentEmployeeName = taskObj.Employee_AssignTo;
        commentObj.CommentEmployeeId = taskObj.Employee_Id;
        commentObj.CommentDate = System.DateTime.Now;
        commentObj.Comments = "This task is colsed by admin : " + taskObj.Employee_AssignTo;
        CommentManager commentManagerObject = new CommentManager();
        commentManagerObject.SaveComment(commentObj);
    }
    catch (PrimaryKeyException primaryKeyExceptionObj)
    {
        errorLabel.Text = primaryKeyExceptionObj.Message;
    }
    catch (SqlException sqlExceptionObj)
    {
        errorLabel.Text = sqlExceptionObj.Message;
    }
    catch (Exception exceptionObj)
    {
        errorLabel.Text = exceptionObj.Message;
    }
}
```

All Task (View Only)

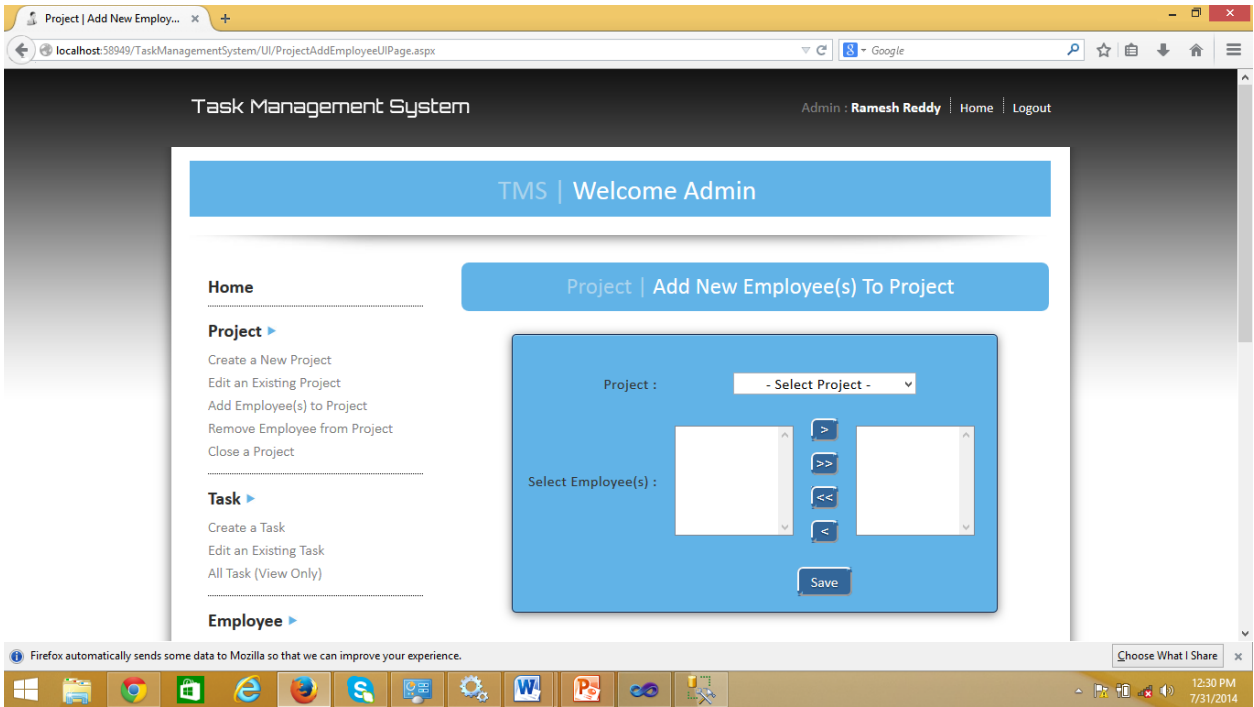
An admin can view all tasks (assigned + non-assigned)



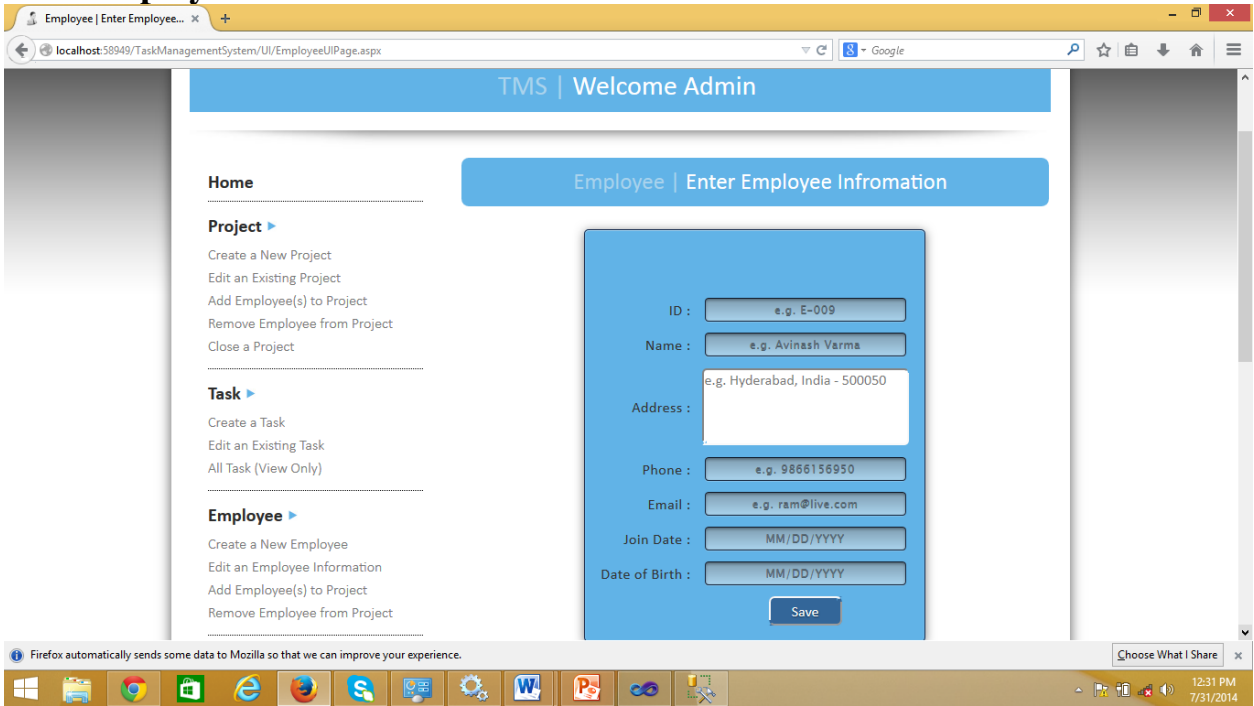
Create Project Screen Shot



Add New Employees to Project Screenshot



New Employee creation Screenshot



University information Screenshot

The screenshot shows a web browser window with the URL `localhost:58949/TaskManagementSystem/UI/UniversityEditUIPage.aspx`. The page has a sidebar menu with sections for Project, Task, Employee, and User. The main content area features a blue-bordered form for adding university information with fields for University ID, University Name, Contact Person, Contact Date, Address, Phone Number, and Email, along with an Update button. Below the form is a section titled "Existing University Information" containing a table with the following data:

university_ID	university_CompanyName	university_ContactPerson	university_ContactDate	university_Email
U-001	Governors State University	Mr. Sidhartha Reddy	7/30/2014 12:00:00 AM	sidharthareddy7@gmail.com

Footer Page Screen Shot

The screenshot shows a web browser window with the URL `localhost:58949/TaskManagementSystem/UI/LoginUI.aspx`. The main content area features a blue-bordered login form titled "GET STARTED" with fields for University ID and Password, and a Login button. The footer contains the following information:

Task Management System

University Park, IL 60484 | (305) 371-0000 | ramesh2230@gmail.com

Call Us | Live Chat | Login

Task Management System is a web application by which any organization can manage tasks among its employees.

