

Software Requirement Specification for Facebook

The Facebook logo, consisting of the word "facebook" in a white, lowercase, sans-serif font, centered within a solid blue rectangular background.

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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 the latest in a long line of what we now know as “social networking” websites. But what sets it apart from the competitors is its popularity. At last check, **Facebook** boasts over 2.23 billion active users.

Established in 2004, from the college dorm room of Mark Zuckerberg, a Harvard student, the website is now worth billions of dollars and is one of the world’s most recognisable brands. It’s even had the Hollywood treatment, with The Social Network, a film exploring the site’s conception, released to wide acclaim in 2011. But, if you’re not quite on top of technology or are new to the internet, as a parent, or a teacher, you probably have a few questions.

Facebook is a website which allows users, who sign-up for free profiles, to connect with friends, work colleagues or people they don’t know, online. It allows users to share pictures, music, videos, and articles, as well as their own thoughts and opinions with however many people they like.

Users send “friend requests” to people who they may – or may not – know.

Facebook has over 1 billion users

Once accepted, the two profiles are connected with both users able to see whatever the other person posts. “**Facebookers**” can post almost anything to their “timeline”, a

snapshot of what is happening in their social circle at any given time, and can also enter private chat with other friends who are online.

People with profiles list information about themselves. Whether it be what they work at, where they are studying, ages, or other personal details, many users post lots of information which is easily accessible to their friends and others. On top of this, users can “like” other pages which interest them. For example, a Liverpool FC supporter can follow the club by linking up with its **Facebook** page. There, the user can post comments and receive club updates, pictures etc.

2. Overall Description

In this section the background description of the system should have been provided. **Facebook** is a social networking mobile application that brings you closer to the people and things you love.

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 Function

After creating an account using **Facebook**, people can search for each other and follow them. After sending Add Friends requests they can see each other's posts such as photos, videos, news feeds etc. They can like,comment, and share each other's posts. They can also chat with each other.

2.3. User Characteristics

Facebook does not require any computer knowledge to use it. Anyone can use it very easily.

2.4. Design and Implementation

Being a social networking system it's 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. Interface Requirements

Various interfaces for **Facebook** could be :

Login Page

Profile Page

NewsFeed Page

Friends Requests and suggestions page

Marketplace Page

Notifications page

Watch Page

Messenger

3.2. Hardware Interface

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.

For example:

- **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 amount of photos, or Scribe, a logging system that can

operate at **Facebook's** scale (which is far from trivial).

4. Specific Requirements

In this section all software requirements will explain some information to the user.

4.1. Functional Requirements

4.1.1. FR 1 : Adding Posts

You can use **Facebook** to share photos and videos with your friends , certain friends or everybody.

4.1.1.1. Add Post

→ You can Add a single post without attachments.

→ You can Add a single post with attachments (Photo/Video).

◆ You can either use camera for a new photo/video or browse from your photos and videos.

→ You can share multiple photos/videos in one post only)

◆ You can use a mix of photos and videos either by using a camera for a new photo/video or browse from your photos and videos.

→ You can Write a caption

→ You can Tag people from your Friends list.

→ You can Add a location

◆ You can see a list of nearby places to select from them or to search by your own location.

→ You can Add a feeling/activity

→ You can start a Live video to be shared as a post later

→ Save post as Draft

- Turn off commenting
- Share/Copy its link to anywhere
- Like, and reply to comments on your post
- Save your post
- Edit, Delete, Archive post

4.1.1.2. View Posts of Following Peoples and My posts

Home shows a feed of posts , photos and videos posted by you and your friends and pages you're following . You can like , comment and share posts in your feed.

→ You can interact with any post by doing the below actions

- ◆ Like, Comment, Share.
- ◆ Hide.

4.1.2. FR 2 : Stories

With stories, you can share photos and videos that disappear from your profile, feed and messages after 24 hours, unless you add them to your profile as story highlights, you can do this from 2 different places with the same behavior : Home page, and Profile page

4.1.2.1. Adding a Story

→ Post a single Story (Photo/Video)

- ◆ You can either use camera for a new photo/video or browse from your photos and videos

→ 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 photos and videos

→ Tag people

◆ You can tag only public accounts, by using the “@Mention” sticker, or by adding “@” while adding a text

→ Save the story to your mobile

→ Share the story to friends

→ Share the story to close friends

◆ If you didn't set the close friends list before, it will ask you for defining the list first then share

→ Share the story to the direct messages

◆ You can search for the friend name to send him the story in the direct messages

◆ You could select only one or more friends to send them the story

→ You can view a stream of stories posted by you and your friends from the Home page, and you can reply on them.

4.1.3. FR 3 : Messaging

With **Facebook** Messenger, you can chat with /call friends, Pages or groups

4.1.3.1. Sending Messages

→ send text message to a friend

→ send a Photo/Video to a friend from camera

◆ You can either use camera for a new photo/video or

browse from your photos and videos

→ **send multiple Photos/Videos to a friend**

◆ You can use mix of photos and videos either by using camera for a new photo/video or browse from your gallery.

→ **Pin a certain message**

4.1.3.2. Create Groups

→ **Make a new group**

→ **Add new people to group**

→ **Remove existing people from group**

→ **Mute group**

◆ You can mute a certain group by disabling any notifications from it.

→ **Generate invite link for the group**

→ **Send Messages (text/Photo/Video) to created group**

→ **Block certain Member(s) from the group**

→ **Leave Group**

→ **Delete Group**

4.1.3.3. Make Audio/Video calls

→ **Make An Audio/Video call**

◆ You can initialize a video call to one friend or a an existing group
Or even a group that wasn't created before.

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, OS or android.