

# Software Requirements Specification for

FaceBook Application

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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**

### **2.1 Product Perspective**

Facebook is an independent and world-wide network system. Every person can use it without any cost. People from different regions of the world can connect to each other via this system.

### **2.2 Product Features**

The mobile application will perform the following operations

- Display posts posted by the friends of the user in the news feed
- View notifications

- Post and share photos, create, view, and manage photo albums
- Send and receive messages from user's friends and other Facebook users, group admins .
- Share current location of the user
- View, create and manage Facebook pages and Facebook groups

## **2.3 User Classes and Characteristics**

The application is a generic application and thus anyone above the age of 13 can use the app. Facebook does not require any computer knowledge to use it. Anyone can use it very easily.

## **2.4 Design and Implementation Constraints**

Being a social networking system its design should be perfect and attractive. It should be secure enough so that the user's data and their personal information should not be leaked and those should be securely preserved in the system

# **3. External Interface Requirements**

## **3.1 User Interfaces**

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 Interfaces

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 Interfaces

In some ways Facebook is still a LAMP site (kind of) which refers to services using Linux, Apache, MySQL, and PHP, but it has had to change and extend its operation to incorporate a lot of other elements and services and modify the approach to existing ones. Facebook still uses PHP, but it has built a compiler for it so it can be turned into native code on its web servers, thus boosting performance. Facebook uses Linux but has optimized it for its own purposes (especially in terms of network throughput). Facebook uses MySQL, but primarily as a key-value persistent storage, moving joins and logic onto the web servers since optimizations are easier to perform there (on the “other side” of the Memcached layer). Then there are the custom-written systems, like Haystack, a highly scalable object store used to serve Facebook’s immense number of photos, or Scribe, a logging system that can operate at Facebook’s scale

# 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

### 4.1.1 FR 1: Adding Post:

- 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 friend
- 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 tapping 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
  - You can mute notification of new messages, calls or messages and calls.
  - 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
  - You can enable/disable notification sounds of a conversation or customize the notification sound.
  - 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 micro
- 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 micro
- 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

## **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 should be so secure that it should not show any cookies regarding the password or the username of the user so that no one rather than the user can access the system

### **4.2.2 Reliability**

The system provides a database for storage for all kinds of devices whether it is a computer or mobile or something else. The reliability of the whole system depends on the reliability of the separate components. The system should be so reliable that it should not crash or hang during the user's use.

### **4.2.3 Maintainability**

There are many people who are there for the maintenance purpose of the system. They can be software engineers or a team of hackers. They are there to take care of that if there are some problems regarding the system or not.

### **4.2.4 Portability**

The system consists of scripting languages such as PHP, HTML etc. It should run on any device and any platform or in any operating system whether it is Windows, Mac OS, IOS or Android