4.0 S/w and H/w requirements

4.0.1 Environment:

- **Servers:**
 - **Operating System Server:** - Microsoft Windows 7 or Higher
 - **Data Base Server:** Microsoft SQL Server 2012
- **Clients** : Microsoft Internet Explorer,
- **Tools** : Microsoft Visual Studio .Net 2010
- **User Interface:** ASP.NET
- **Code Behind** : C# .NET

4.0.2 Requirements:

- **Hardware requirements:**

Number	Description
1	PC with 56 GB hard-disk and 4GB RAM

- **Software requirements:**

Number	Description
1	Windows 7/8.1/ or Higher with MS-office
2.	SQL server2012
3.	Ms-Visual Studio .Net 2010
4.	Ms-Internet Explorer

5.0 Data Management

5.1 Data Description

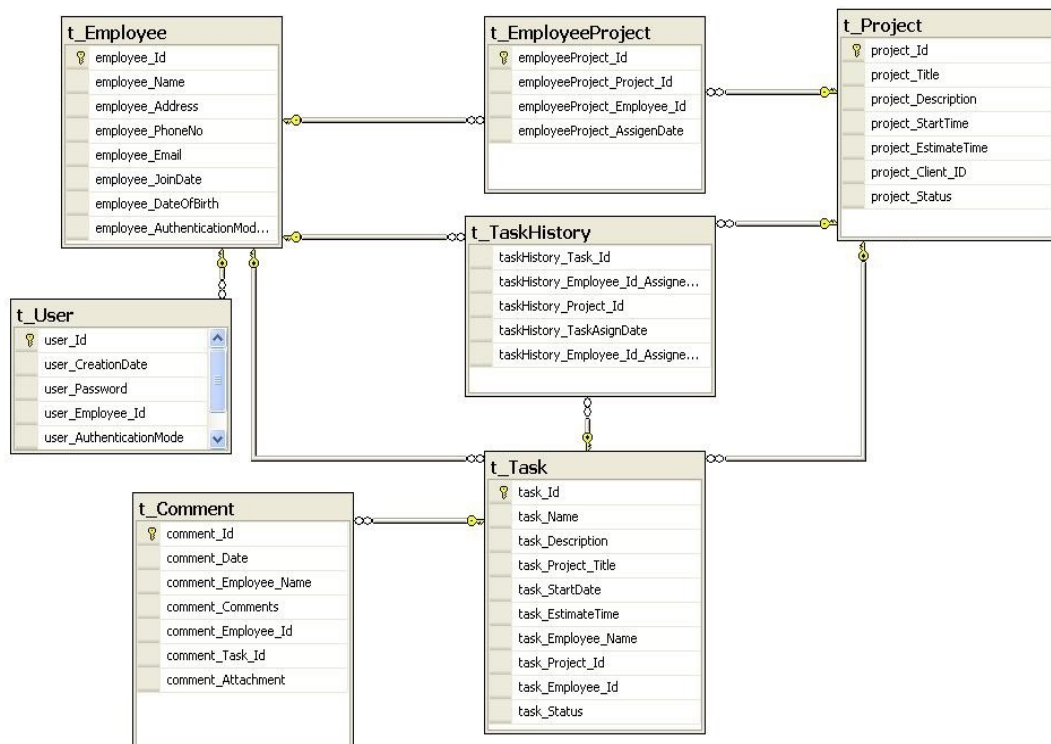
This database consists of

- Employee: Employee personal information is added to database with Unique ID.
- Project: Admin can create project, edit project information, add / remove employee to a project and can close a project.
- Task: Contains task description with unique task id.
- Task History: Contains all task information done by the employee.
- Employee Project: Admin/ Owner can assign project to employees.
- Comment: Admin/ Owner and employee can comment on work tasks.

