

Project Plan

In this project, I will be creating a web based system for the management of projects and collaborating with other users on these projects. The need for this arose from my own personal needs, as I needed something to help manage the state of many of my own personal projects, as well as dealing with work projects, which I do on a freelance basis. These projects all involve working remotely with the client, and I lacked any sort of structured way to keep track of the projects.

There are already a number of project management systems available, some even web based, but they all failed to meet my needs. Every system I've tried suffered from at least one of the following problems:

- It was too simple/lacked features
- It had all the right features but was too complex to use

Aims and Objectives

I have the following key aims for this project:

- To create something easy to use which will encourage the use of such a system in a project
- To create a project management system which doesn't force a methodology on you, such as the waterfall model
- To balance the feature set, so it's not restricted to a very small domain, but not so loosely defined that it becomes useless

Features – Must have

Project management – Must be able to create projects on the fly, assign users to a project, nest multiple projects, view the status of a project.

Milestones – Must be able to create, edit and delete milestones which occur on a given date and time. Should also be able to view upcoming milestones, overdue milestones and completed milestones. Should also be able to categorize them and filter based on these categories.

Tasks – The ability to create any number of tasks on a project, and group these into lists. Can also prioritize these tasks and categorize them as well.

Communication – A centralised communication channel, which everyone can see and is easy to search, unlike email. Can be categorized and receive email notifications of new messages.

Time tracking – Track how long it takes to complete tasks.

File repository – Upload and version control project files. Organize them in nested folders and tag them for easy retrieval.

Features – Nice to have

iCal integration – The ability to add all milestones to any iCal compatible calendar application.

API – To allow external users and other applications to integrate with my system.

Reply by email – The ability to reply to a message via the email notification.

Time efficiency – Compare estimated times to actual times, and use it to improve estimates in the future

Advanced graphical reports – The ability to create reports based on all the data with various charts and graphs

Deliverables

Poster – Due in on the 11th November 2009 at 2pm

Seminar – Between 18th November and 8th December 2009

Presentation of results – Between 10th and 23rd March 2010

Draft report – 5th April 2010

Report – Due in on the 5th May 2010

Tasks

The following is a subset of the tasks for this project. The planning, implementation and testing for each section is missed here, as it applies to each section and is clearly displayed on the Gantt chart.

- Research existing project management systems – 1 week
- Research storing hierarchical data in databases – 2 days
- Research the benefits of the various storage engines in MySQL (decide between MyISAM and InnoDB) – 2 days
- Create the database schema, plan relationships and constraints – 2 weeks
- Design several possible UI designs for each section and get user feedback – 2 days for each section, 3 weeks total
- Plan the flow of the application for each section – 2 weeks
- Create main UI for the site – 2 weeks
- Integration testing – 6 weeks
- Release and get feedback – 4 weeks
- Plan the basic structure of the report – 2 weeks
- Write the report – 6 weeks

Milestones

As well as the listed deliverables, I will have several of my own milestones. These will occur every 2-3 weeks and will enable me to see if I'm not on schedule much sooner than I would if I just relied on the external milestones/deliverable dates. As well as these internal milestones which I will use to track progress, I will have several of my own external milestones. These are when I aim to release a working copy of my system for testing by the general public. I will aim to make several such releases over the course of the project each time I add some major functionality. The sooner I get these out, the sooner I can get feedback on the system as a whole, and if it really does meet real needs.

The internal milestones in March are subject to change when I find the exact date of my presentation of results. If my presentation of results falls at the start of the 2 week block, I may need to drop the report functionality in order to get the other 2 sections done in time for the presentation.

Public milestones:

- Alpha release – Must be ready to launch an alpha release by the 21st December
- Beta release – Must be ready to launch an alpha release by the 1st March

Internal milestones:

- Create database schema – 19th October
- User interface – 23rd October
- User management – 6th November
- Project creation and management – 20th November
- Task management – 11th December
- Milestones and date facilities – 11th December
- Initial communication system – 21st December
- Ticketing – 12th March
- Time tracking – 12th March
- File repository – 26th March
- Report generation – 26th March
- Integration testing – 26th March

