# SOFTWARE REQUIREMENT SPECIFICATION FOR FACEBOOK

Prepared by: Reem Ahmed

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# 1. INTRODUCTION

SRS stands for Software Requirement Specification. This document is prepared in order to determine the software requirement specification for Facebook.

Facebook is a social network that connects people. The aim of Facebook is to provide information to the users about the events and the people whom they know. The users of Facebook can add friends, share videos which they want their friends' watch; upload photos, comment on their friends' sharing's, chatting with their friends and become informed about their friends. Moreover, people can create social groups for such as university clubs, football clubs or for social awareness. People can be informed about the events by the help of these groups or their friends.

When the user logins Facebook, they can see their home page, which is named as "News Feed" that provide users to see what their friends share, what their friends write their status. Moreover, at the left of this page, the user can see the event invitations and the birthdays of their friends. Therefore, News Feed is the main page which combines daily friend interactions.

# 2. OVERALL DESCRIPTION

In this section, background information about what type of requirements the system should have will be provided briefly.

## 2.1 PRODUCT PERSPECTIVE
Facebook is an independent and world-wide social network website. Every person can use it online without a fee. The Facebook is not a part of a larger system, it is an independent system. People from different regions of the world can connect to it and exchange information with other people. In order to control the contents of the sharing's and comments done by the other people, Facebook has also a control mechanism. People can deliver their complaints about any part of the Facebook to the "Facebook Administrators". Then, "Facebook Administrators" might take appropriate actions according to the complained situation which is against the rules.

## 2.2 PRODUCT FUNCTIONS
After creating an account and starting to use the Facebook, first thing he or she will make is searching for friends. The user will search people by their names and can send an invitation to them to add as a friend and to be able to see their shared items on Facebook. If the person accepts the invitation, these two persons become friends on Facebook and can

interact more closely such as sending messages to each other. Any user can share his/her status like whatever he is thinking, wherever he is or his current mode. Friends of this person can make a comment on that. Furthermore, if a user shared a photo, video, link or anything, any friend of that user can share that shared item also. Users can upload photo and video to their profiles and create an album. Anyone can create a group and invite people to join in the group. Similarly, people can attend the activities where they are invited.

## 2.3 USER CHARACTERISTICS

Facebook does not require any specific computer knowledge to use it except the developers and administrators of it. Standard users are thought to be from any age, any gender and from any nationality who can use just computer's browser. On the other hand, administrators and potential developers need a high level of expertise to understand web technologies.

## 2.4 DESIGN & IMPLEMENTATION CONSTRAINTS

Being a social network website, the software should ensure the safety of information given by the user and provide some privacy settings options to the user. Firstly, Facebook provides people the right to choose the category of people who will be able to view their shared items. Some users may not desire the access of some people to their shared items and information. If this is the case, users can set their privacy settings to prevent some people's access to their information. Secondly, Facebook cannot sell the private information of users to someone else.

# 3. EXTERNAL INTERFACE REQUIREMENT

## 3.1 INTERFACE REQUIREMENT

Various interfaces for the Facebook could be
1. Sign up Page
2. Log in Page
3. Home Page
4. Profile Page
5. Watch Page
6. Marketplace Page
7. Feeds Page
8. Groups Page
9. Memories Page
10. Gaming Page
11. Saved Pages
12. Pages Page
13. Reels Page
14. Events Page
15. Menu Page

## 3.2 HARDWARE INTERFACE

The System must run over the internet. All the hardware should be connected to the internet such as Wi-Fi or cellular data.

## 3.3 SOFTWARE INTERFACE

The system is on server, so it requires the any scripting language like PHP, VBScript etc. The system requires Data Base also for the store the any transaction of the system like MYSQL etc. system also require DNS (domain name space) for the naming on the internet. At the last user need web browser for interact with the system.

# 4. SPECIFIC REQUIREMENTS

In this section, all software requirements will explain some information of the user in detail. All requirements are divided into two groups as functional and non-functional.

## 4.1 FUNCTIONAL REQUIREMENTS

A functional requirement defines a function of a system or its component.

### 4.1.1 FR 1: ADDING POSTS

➢ Add a post without photo or video (text only)
➢ Add a single post (Photo/Video)
- You can either use camera for a new photo/video or browse from your gallery
➢ Add a carousel post
- You can share multiple photos/videos in one post either by using camera for new photos/videos or browse from your gallery
➢ Use mix of photos and videos in on post
- You can either use camera for a new photos and videos or browse from your gallery
➢ Tag people from your friends list
➢ Add Feelings/Activity
➢ Add a location
- You can select from a list of nearby places or search by your own location
➢ Add a live video
➢ Add a background colour to your post
➢ Add a GIF to your post
➢ Add music to your post
➢ Control who can see your post
- set your post to **Public**: Everyone on and off Facebook can see your post
- set your post to **Friends**: your friends can see your post
- set your post to **Friends expect**: don't show to some friends

- set your post to **Specific friends**: Only show post to some friends
- set your post to **Only me**
➢ Select one of your albums or create a new album to post your post in it
➢ Share your post to Instagram
➢ Save your post as a Draft
➢ Discard your post

## 4.1.2 FR 2: ADDING STORIES

With stories, you can share photos and videos that disappear from your profile, feed and messages after 24 hours. You can add stories from the Home page only.

