

Software Management Plan

Organization

Our team will utilize a function oriented approach, where the team is assigned roles based on what their specific role is to the project. At the top of our organization will be the project leader, who is responsible for leading team meetings and delegating to the other departments and group members. The Development team will be split into two groups. One group will be responsible for front end development, and the other group will be responsible for back end development. Our team will also have one member working as Quality Assurance and Tester. The various teams and roles will be responsible for their functions within the project, and will coordinate with other members and the group leader as needed or as responsibilities overlap.

Project Management Tools

Our team will use the below project management tools:

Scheduling & Documentation:

- Google Docs
- Google Sheets

Configuration Management:

- Github

Languages:

- HTML
- CSS
- JavaScript

Design Documents:

- Figma

Libraries:

- *React.js*
- *Redux*

Environments

- *Node.js*

Databases:

- *MongoDB*

Hosting & Authentication

- *Firebase*

Risk Management Plan

Our team has identified the following risks to our project. Each risk has been given a priority based on estimated likelihood and impact. Each risk has been assigned to a team member. This team member will be responsible for proactively assessing these risks, and coordinating with the project leader on any actions that need to be taken.

Risk	Priority	Estimated Likelihood (1-10)	Estimated Impact (1-10)	Team Member Responsible	Mitigation
Major Code Issues & Bugs	1	5	8	Khalid	Quality tests will be run weekly.
Poor Estimation & Scheduling Issues	2	5	6	Patrick	Extra time has been built into schedule.
Insufficient Skills with Back End Technologies	2	2	7	Daniel	Multiple team members assigned to back end development. Extra time built into schedule in case of issues.
Insufficient Skills with Front End Technologies	4	2	7	Shahla	Multiple team members assigned to front end development. Extra time built into schedule in case of issues.
Inaccurate or Incomplete Design	5	6	4	Sai	Design documents will be reviewed by development

Documents					teams and project leader for for revisions
-----------	--	--	--	--	---

Estimation and scheduling

In order to estimate the time needed to complete our project, we have broken down the project into the specific features that will be implemented on the project. Using our experience in the specific technologies needed to implement these features, as well as outside research into how long it will take to design these features for a social media site, we have scheduled which features are to be completed on a weekly basis. More major features will be assigned an entire week for development, whereas on other weeks a number of smaller features will be worked on simultaneously. Our team has left a period of a few weeks at the end of the project where there are no features that need to be implemented. This will give us a buffer in the case that any issues arise, so work can be rescheduled in time for the completion of the project. If our team is able to stay fully on schedule, this time will be used to run more quality tests and implement additional features. Specific team members will be assigned work for that week based on this schedule.

Schedule of Features to be Added

W/E 9/26

- Login Page
- Connect Firebase
- Front end register page

W/E 10/3

- Site header
- Backend login functionality

W/E 10/10

- Home Page
- Navigation bar

W/E 10/17

- Share feature (allow users to share posts, media etc.)

W/E 10/24

- Article Template
- Add login functionality

W/E 0/31

- Save User Details
- Profile Picture
- Username Feature

W/E 11/7

- Text Posts

W/E 11/14

- Posts with images & media

W/E 11/21

- Retrieve posts
- Display Posts

W/E 11/28

- Flex week

W/E 12/5

- Flex Week

W/E 12/12

- Flex Week

Example of Weekly Schedule for Team Members:

	9/26	10/3	10/10	10/17	10/24	10/31	11/7	11/14	11/21
<i>Features Due</i>	Login page	Site header Nav bar	Home Page	Article Template Share feature	Connect Firebase Add login functionality	Save User Details Profile Picture Username	Text Posts	Posts with images & media	Retrieve posts Display Posts
<i>Patrick</i>	Proposal, SMP & assist with design docs								
<i>Qinfeng</i>	Assist with register component								
<i>Daniel</i>	Create register component								
<i>Shahla</i>	Create login Component								
<i>Sai</i>	Create login design docs								
<i>Khalid</i>	Test login & register components								

Documentation & Monitoring

Our team has implemented a number of protocols to document and monitor our weekly progress. Weekly team meetings will be held where team members update the status of their tasks for that week. A status update report will be prepared based on the weekly team meeting and the overall status of the project. Overall progress will be documented using our schedule, and necessary changes to the schedule will be made as necessary.