**Software Requirements Specification**

**for**

Facebook Recreation

**Version 1.0 approved**

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**Intro to Software Engineering - Group 3**

**02/02/2022**

# **Introduction**

## **Purpose**

The purpose of this document is to give a complete description about how the Facebook system can be developed. This document is to provide information about what the software product is to do to customers and establish an agreement between customers and the software developers. The software should be able to add friends, upload photos, and people should be able to like, share, and comment on each post.

## **Document Conventions**

*red = high priority requirements*

*orange = medium priority requirements*

*green = low priority requirements*

## **Intended Audience and Reading**

This document is intended for developers so they can understand the task at hand; project managers, so they can understand how the project is coming along; marketing staff so they understand what they are selling to the public.

I would recommend starting with the introduction in section 1, moving to section 3, then moving to section 2, then lastly section 4 to understand what this product is, the features involved, and the security added as well.

## **Product Scope**

The software’s main goal is to provide a safe space for users to associate with people they choose to interact with. The ability to post images, videos, text, update personal information, and individual statuses such as jobs are just a few of the abilities that users will be able to take advantage of.

## **References**

There are no direct references at the moment.

# **Overall Description**

## **Product Perspective**

*The Software that we are creating is an independent software which means it can be accessed online worldwide. Also, this social media platform should be accessed worldwide and people should be able to exchange information with other people. People should be able to get help when they can’t access their account through username and password.*

## **Product Functions**

* A user should be able to login into his account to be able to connect with his friends and access their timeline.
* A user should be able to compose, edit, and post status on his/her timeline
* A user should be able to send and accept friend requests from others which will allow them to be friends with others and enable them to interact with them
* A user should be able to like, comment, and share the status/timeline post of their friends

## **User Classes and Characteristics**

* User - A user will be allowed basic functionality of the site. As detailed in section-2.2, a user will be able to log in, interact with friends, and interact with posts.
* Moderator - A moderator will be able to remove harmful/vulgar content from the site, as well as create posts and comments in a notification style format.

## **Operating Environment**

Visual Studio Code. Windows 10 and Mac OS or any device with a stable internet connection

## **Design and Implementation Constraints**

Certain limitations may present themselves in different forms during development. Including but not limited to:

* Database Size - The database chosen may be extremely limited in space and speed; depending on the method implemented for storage of sensitive account information.
* Bugs - Certain bugs and glitches are expected to present themselves in the early stages of the project. These will be ironed out in succession in order to make the site run smoothly, as it could limit the effectiveness of the site.
* Security - Securing sensitive account information will require careful data handling.

# **System Features**

## Account Creation

3.1.1 Description and Priority

This feature allows the user to create his/her account by making a username as well as a password

This feature is of high priority

3.1.2 Stimulus/Response Sequences

The user will be prompted to either sign up or log into an account upon opening the product. The user will proceed to input a username and password and an account will be created and saved.

3.1.3 Functional Requirements

REQ-1: There needs to be a page that is shown first upon opening the product that will allow the user to sign-up/login

REQ-2: There needs to be a database to hold usernames and passwords

## Account Login

3.2.1 Description and Priority

This feature allows the user to log in to his/her account in order to access the product.

This feature is of high priority.

3.2.2 Stimulus/Response Sequences

The user will be prompted to either sign up or log into an account upon opening the product. The user will proceed to input a username and password and will be logged in if their information is correct

3.2.3 Functional Requirements

REQ-1: There needs to be a page that is shown first upon opening the product that will allow the user to sign-up/login

REQ-2: There needs to be a database to hold usernames and passwords and will check if the information the user inputted is correct

## Add Post To Timeline

3.3.1 Description and Priority

This feature will allow a user to post on their timeline whether it is a picture or just text

This is of high priority

3.3.2 Stimulus/Response Sequences

The user will go to the post button and will have a page that will allow a user to select a photo from their library and/or add text. When the user is finished, they will press the post button again and the post will be added to their timeline. The database will also take this information in so that it can remain attached to the user’s timeline after closing the product.