➢ Post a single story (Photo/Video)
- You can either use camera for a new photo/video or browse from your gallery
➢ Post multiple stories at once
- You can use mix of photos and videos either by using camera for a new photo/video or browse from your gallery
➢ Save story to your mobile
➢ Control who can see your story
- set your story to **Public**: Anyone on Facebook or Messenger can see your story
- set your story to **Friends**: Only your Facebook friends can see your story
- set your story to **Hide story from**: Choose who to hide your story from
- set your story to **Custom**: Choose people to share your story with
- Comments on story: You can enable/disable comments on your story
- Story you've muted: Stories of other people you don't want to see
- Always share to Instagram: Automatically share your Facebook story to Instagram
➢ Add Stickers to your story
➢ Add Text to your story
➢ Add Music to your story
➢ Add Effects to your story
➢ Add Draw to your story
➢ Tag people
- You can tag people by taping on "Aa" to add text, and typing @ followed immediately by their username, then select the person you'd like to mention.
- You can tag people by selecting the option "Tag People".
➢ Add Location to your story

- ➢ Add Time to your story
- ➢ Add GIF to your story
- ➢ Add Weather to your story
- ➢ Add Event to your story
- ➢ Add Feelings to your story
- ➢ Add Donation to your story
- ➢ Add Poll to your story
- ➢ Add Question to your story
- ➢ Add Emojis to your story
- ➢ Add Green screen to your story
  - You can add a background image while creating a story(photo/video) using your camera.
- ➢ Add Boomerang to your story
- ➢ Add Selfie to your story

### 4.1.3 FR 3: MESSAGING

This function lets you instantly reach people. You compose a new message, delete current messages, and read existing messages.

- ➢ Start conversation with a Facebook user
  - Send voice message
  - Send image/video
  - Send location
  - Send emojis
  - Send GIF
  - Send Sticker
  - Send Sound
  - View user profile
  - Mute a conversation
    - o You can mute notification of new messages, calls or messages and calls.
    - o You can set the mute period: 15 mins., 1 hour, 8 hours, 24 hours or until the user change it
  - Select a design for the conversation
  - Select a default emoji for the conversation
  - Add word effects to conversation
  - View media, data and links
  - Search in a conversation
  - Notification and sounds
    - o You can enable/disable notification sounds of a conversation or customize the notification sound.
    - o You can enable/disable the notifications and sounds of messages, reactions and calls.
  - Start a secret conversation
  - Share user contact

- Strict user
  - You can see less of a contact without blocking them.
- Block user
  - You can block messages and calls only, but user account will not be blocked on Facebook
  - You can block user account on Facebook, so that messages and calls will also be blocked.
- Give a feedback and report a conversation
  - You can select a problem to report: Harassment, Suicide or self-injury, Pretending to be someone, Sharing inappropriate things, Hate speech, Unauthorized sales, Scams or Other
- Open chat head
- Delete conversation
- Report a technical problem
  - You can explain what happened and how to reproduce the problem
  - You can add images of the problem
  - You can select the problem related to: Chats, Block/Unblock, Calls, Active Status, Search, Notifications or Other

➢ Create a group conversation
➢ Start an audio call
- You can mute the mic
- You can request a video call
- You can share your display
- You can watch a video together on Facebook
- You can add persons to your audio call
- You can raise hand
- You can use an avatar

➢ Start a video call
- You can mute the mic
- You can switch off camera
- You can switch between front and rear camera
- You can add persons to your video call
- You can share your display
- You can watch a video together on Facebook
- You can add effects, lightening or touch up
- You can use an avatar
- You can raise hand

➢ Show previous conversations
➢ Show online friends
➢ Search for previous conversations
➢ Archive a conversation

➢ Mark a conversation as unread

## 4.2 NON-FUNCTIONAL REQUIREMENTS

### 4.2.1 SECURITY
The system uses SSL (secured socket layer) in all transactions that include any other confidential passenger information. The system must automatically log out in all customers after a period of inactivity. The system should not leave any cookies on the customer's computer containing the user's password, system's back-end servers shall only be accessible to authenticated administrators. Sensitive data will be encrypted before being sent over insecure connections like the internet.

### 4.2.2 RELIABILITY
The system provides storage of all databases on redundant computers with automatic switch over. The reliability of the overall program depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes. Thus, the overall stability of the system depends on the stability of container and its underlying operating system.

### 4.2.3 MAINTAINABILITY
A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the program will be done. Also, the software design is being done with modularity in mind so that its maintainability can be done efficiently.

### 4.2.4 PORTABILITY
The application is HTML and scripting language based. So that end user part is fully portable and any system using any web browser should be able to use the features of the system, including any hardware platform that is available or will be available in the future. An end-user is using this system on any OS; either it is Windows or Linux. The system shall run on PC, Laptops, and PDA etc.