

SW Engineering CSC648/848

Edumingle

Section 01, Team 01

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Milestone 1

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Date	Revision

1. Executive summary:

Students often find themselves navigating through multiple online applications or platforms, in order to learn about the activities at their school and be able to search for clubs or any other activities happening at their own university. This sense of segregation often leads students to feel like they are not part of a community. This is a driving force behind our creation of a social media platform for SFSU students, teachers, and staff, which would offer a space to share ideas and collaborate on different academic and extracurricular activities. This sense of belonging can enhance the overall learning experience, as socializing on the platform can make learning more engaging and enjoyable. When students, teachers, and staff feel connected and supported, it can boost motivation and participation in educational activities. One advantage of our social media platform is that it primarily focuses on content pertaining to the SFSU community. Irrelevant content not dedicated to the SFSU community would serve as a distraction to the purpose of our social media platform. It would lead to an impression of just being another social media platform and not being dependable and reliable. We want our social media platform to be the primary source of information about SFSU.

By using the platform, the users will be able to create profiles with their personal information and academic achievements. Users can connect or follow other users, allowing them to see the activities of those they follow. Users can send private messages to each other or in small groups which are for academic discussions, questions, or social interactions and other functionalities that users can experience to foster a community. In addition, The platform provides a unique function where users can make collections of their updates and posts where they can customize the collection to fit their preferences.

Our student startup team has worked tirelessly on determining the layout and functionality of our social media platform. We have looked into many competitive products and outlined their advantages and disadvantages, as well as determining which features would be included in our own platform. Some features may be similar, but we would incorporate our own design philosophy. We would design our social media platform to be as simple, accessible, and informative for users as possible.

2. Personas and user stories:

Persona 1:

- Name: Emily
- Age: 19
- Location: San Francisco
- Major: Computer Science
- Wants: To socialize with people who are from SFSU that are not CS Majors and who are not associated with the people who are within her social group.
- Needs: A platform that is dedicated for SFSU students where people are able to freely socialize with each other
- Frustration: Wants to make posts strictly for other SFSU students and not for only other students to see (not faculty or alumni as the content she would post could be jokes or memes that only students would understand)
- Bio: Living in the heart of San Francisco, Emily believes that there's so much more to college life than just hanging out with her CS buddies. She wants to explore the rich tapestry of personalities that SFSU has to offer.

Persona 2:

- Name: John
- Age: 23
- Location: San Jose
- Major: Computer Science
- Wants: Wants to reconnect with his previous classmates as well as other students who are not in his current social bubble.
- Needs: He want to use a platform that is dedicated for SFSU students rather than sporadically finding them on other social media platforms like Facebook or Instagram, that is for a more general audience, and the people who would use the platform would also be aware that they would be communicating with another fellow SFSU student or alumni.
- Frustration: With the current platforms that are on the market, he is unable to find some people that he has seen or met briefly during his time at SFSU. If he were to use a platform that is catered towards SFSU students and alumni, it would be easier to navigate and find those people who he would like to reconnect with.
- Bio: Currently working at a startup company as a Software Engineer and has a lot of free time but not many people to hang out with.

Persona 3:

- Name: Bob
- Age: 21
- Location: San Francisco
- Major: Business
- Wants: Wants to compete in the school's pitch competition, but would like to recruit some CS Majors who align with his vision of what he wants to create.
- Needs: Bob requires a platform that allows him to identify and recruit Computer Science (CS) Majors who share his vision and passion for the project he wants to create. Bob needs to be able to connect to specific majors at campus to seek for support and collaboration with CS students and professors.
- Frustration: Since he is not a CS Major, he is unable to meet the majority of CS majors who may be capable of developing his idea.
- Bio: Business Major, class of '24, loves to go climbing.

User Stories:

1. Amir Patel, an alumni who wants to find appropriate programs in my interest, he wants a platform where I can see the available programs offered at SFSU. (For Masters/Research)
2. Mei Chen, a student who wants to know about the current events that are happening on campus, she wants a platform where I can see all events from the various clubs and organizations at SFSU.
3. Jamal Khan, a student who wants a platform where he can socialize with other fellow students at SFSU, to talk about current events that are happening around SFSU. Whether it be pictures or just sharing details.
4. Aisha Rodriguez, an alumni, wants to be able to reconnect with other Alums from SFSU on a large social platform dedicated to SFSU students.
5. Hiroshi Kimura, a faculty member, would like to read about updates about rooms being occupied within buildings at SFSU
6. Andrej Petrov, a student, wants to use a platform where he is able to connect with other students through the use of commenting but restricted to the SFSU community.
7. Sofia Nguyen, a student, wants to be able to associate tags with the content that she posts, and also sorts the posts based on certain tags to put them into collections.

