Principles of Software Engineering Spring 2023

FAU Social Board

Group: SP23G20

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Milestone 1

Date: 3/03/23

Revision History:

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| --- | --- |
| 03/02/23 | Document created, added executive summary. |
| 03/03/23 | Finished Milestone 1. All the requirements were added for submission. |
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EXECUTIVE SUMMARY

FAU Social board is a website that will allow FAU students to connect on an online platform. This website will allow students to upload photos, comments, or short stories about anything FAU related. The website will have different sections for different themes, such as homework, exercise, food, and more.

COMPETITIVE ANALYSIS

|  |  |  |
| --- | --- | --- |
| Company name: | Their Key Features: | Our Planned Features: |
| Imgur | Images: users upload images to the platform.  Gallery: a collection of the most seen photos on the platform.  Meme generator: allows users to create custom images.  Statistics{  Amazon Alexa rank: (96)  Users: 1 billion  Content: 60 Billion images | Users will be able to upload photos to the website in the main feed. |
| Giphy | Online database: this database contains images in the ‘.gif’ file format. It allows the users to search for images.  Statistics{  Amazon Alexa rank: (2269)  Users: 700 million  Content: 10 billion images | Each user will have access to the feed and be able to like or dislike a post. |
| Facebook | Social Media Platform: Allows users to make updates about their life, to their group of friends. Allows for liking and sharing of posts.  Statistics{  Alexa rank: #3  Users: 2.9 billion  Content: 2.5 trillion posts | Users can share FAU activity related posts on the main feed of the website. Find other FAU visitors that have been on this website (our group members, each of us is an FAU student) |
| Twitter | Social Media Platform: Allows users to make updates about their life, to their group of friends or the general public. Allows for liking, reposting, and sharing of posts.  Statistics{  Alexa rank: #5  Users: 450 million  Content: 500 million per day | Users can update their own content inside the feed. This is done through an edit feature. |

An advantage of our app versus the competition is that this project will be used specifically for FAU students as opposed to other types of software that are not exclusive to FAU students. Students will be able to upload messages and photos that might be relevant to fellow classmates on campus. Since this app is exclusive to FAU students, users will not have to worry about interacting with people outside of their alumni.

DATA DEFINITION

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| --- | --- | --- | --- |
| Name | Meaning | Usage | Comment |
| Account | data | Use case scenarios | Store user information |
| FAU | data | Activity Type | Users are allowed to upload FAU related activity |
| Comments | service | Site user service | Allows the users to leave comments |
| Photos | service | Site user service | Allows visitors or local to upload images |
| Log in | service | Site user service | Allow user the ability to comment, photos and Social Board activities |
| Social Board | service | Site user service | Allows users to upload their favorite activities |
| Web Site | User Interface | User Interface | Front end display for user interaction |
| Home page | User Interface | User Interface | The first page the user is visiting on the website |
| Navigation Tabs | data | Site user service | Allows the user to navigate the website to go to their desired results |
| User | actor | Use case scenarios | General definition of a site visitor or registered user |
| Information Page | User interface | User interface | Page that is displayed when user activity is clicked. The page shows photos, comments, etc. |
| System | Platform hardware and services | Use case scenarios | The MYSQL database, all the code, front end design and back-end services |
| Lamp.eng.fau.edu | server | Use case scenarios | It’s the server that has all of our data |

OVERVIEW, SCENARIOS, AND USE CASES

An FAU student navigates through the tabs to see a feed of photos and messages relevant to that tab. At the top of the page, the user will be able to sort through the feed with different options provided. The user can scroll down through the feed, and they can like or dislike any post. At the bottom of the page, there is an option for the student to upload their own post. It will ask for a username and the contents of the post.

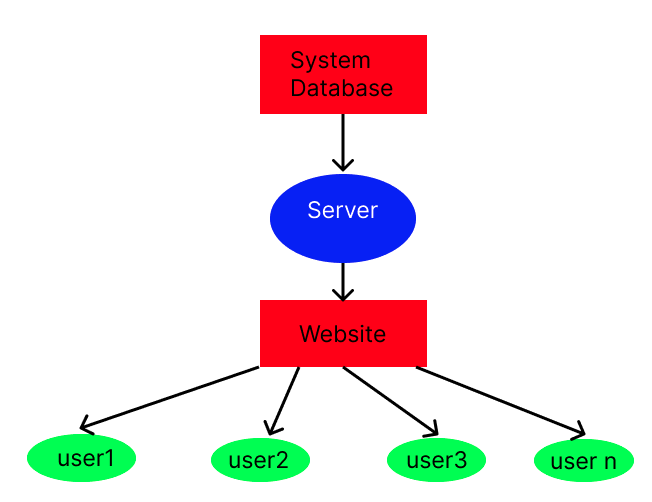
\*\*INITIAL LIST OF HIGH-LEVEL FUNCTIONAL REQUIREMENTS

1. Account Creation: The ability to create an account, and have some aspects be private while others are made public, along with the ability to log into said account later, and have all data stored in the cloud.
2. Text and image post functionality: The ability to post text and images, and have it be shared to other devices, and saved online.
3. Ability to follow other accounts: The ability to choose accounts to follow, to have follow requests and the ability to accept or decline a follow request, to view followers and display follower count on a user's profile.
4. Ability to direct message: The ability to privately message any individual, or group of users, and have content shared between users and saved on the cloud.
5. Ability to like and comment on posts: Each post on the main feed will be able to have a like by the visitor of the website.
6. Ability to join and create groups: The ability to create and join multiple groups and share content directly to that group rather than the main feed, as well as the ability to view a group feed to see posts made only to that group. As well as the ability to leave groups or create private groups that need to have a join request accepted.

LIST OF NON-FUNCTIONAL REQUIREMENTS

1. Accesibility: This website will be optimized for desktop usage only. Mobile website requires advanced CSS/SASS skills and is out of scope for the project.
2. Security requirements: Our app will have basic security against XSS attack by setting the Content Security Policy.
3. Storage: This app storage is big enough for the FAU lamp server.
4. Availability: The website will run at 100% UP on FAU’s server and the source code will be hosted on a Git repository on GitHub.
5. Usability: The User can easily navigate the site and experience a styled UI.
6. Fault Tolerance: Error checking by using Boolean functions to evaluate the success or failed responses.

HIGH-LEVEL SYSTEM ARCHITECTURE



1. Browser Compatibility: This system will be a web-based app that operates well on the latest versions of Mozilla Firefox, and Google Chrome.
2. Subversion: The subversion control system we are using is GitHub.
3. Database: The database for this project is MYSQL database.
4. Microsoft Visual Studio Code: Microsoft Visual Studio Code is the IDE that the developers will be using to code the website and deploy it.

A) Hyper Text Mark-up Language (HTML) - will be the language that will allow the browser to display the website.

B) Cascading Style Sheets (CSS) - will be the language to style the website.

C) Bootstrap (JS) - will be the framework that will be used for stylizing the website and giving its Fonts and UI.

D) Javascript (JS) - will be the language used for client-side functions for the end user in the User Interface.

E) (SQL) - The language of the backend database of the project.

5) Canvas: Desktop and Mobile Application used by the student to communicate with each other, download required materials, and submit assignments.

6) FAU Lamp Server: Lamp Server given to us by the professor for hosting. The server will be used as a source for our group project.

7) JIRA: Our project board and working status tool. This is our method of tracking code sprints and project progress through the course.

TEAM 20 Roles:

Team Leader: Caleb Panoch

Scrum Master: Colin Hrzich

Developers: Deon Rennie, Luciano Scarpaci, Collin Hammock