



# CAPSTONE PROJECT

## Project Management System

Developers & Designers

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## PROJECT VISION STATEMENT

This application will help JD Market and Research Company administers projects and employees, and we call this application “Project Management.” Basically, two main functions will be designed in our application. First, employees can log into the system and find suitable projects corresponding their capabilities and time schedules. Each project will be assigned by a manager with limited employees to work on it. Second, employees can track project process through the system. Employees may track what they did everyday chronologically, or track by different projects.

Through this system, a manager can assign projects to employees online and let employees choose projects they are confident. In addition, employees can track old projects when they are doing similar one. If an employee quits his project due to illness, another employee can track his project and finish remaining jobs.

This application contains three security roles, manager and employee. We may add boss role if necessary. We are thinking to create four tables in our database, which are managers, employees, tasks, and projects. We may add more tables for recording other information. Besides, we still have other useful functions embedded in the project.

## PROJECT SCOPE

Project management system is a web based software integrated with role based security. This system will provide several searchable databases of all projects, tasks and personal information that is updated in real-time. As a collection of programs that is used to manage various phases of a project, this system is accessible on the Internet. Project management entails processes such as building timelines, releasing projects, creating task lists and controlling documents. Each of these processes can be controlled by the project management solutions. These web based solutions are coded in a browser supported language such as HTML, ASP and JavaScript, so they can be accessed by internal users through a web browser.

## FEASIBILITY ANALYSIS

We believe our project management system is feasible technically, economically, and organizationally.

### TECHNICAL

Considering there are many roles, boss, manager and employee that with a wide variety of computer skills using this project management system. Our application is going to be as user friendly as possible, by using buttons and dropdown list for users to accomplish an action. All of our customers should find these user interface functions intuitive and easy to follow. Users should be able to search for project, track project currently working on, employees can get task assigned by manager, add, delete and edit personal information, contact users within the system and etc.



## ECONOMIC

Develop and maintain this project management system might take a great amount of money. However, this system brings more benefits. Since everything would be more efficient, we are going to reduce in staff and salaries after start using this system. Moreover, both employee and manager would get work done easier and more accurate. Because users can always keep in track of what they are currently working on, and also check what else needs to be done.

## ORGANIZATION

Using this project management information system will definitely be a big change to a company. However this system would be easy to learn, the ease of use built in to the user experience will make for a much more efficient workflow and happier employees who can get work done more efficiently. Employees and managers would improve the overall satisfaction level, which in turn lead to much better working environment.

## BUSINESS RULES

- This system is designed to be used by only internal users
- The extended completion date for unfinished task is no more than 10 days after the original assigned completion date
- Each project must have and only have one manager
- The number of employees for each project is dependent on its complexity and varies sometimes
- Before implementing a project, feasibility analysis should be done to

## CONSTRAINTS

- The system will be constructed using the following technologies :
  - XHTML/CSS
  - ASP.NET
  - JavaScript
  - Microsoft SQL Server
  - Windows Server 2008 R2
- The system must be functional on Firefox, Chrome, Safari, and Internet Explorer browsers
- The system shall encrypt sensitive data (user accounts, personal information, etc.) using an SSL public key encryption standard
- Any SQL requests should be projected against injection attacks



## Schedule

Month 1(110 hrs)		
US#	Title	Hours
17	Log in/out to the system	2.86
35	Log in/out to the system	2.86
9	Log in/out to the system	4.29
33	Update personal information	2.86
32	Edit employee information	4.29
46	Update personal information	2.86
23	Search employee contact(s) by first name, last name, phone number or email address	11.43
1	Create and delete ASP.Net manager roles	5.71
2	Create and delete ASP.Net employee roles	5.71
3	Edit ASP.Net manager and employee roles	5.71
4	Search for and view manager and employee contact(s)	11.43
13	Update personal information	2.86
16	Set up start and end date for each tasks	7.14
30	Search projects	8.57
25	View finished project within their own department	8.57
26	View unfinished project within their own department	8.57
20	View tasks that are uploaded by employees	14.29



Month 2(111 hrs)		
US#	Title	Hours
21	Reassign tasks that are uploaded by employees	14.29
31	Add new projects and divide into smaller tasks	17.14
15	Assign tasks to employees if no one pick up the tasks	17.14
29	Change start and end date	7.14
5	View finished project(s)	8.57
6	View unfinished project(s)	8.57
8	Search project	11.43
7	View employee project timeline	12.86
38	View project timeline	14.29

Month 3(101 hrs)		
US#	Title	Hours
34	Aquire tasks from the task list	8.57
37	Upload finished task to the system	8.57
47	View all tasks in the task list of current project	14.29
48	Search project	8.57
42	View finished project within their own department	8.57
43	View unfinished project within their own department	8.57
40	Give up task in progress	4.29
24	Sent feedback to employee(s)	4.29
44	View feedback from manager	14.29
19	Sent out reminders to employees for upcoming task deadlines	21.43



Month 4(116 hrs)		
US#	Title	Hours
41	Receive reminder from manager for task deadlines	21.43
28	Send important message to all/partial employees	14.29
45	Sent message to manager	14.29
22	Answer employee's question	8.57
11	Send comments to manager	8.57
12	Send important message to all/partial employees	21.43
27	Sent message to boss	10.00
39	Chat with employee, manager and boss	17.14

## DICTIONARY

- Project Management – a system which is designed for helping companies better organize, moderate, and complete a project
- Manager – a staff member responsible for breaking a specific project into smaller tasks and assigning these tasks to different employees
- Employee – a staff member responsible for picking suitable projects corresponding their capabilities and time schedules
- Boss – a staff member responsible for checking all materials (projects, time line, etc.)
- Time line – a system that records what each employee has done everyday