**Capstone Project**

**Document Template**

Note: The following are the candidate sections of the document. They are presented here for guidance. Questions in each section could be used as possible aspects to cover. Some questions may not be applied to each project. On the other hand, additional information may be needed.

# Introduction

## Purpose

* Connecting people through projects
* No other similar solution currently exists (that I know of)
* There are no current users, but loneliness epidemic could ensure users
* At best, millions of daily users linked and developing themselves through the app
* As stated no similar project exist. People can pledge money to projects or find friends through application but not discover and collaborate on projects

## Industry/ domain

* The domains are Project management and Self development
* It is a flourishing industry due to a shift of culture toward individualism
* Profits are primarily from sales or subscription to courses
* The key concepts are:
  + Developing a Personal Vision
  + Planning Your Personal Development
  + Starting the Improvement Process
  + Recording Your Personal Development
  + Reviewing and Revising Personal Development Plans
* The project could be linked to many industries, including advertisement and education

## Stakeholders

* Everyone over 16 that has a reliable access to the Internet
* It lets stakeholders connect to others and sharpen their skills
* Currently none, though ease of use will be a requirement

# Product Description

## Architecture Diagram

## User Flow

## Wireframe Design

See [here](https://www.figma.com/file/Fxt8dQqFcPtzU1qc5BFTLr/Capstone?type=design&node-id=0-1&mode=design&t=wQ4kDrbbfBBdAi1M-0) (FIGMA link)

## Open Questions/Out of Scope

* A file called wider\_scope to serve as notebook for further ideas to widen the scope

## Non-functional Requirements

* Users will need login to access their private information, though cookies will let people log back on easily. Password are stored and communicated as hashed
* There is no theoretical maximum to connections or transactions, though server capacity will realistically be limited
* The software would ideally be used on a daily basis, thus as easy to use as feasible
* The application presents no urgent situation. Response time should be short but it is not a priority
* Application serves as common billboard. Display failure only means slightly delayed update, thus is not a priority
* The software has no major reason to be overhauled but individual features and/or Quality of Life improvements are to be expected

## User Stories

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | User Story Title | User Story Description | Priority  0(min) - 10(max) | Additional Notes |
| 1 | Sign up | The user creates an account | 10 | Currently does not use tokens |
| 2 | Log In | The user logs in to use their account | 10 | Idem |
| 3 | Add skills | The user chooses the skills their master from the skills list | 8 | Currently shows all skills instead of needing to choose a field first |
| 4 | Add interests | The user chooses the fields that they wish to develop skills in | 9 | Works well. Height cannot be changed,  rewritten to reduce the number of components |
| 5 | Create a project | The user creates a new project defining it’s type, it’s budget and whether it is public or not | 10 | Name needs to not be empty (tested but led to the creator’s profile) |
| 6 | Add steps | The user adds steps to define the broad | 10 | Button created but not linked to a function |
| 7 | Add tasks | The user adds tasks to define the details of what needs to be done | 10 | Idem |
| 8 | Change status | An admin or assignee changes a task status (admin only for professional projects, as it may need review) | 7 | Dropped due to lack of time |
| 9 | Add budget | The creator defines the pool of money available to realize the project | 3 | Created as base value, cannot be edited |
| 10 | Pledge money | A user add money to the budget of one of the project they chose | 2 | Dropped due to lack of time |
| 11 | Add members | A project creator add users as member of said project | 6 | Dropped due to lack of time |
| 12 | Assign tasks | An administrator defines who does what, though a member can add themselves as an assignee | 5 | Dropped due to lack of time |
| 13 | Browse projects | A user browses the list of projects and filters it by name or fields | 7 | Tested a lot, needed to be re-written to reduce hook calls |
| 14 | Request entry | A user asks to be a member of a project | 4 | Dropped due to lack of time |
| 15 | Set admins | A project creator defines the members they wish to have administration rights on their project | 4 | Dropped due to lack of time |
| 16 | Set resources | The creator or administrator defines the resources that are needed for a step | 3 | Dropped due to lack of time |
| 16 | Add/edit resources | The members of the project modify the current number of resources | 2 | Dropped due to lack of time |

# Project Planning

# Testing Strategy

* API automated testing
* Manual Thunderclient API testing
* Frequent manual inspections of the front-end

# Implementation

* AWS remote build

# End-to-end solution

* How well did the software meet its objectives?

# References

* The code is stored in [a GitHub repository](https://github.com/PhilNbel/IODCapstone)
* The core is a Vite and JS mix, with MySQL for the database. The following libraries are used:
  + React
  + express
  + cors
  + sql-sanitizer
  + MUI
  + mysql2