

Software Requirement Specification for Instagram

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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 Instagram.

Instagram is a social networking mobile application that brings you closer to the people and things you love.

Connect with friends, share what you're up to, or see what's new from others all over the world. Explore our community where you can feel free to be yourself and share everything from your daily moments to life's highlights.

Express Yourself and Connect With Friends

Add photos and videos to your story that disappear after 24 hours, and bring them to life with fun creative tools.

Message your friends with Messenger. Share and connect over what you see on Feed and Stories.

Create and discover short, entertaining videos on Instagram with Reels.

Post photos and videos to your feed that you want to show on your profile.

Learn More About Your Interests

Watch videos from your favorite Creators and discover new content through Instagram Video and Reels.

Get inspired by photos and videos from new accounts in Explore.

Discover brands and small businesses, and shop products that are relevant to your personal style.

2. Overall Description

In this section the background description of the system should have been provided.

Instagram is a social networking mobile application that brings you closer to the people and things you love.

2.1. Product Perspective

Instagram 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 instagram people can search for each other and follow them. After sending follow 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

Instagram 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 instagram could be :

- Login Page
- Profile Page
- Home Page
- Explore Page
- Messenger

3.2. Hardware Interface

The whole system runs over the internet. Without internet connection the system will not work. All the hardware should be connected to the internet such as wifi. Software Interface:

The system is on a server so there will be some scripting languages such as PHP, HTML, VBScript etc. Database is also required for the storage purpose of any transaction like MYSQL.

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 : Registration and Authorization

The user can simply sign in using a Facebook account or create a new account by providing required personal information about himself/herself. After creating the account it will display the account created successfully.

- Sign up with an email address or phone number
 - ◆ Phone Number will require a confirmation code
 - ◆ In this case you can create a username and password, and fill in your profile info
- Sign in with a Facebook account.
 - ◆ You'll be prompted to log in to your Facebook account if you're currently logged out.

4.1.2. FR 2 : Profile Edit

Your personal information on Instagram can be updated and this information won't be part of your public profile on Instagram. you can edit your profile to do the below actions

- Update your profile picture.
- Update your Name, username and Pronouns
- Add a bio or a website to your profile.
 - ◆ You can write a bio of up to 150 characters on your profile. Please bear in mind that anyone can see your bio.
- Update your personal information settings
 - ◆ Email, Phone, Gender, Birthdate

4.1.3. FR 3 : Account Privacy Settings

By default, your Instagram account is public and you can choose to make your account private at any time. When your account is:

- Public: Your profile and posts can be seen by anyone, on or off Instagram, even if they don't have an Instagram account.
- Private: Only the followers you approve can see what you share, including your photos or videos on hashtag and location Pages, and your followers and following lists.

4.1.4. FR4 : Social Networks Link

Connecting your Instagram account to your Social media profiles means sharing content such as stories and posts directly from Instagram to these profiles. Bear in mind that you can only connect your profile from the Instagram app for Android or iOS devices. Once you've linked accounts, you'll have the option to share a post to your social media account from the same screen where you've added a caption.

You can link with these accounts

- Facebook
- Twitter
- Tumblr

4.1.5. FR 5 : Search

You can discover new things on Instagram based on people you follow and posts you like, you can explore by doing the below actions:

- A list of photos and videos should be shown by defaults (related to statistics according to your interests and likes)
- Search and Explore for any content by these search criteria
 - ◆ Top : All
 - ◆ Accounts : Instagram Accounts
 - ◆ Audio : Instagram Audios
 - ◆ Tags : Instagram Hashtags
 - ◆ Places : Locations (You can select "Near Current Location from here")

4.1.6. FR 6 : Follow Requests

4.1.6.1. Sending Follow Requests

Once you've followed someone, their profile will say Following instead of Follow. People will be notified that you follow them.

These users' posts appear on your feed, and you have access to view their profile if you want. You can directly message these users, but if they do not follow you back they may have to approve the message before responding.

4.1.6.2. Accepting / Denying Follow Requests

If your account is set to private, anyone who wants to see your photos or videos will have to send you a follower request, and you can

- Accept : He will see your account as a public
- Follow Back : You will send him a follow request and when he accept you will see his account as public too
- Deny : He won't see your account as public

4.1.6.3. Unfollowing People

- Un-Follow : Once you've unfollowed someone, their profile will say Follow instead of Following. People won't be notified when you unfollow them.
- If your account is set to private, you can remove people from your followers list. You can also block them. When you block someone, the blocked person can't see your photos or videos or search for your Instagram account. The blocked person isn't notified when they're blocked.

4.1.7. FR 7 : Photos and Videos Upload

You can use Instagram to share photos and videos with your followers, you can do this from 2 different places : Home page, and Profile page

4.1.7.1. Add Post

- You can Add a single post (Photo/Video)
 - ◆ You can either use camera for a new photo/video or browse from your photos and videos
- You can Add a carousel post (*share multiple photos/videos in one post only*)
 - ◆ You can use mix of photos and videos either by using camera for a new photo/video or browse from your photos and videos
- You can Write a caption
- You can Tag people from your following list
- You can Add a location

- ◆ You can see a list of a nearby places to select from them or to search by your own location
- You Share to other social networks
 - ◆ Facebook, Twitter, Tumblr
 - ◆ You can share on the binded account and if you are not binding the accounts it should ask you to bind
- Save post as Draft
- Hide like counts
- Turn off commenting
- Share post on binded accounts on social media
- Share/Copy its link to anywhere
- Like, and reply to comments on your post
- Save your post
- Edit, Delete, Archive post

4.1.7.2. View Posts of Following Peoples and My posts

Home shows a feed of photos and videos posted by you and your friends. You can like and comment on photos in your feed

- You can interact with any post by doing the below actions
 - ◆ Like, Comment
 - ◆ Share (through DM, or through stories)
 - ◆ Hide

4.1.8. FR 8 : 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

4.1.8.1. 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 multi 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
- ◆ In case of multiple friends you have 2 options
 - Send story to each one individually
 - Sent story to both of them in a group and you could name this group
 - Share the story as a post (After it is already shared as a story)
 - After it is posted from 2 places Home page, and profile page
 - You can view a stream of stories posted by you and your friends from the Home page, and you can reply on them

4.1.9. FR 9 : Messaging

4.1.10. FR 10 : Push Notification

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.