super-duper-umbrella

Amanda Chen Elizabeth Doss Yevgeniy Gorbachev Junhee Lee

Project Manager™

Goal: To create a website from which one can easily manage a software project.

Feature List

Minimum Viable Product

Account Usage

- Registration
- Login/logout
- Profile editing/deletion
- Allow users to accept/decline project invite

Project Administration

- Manager (original creator) designated
- (Manager) project creation, team creation, project completion/abandonment
- (Manager) add/remove users
- Logging of all actions done to the project

Project Management

• (Manager) open/close/delete tasks, assign tasks to teams/users

Additional - Easy

Project Administration

• Manager can change manager

Project Management

- Add dependencies to tasks
- Specify feature's development branch

Google Calendar integration¹

• Task deadlines displayed on a calendar

Additional - Hard

Message Board/Chat

- Send message
- Asynchronous message update

Git integration

• Visual display of commit history in each branch

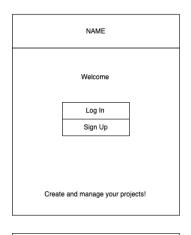
Markdown

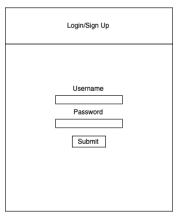
• Implement Markdown rendering

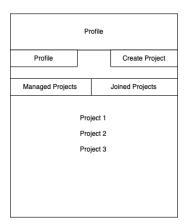
Front end framework: Bootstrap; considered generally superior by developers

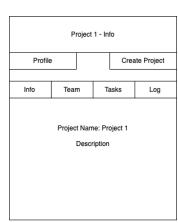
 $^{^1\,}https://docs.google.com/document/d/1 at MCAui 86 AwBSWEz8lCIJFaNkUL4V5 fwVecNcnxSpP0/edit?usp=sharing$

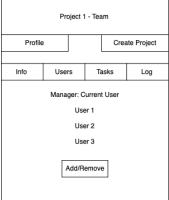
Site Components

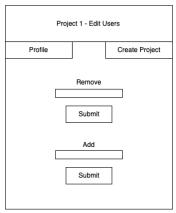


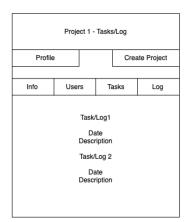


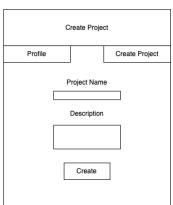












Database Schema

Table	Contents
users	userid integer primary key, username text unique, password ² text, projects text ³ , tasks text
projects	projid integer primary key, name text unique, userid ⁴ integer, teams text ⁵ , workers ⁶ text, blurb text, description ⁷ text, log text
tasks	projid integer, taskid integer, status text, content text, dependencies ⁸ text, workers text, primary key (taskid, projid)

² MD5 hashed in final product, unhashed for development

³ Comma-separated list of projid

⁴ Of current manager

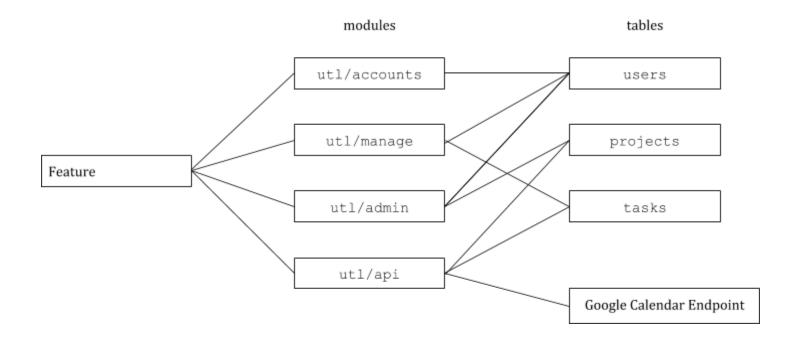
⁵ Comma-separated list of team names, with the first item as "unteamed" or "all"

⁶ Comma-separated list of (userid, teamid)

⁷ More in-depth than the blurb (Markdown in final version)

⁸ Comma-separated list of taskid

Component Map



Internal API

```
accounts: Account usage
admin: Project administration
manage: Project management
api: Handling API requests
Modules to be added for new major features as necessary
utl/account
     register(username: str, password: str)
     verify(username: str, password: str)
     edit(userid: int, edits: dict)
     list()
     projects(userid: int)
     tasks(userid: int)
utl/admin
     create(name: str, blurb: str, description: str)
     read(projid: int, cols: list)
     edit(projid: int, edits: dict)
utl/manage
     task(projid: int, content: str, dependencies: list)
     edit (projid: int, taskid: int, edits: dict)
utl/api
     TBD
```

Roles

Amanda: Backend

Elizabeth: Frontend Design

Yevgeniy: PM

Junhee: Frontend function (using internal backend API)