5.2 Data Objects

- User: user_Id, user_creationDate, user_Password , user_Employee_Id , user_authenticationMode .
- Employee: employee_Id , employee_Name, employee_Address , employee_Phoneno, employee_Email, employee_JoinDate, employee_DateOfBirth, employee_AuthenticationMode .
- Project: Project_Id , Project_Title , Project_Description, Project_Starttime , Project_EstimatedTime, Project_Status.
- EmployeeProject: employeeProject_Id , employeeProject_Project_id, employeeProject_employee_Id, employeeProject_Assigndate.
- Task: task_Id, task_Name, task_Description , task_Project_Title, task_StartDate, task_EstimatedDate, task_Employee_Name, task_Project_Id, task_employee_Id, task_Status.
- TaskHistory: taskHistory_taskId, taskHistory_Project_Id, taskHistory_Employee_Id_Assignment, taskHistory_taskAssignDate, taskHistory_Employee_Id_Assign.
- Comment: comment_Id, comment_Date, comment_Employee_Name, comment_Comments, comment_Employee_Id, comment_Task_Id, comment_Attachment.

5.3 Relationships



6.0 Non-Functional / Operational Requirements

6.1 Security and Reliability

6.1.1 Security

- Pages of the website must be access in the way they were intended to be accessed.
Included files shall not be accessed outside of their parent file.
- Administrator can only perform administrative task on pages they are privileged to access. Customers will not be allowed to access the administrator pages.

6.1.2 Reliability

- The database should maintain data normalization by implementing a primary and foreign key system so that discrepancies do not occur within the data.

6.2 Maintainability

Maintenance the last phase in the software engineering process. As programs are developed.

A distributing trend has emerged the amount of effort and a resource expended on software maintenance is growing. In total project development maintenances takes 65% of effort .In software maintenance there are four .They are

- Adaptive Maintenance
- Corrective Maintenance
- Perfective Maintenance
- Preventive Maintenance

Adaptive Maintenance is applied when changes in the external environment precipitate modifications to software. I deal with adapting the software to new environments.

Perfective Maintenance incorporates enhancements that are requested by user community. It deals with updating the software according to changes in user requirements

Corrective Maintenance acts to correct errors that are uncovered after the software is in use. It deals with fixing bugs in the code

Preventive Maintenance improves future maintainability and reliability and provides a basis for future enhancement. It deals with updating documentation and making the software more maintainable .Tasks performed during the software engineering process define maintainability and have an important impact in the success of any maintenance approach .Reverse Engineering and Reengineering are the tools and techniques used to maintain the project.

- Page loads should be returned and formatted in a timely fashion depending on the request being made.

7.0 Conclusion

It has been a great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of not only programming in ASP.NET and C#.Net web based application and no some extent Windows Application and SQL Server, but also about all handling procedure related with “Administrative support task management system”. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

BENEFITS:

The merits of this project are as follows: -

- This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
- The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updation so that the user cannot enter the invalid data, which can create problems at later date.
- From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can sat that the project is user friendly which is one of the primary concerns of any good project.
- Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
- Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time then manual system.
- Through these features it will increase the efficiency, accuracy and transparency

8.0 BIBLIOGRAPHY

- FOR .NET INSTALLATION

www.support.microsoft.com

- FOR DEPLOYMENT AND PACKING ON SERVER

www.developer.com

www.15seconds.com

- FOR SQL

www.msdn.microsoft.com

- FOR ASP.NET

www.msdn.microsoft.com/net/quickstart/aspplus/default.com

www.asp.net

www.fmexpense.com/quickstart/aspplus/default.com

www.asptoday.com

www.aspfree.com

www.4guysfromrolla.com/index.aspx

The following books were referred during the analysis and execution phase of the project

Sql the complete reference

By Sql Press

Professional asp.net

By Wrox

msdn

By Microsoft