3.3.3 Functional Requirements

REQ-1: Post button

REQ-2: Page that allows user to post a picture and/or add text

REQ-3: Button to allow user to select picture from their photo library

REQ-4: Information needs to be sent back to database

## Send/Accept Friend Requests

3.4.1 Description and Priority

Sending and accepting friend requests are of medium priority. They are a necessary component of the site, but are not as urgent a priority as other features. It is technically an optional feature of the site, as the user can still use the site without it, but it is still required for optimal accessibility of the site. Interacting with other users on the site is the primary benefit of this feature, and its performance impact on the site will be negligible, even if the feature does not work as intended.

3.4.2 Stimulus/Response Sequences

There will be a friends button that the user can press that will open a page to look up usernames in order to add friends as well as show a list of all the people that are trying to be friends with you and the user will be able to accept/decline the friend requests

3.4.3 Functional Requirements

REQ-1: Friends button

REQ-2: Friends page with a search bar to look up usernames as well as a list of incoming friend requests

REQ-3: Button to accept/decline friend requests

REQ-4: List of friends you have accepted which allows you to click on their name in order to view their timeline

## Like Posts

3.5.1 Description and Priority

This feature will allow users to like their friend’s posts on their timelines. It will keep a running count of how many likes each post has and display that back to the users.

This is of low priority at the moment.

3.5.2 Stimulus/Response Sequences

There will be a like button beneath the post that a user can click to like the post. Once clicked, the number of likes will increase by one and update to the database and to all users that see the post

3.5.3 Functional Requirements

REQ-1: A like button under the post

REQ-2: Database needs to increment the like count by 1

## Comment on Posts

3.6.1 Description and Priority

This feature will allow the user to comment on a friend’s post that the friend and all of their followers will be able to view.

This is of low priority at the moment.

3.6.2 Stimulus/Response Sequences

There will be a comment button that will prompt a text box that the user can type a message. When the user is finished, they will click a post comment button and that will update the database with the new comment.

3.6.3 Functional Requirements

REQ-1: Comment button

REQ-2: Text box prompted after clicking the comment button

REQ-3: Post comment button

REQ-4: Update the database with new comment

## Share Posts

3.7.1 Description and Priority

This feature will allow the user to share a friend’s post and put their post onto your timeline for your friends to view as well.

This is of low priority at the moment.

3.7.2 Stimulus/Response Sequences

This feature will act very similarly to just adding a post to your timeline. There will be a share button under every post and a user can press that button and that post will be added to their own timeline as well.

3.7.3 Functional Requirements

REQ-1: Share button

REQ-2: Update the database to show post to your timeline

## Sign Out

3.8.1 Description and Priority

This feature allows the user to sign out of their account and return them to the initial login screen.

3.8.2 Stimulus/Response Sequences

There will be a signout button at the top corner of the screen and onced pressed it will return the user back to the starting login screen.

3.8.3 Functional Requirements

REQ-1: Sign out button

# **Other Nonfunctional Requirements**

## **Performance Requirements**

The product should be able to be accessed through any web browser on any platform with an internet connection.

The user needs to create an account to access the website.

## **Safety Requirements**

* Security - Handling of user data is a high priority, and will be accomplished using a secure database to facilitate creation and management of accounts. Usernames, first/last names, emails, and passwords are the highest priority data, and guidelines for handling such things will be properly accomplished.
* Legal Issues - Legal standings and regulations regarding the mishandling and breach of sensitive user information will be considered. User data should be secure and only accessible by the person such data belongs to.

## **Security Requirements**

* *password encryption*
* *admin privileges*

## **Software Quality Attributes**

Flexibility and reliability are the biggest factors in this project. The product must be able to reliably work in every condition and situation. It cannot however be rigid, and will have features that can adapt to different conditions on the site.

# **Other Requirements**

Other requirements may come in later sprints.

**Appendix A: Glossary**

No special acronyms at the moment.

This is subject to change

**Appendix B: Analysis Models**

There are no models at the moment. This is subject to change.

**Appendix C: To Be Determined List**