Software Requirements Specification

for

<FACEBOOK>

Version 1.0 approved

Prepared by

Laiba Sohail

Fatima Jinnah Women University

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1. Introduction

1.1 Purpose:

The goal of the paper is to compile and evaluate all concepts that have been proposed to describe the system (the Facebook mobile application), as well as its specifications with regard to users. In order to better understand the project, we will also define concepts that may be created later and document ideas that are being considered but may be abandoned as the product develops. Additionally, we will estimate and describe how we expect this product will be used.

1.2 Document Conventions

Text Formats:

Font: Times New Roman (Headings and Body)

Font size: 18 for Headings, 16 for Sub-headings, 13 for Body.

1.3 Intended Audience and Reading Suggestions

The document is meant for all customers and developers, including designers, programmers, testers, and maintainers. It is assumed that the reader is familiar with the fundamentals of Mobile OS, databases, and user accounting. Also used to inform the reader for approaching the facebook application and how the user can use it efficiently; the user will get a general understanding of the product including its functional and non-functional requirements as well as its features.

1.4 Product Scope

The product's scope will primarily fall inside the domain of the Facebook API that we'll be implementing. The app will receive its inputs from the user when they enter their status updates and from the Facebook database as it provides the user updates from their friends and other user-specific data. The application interface, which presents the user the information, and data uploads the user creates to the Facebook database are examples of outputs. Text display, downloading, and receiving will make up the majority of the application's data processing. The programme will be operating on top of the Android OS, thus it must follow any limits or capabilities unique to that environment.

1.5 References

- www.facebook.com
- www.wikihow.com

2. Overall Description

2.1 Product Perspective

Facebook is a private, global social networking service. It is free for everyone to use online. Facebook is a separate system; it is not a component of a bigger system. It allows people to connect from all around the world and communicate with one another. Facebook also has a control mechanism to regulate the content of the sharing and comments made by other users. The "Facebook Administrators" can receive complaints from users regarding any aspect of Facebook. The Facebook Administrators may then take necessary action in response to the alleged violation of the rules.

2.2 Product Functions:

The first move a user does on Facebook after opening an account and logging in is to look for friends. In order to add someone as a friend and grant them access to view their shared stuff on Facebook, the user will search for them using their names. If the individual accepts, they become friends on Facebook and can communicate more directly by sending messages to one another. Any user may publish their status, including what they are thinking, where they are, or how they are Feeling right now. This person's friends can comment on that. Additionally, if a user uploaded a picture, a video, a link, or anything else, any of that user's friends can share that.

2.3 User Classes and Characteristics

Except for its managers and developers, using Facebook doesn't require specialized technical skills. Standard users are believed to be of any age and of either gender or everyone with access to a computer's browser, regardless of nationality. As opposed to that, Web administration and potential development require a high level of skill technologies.

2.4 Operating Environment

The following requirements should be met by the hardware, software, and technology used:

- The capacity to connect to a mobile or Wi-Fi network.
- The capacity to transfer data over a network.
- Keypad or Touch Screen for convenience (in case touchpad not available)
- A 500 MHz processor and a continuous power source
- Capability to use the mobile device's camera, gallery, microphone, and other features
- Capability to accept user input
- Device must have 512MB RAM or more
- Limited to IOS and Android only

2.5 Design and Implementation Constraints

As a social networking website, the programme must guarantee the security of any information provided by the user and offer the user certain privacy setting options. Firstly, Facebook gives users the option to select the group of users who can view the content they share. Some users might not want certain others to have access to their shared content and information. Users can adjust their privacy settings to limit who has access to their information if this is the case. Secondly, Facebook is prohibited from selling user's personal data to third parties. However, an application can access some user information only with the user's permission.

2.6 User Documentation

Use the help option in the main menu to get user manual and support, or go to http://www.facebook.com/ and select the contact us link.

2.7 Assumptions and Dependencies

- Power supply.
- A better network connection.
- The availability of mobile services.
- The availability of networks and data.

3. External Interface Requirements

3.1 User Interfaces

User interface for facebook could be:

1. Login page

- 2. Home page
- 3. There will be a screen showing news feeds, friend requests, suggestions etc.

3.2 Hardware Interfaces

The system must run over the internet, all the hardware shall require to connect internet will be hardware interface for the system. As for example modem, WAN, LAN, Ethernet Cross-Cable.

3.3 Software Interfaces

The software interfaces are unique to the target Facebook software systems used by other users. Facebook requires the following mobile operating systems (environments) and software:

- iOS
- Android

3.4 Communications Interfaces

GUI will be utilized as the communications protocol (Graphical user interface). Because the user running the system won't have any assistance, the interface needs to be extremely intuitive or engaging. Anyone with only a very basic understanding of computers and mobiles may utilize the interface because it is so user-friendly. Facebook communicates with its database via its communication network.

4. System Features

Following are the system features of Facebook:

4.1 Create Account:

If user is new and does not have Facebook account, input request for first name, last name, email id/phone no ,and password. Then retrieves the provided information and makes a new account for user. Output displays created account.