8. Sanjay Gupta, a student who wants to be able to search for specific content based on the description, name, or tags associated with it.
9. Leila Martinez, an alumni, who wants to update their account details to reflect any new information about them. (i.e. student status, name change, picture change, pronoun change)
10. Aiden Hayes, a student, who wants to be able to watch and replay videos that are posted onto the platform from other SFSU students.

3. Data definition:

- Entities:
 - Users: personal information
 - Roles: student, staff, alumni
 - Post: title, description
 - Post_type: video, photo, etc.
 - Sessions: login sessions

4. Initial list of functional requirements:

- Users should be able to sign up
- Users should be able to view general post on home page
- Registered users should be able to make comments on posts
- Registered users should be able to edit content filter
- Registered users should be able to edit their profiles
- Registered users should be able to tag their posts
- Registered users should be able to search posts
- Registered users should be able to search for other users
- Registered users should be able to connect other users
- Registered users should be able to log in
- Registered users should be able to log out
- Registered users should be able to change their passwords
- Registered users should be able to edit their posts
- Registered users should be able to edit viewer for their posts
- Registered users should be able to delete their posts
- Registered users should be able to delete their comments on a post

5. List of non_requirements:

- Compatibility
 - The application can be used on several mobile browsers including Chrome and Mozilla Firefox, and Internet Explorer.
 - The application can be used on different devices such as phone, tablet, computer.
- Security
 - The user password should be encrypted
 - Regular database backups should be performed at least once a day
- Scalability
 - The application can handle many user tasks at a time.
 - The system can handle large data volumes.
- Development requirement
 - Data shall be stored in the team's AWS MySQL database
- Testability
 - The code in the master branch of the team's GitHub repo should be well maintained twice a week
 - The server is guaranteed to work 24/7.

6. Competitive analysis:

Competitor	Own
Facebook - general social media platform with searching, and content-sharing capabilities that support tagging.	Ours: It would support the same idea, except be strictly only for SFSU students, and would have different tagging capabilities where users would be able to see their content that is associated with the tag that they used.
LinkedIn - a platform for professional socialization and currently the preferred platform where Alumni would socialize	Ours: Given that the platform is restricted to SFSU, they would be able to meet more SFSU alumni on a platform.

and meet each other who may have not been associated with each other before.	
Facebook - the platform has faced a number of privacy-related controversies over the years, which have led to increased scrutiny and efforts to address privacy concerns.	Ours: our platform prioritizes user privacy by default, offering granular control over data sharing and emphasizing end-to-end encryption for messages and content.

One of the advantages of our product is the focus on a specific audience, those who attend/work/ or have graduated from SFSU. The app is made so that those who attend the school can have easier access to information from other members from their school. This information can involve a multitude of things such as sharing school events, club activities/meetings, class information, sharing achievements. More of the connections made on our platform may involve people who can actually meet and discuss with one another outside of the application.

7. High-Level Requirements:

- Cloud Server: AWS
- Operating System and version Number : Ubuntu 22.04
- Database and Version number : MySQL, MongoDB 6.0
- Web Application framework: Express
- Front-end technology : HTML, Tailwind CSS, Javascript / Typescript, and React
- Web server: Caddy 2.7.3
- Additional technologies or packages: mongoose, ffmpeg, socket, mysql2(if later decided to do live stream)

8. Team

- Vinh Ngo
 - Team Leader
- Leo Wu
 - Front End
- Vijayraj Tolnoorkar
 - Front end
- Ronald Tieu

- Back end
- Nghi Nguyen
 - Github Master
- Ivana Mena
 - Scrum master

9. Checklist

- ☒ ~~Team found a time slot to meet outside of the class~~
- ☒ ~~Scrum Master shares meeting minutes with everyone after each meeting.~~
- ☒ ~~Github master chosen~~
- ☒ ~~Everyone sets up their local development environment from the team's git repo.~~
- ☒ ~~Team decided and agreed together on using the listed SW tools and deployment server~~
- ☒ ~~Team ready and able to use the chosen back/front end frameworks.~~
- ☒ ~~For each technology (front/back end/DB/cloud), the team decides who will lead the study of each technology and what will be the specific goal of the study within one month from the M1 announcement. Ex : implement DB scheme for main data items~~
- ☒ ~~Team lead ensured that all team members read the final M1 and agree/understand it before submission~~