4.2 Searching Friends

User searches for friends to add in search list by click on search enter name of friend. User clicks on search, enters name and then list of persons displayed of that name. Then name of friend displayed.

4.3 Sending Requests

User can send request to a person he/she wants to add in his/her friend list. By tap on 'add friend'. When user taps on 'adds friend', friend request sent displayed.

4.4 Accepting Friend Requests

When someone sends friend request to user, user gets notification whether he wants to 'accept' and friend added to his/her friend list. After that friend is added in friend list.

4.5 Creating Groups

One can create groups on facebook and add some peoples from his/her friend list .by click 'profile ' at the top, click ' groups', click 'see all', tap 'create group ', name group, add some people, add description, select privacy and click 'save' .afterwards group created.

4.6 Uploading Photo

User can add photos on facebook to update his activities by tapping 'photos', select photo to upload, tap 'done'. user clicks on 'photo ' transferred to 'select'. Photo selected by user then transferred to tap 'done'. After that photo will be uploaded successfully.

4.7 Creating Album

User can add facebook photos and create album by clicking go to 'update status', create 'photo album', chose order of photos, chose album cover, chose privacy and post. Then album created.

4.8 Sharing Status

When someone clicks Share belpow the post, they are able to share your photos, videos or Status updates through facebook by search post to share, tap 'write post 'and tap 'share' now. Processing-user clicks on share, transferred to write post and then clicks on 'share now 'to share.

4.9 Create New Page

One can create a new page on facebook to add his /her activities and connect to friends by tapping on 'pages', tap 'create ', tap ' get started ', select name, select categories, add

cover photo, profile picture for page, tap 'visit'. Transferred to add name, cover photo, profile photo and then tap on 'visit page' to see the created page then a new page is created.

4.10 Send Message

User should be able to send instant message to any contact on his/her contact list. User should be notified when message is successfully delivered to recipient by displaying a' tick sign next to message sent.

4.11 Sent Attachments

User should be able to send audio, video and images attachments by attaching file.

4.12 Commenting

Facebook comments are key to understanding how users engage with one's content by clicking the comment link, type comment, press enter to publish. post the comment on user's attachment.

4.13 Uploading Videos

User can upload video in his/her account by clicking 'add video 'button, choose file, add description and post and then video will be uploaded.

4.14 Notifications

Notifications are updates about activity on Facebook. User click on globe icon and the list of notifications displayed.

4.15 Edit Profile

This asks to upload photo of user, add a nickname, a birth name, relationship, about you, etc. And modifies the profile by checking the information and processes the request.

4.16 Update Profile

User can update his profile picture, can add birthday, nickname, from function 'update profile'. Asks to update user's profile picture, cover picture, education, etc by checking the information and processes the request.

4.17 Creating An Event

User can create a Facebook event through his page to connect to his audience by clicking on 'create event' tab, choose name, add location and time, choose which friends to invite.

4.18 Privacy Settings

User can properly manage Facebook privacy setting so that he /she known who is/ isn't seeing his/her update photos and more. User asks to establish checks like who can view profile, friend list.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The system must always be accessible from anywhere in the world. Being a social network, it is crucial that the system is always accessible because any break in the sharing process will lead users to stop using Facebook. Until half of the registered users become active, the number of active users in the system shall not have any impact. Being a global network, it is a valid and essential requirement to assume that half of the registered users are accessing the website.

5.2 Safety Requirements

A sufficient backup of the data needed for their operations should be made by the backup, recovery. Data and software should both be regularly backed up. To maintain business continuity in the event of a major failure, an off-site backup is required.

5.3 Security Requirements

In all transactions involving any other sensitive passenger data, the system employs SLS. After a certain amount of inactivity, the system must log out all users. It also must ensure that no cookies with the user's password are left on the user's computer. Only authorized

administrators should have access to the system's back end servers. Before being delivered across unsecure links like the internet, sensitive data will be encrypted.

5.4 Software Quality Attributes

- **Reliability:** The system includes database storage on backup computers with automatic switchover. The dependability of the individual components determines the reliability of the programme as a whole. The database backup, which is regularly updated to reflect the most recent changes, is the primary tenet of the system's dependability.
- Availability: The system should always be accessible to users via a web browser, with the exception of any downtime experienced by the server that hosts the system. A substitute page will be displayed in the event of hardware malfunction or database corruption. The administrator should retrieve database backups from the server and save them in case of hardware failure or database damage. After that, the service will restart. It denotes availability round-the-clock.
- Maintainability: The database is maintained using a commercial database, and the application server looks after the website. The program will be re-initialized in the event of a failure. Additionally, modularity is taken into consideration when designing software to facilitate effective maintenance.
- **Portability:** The programme is built on HTML and scripting. Therefore, the end user component is completely portable, and any device running any web browser ought to be able to exploit the system's functionality, including any current or upcoming hardware platform. Any OS, including Windows and Linux, can be used by the end user using this system. The system must function on PCs, laptops, PDAs, etc.