
Software Requirements Specification

Project: InstaHUB - We connect the world

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1 Introduction

[SRS-1] This document is being created in order to come up with a software requirement specification for social media apps such as Instagram and Facebook. These are social networking sites where users may add friends, post movies and images, send and receive messages, and comment on links, among other things. To acquire an overview of the report, the goal and scope of the paper will be presented first, followed by a general description of the system. In addition, system functionality like as photo uploading, video sharing, and friend addition are thoroughly covered. Following the launch of the software system, the exact needs for it will be discussed. Functional and non-functional criteria will be addressed in the last section.

Type: Information

1.1 Purpose

[SRS-2] Main purpose to make InstaHUB is connecting the world together. By this User will be able to find friends all over the world and send them friend request. This allows user to post his image, video or show live activity through webapp. User can be more socialize himself and get to connect the world.

Type: Information

1.2 Scope

[SRS-3] InstaHUB is the name of the software product. InstaHUB is a social networking site that brings people together. The goal of InstaHUB is to give users with information on events and people they know. InstaHUB users may add friends, share movies they wish their friends to watch, post images, comment on their friends' sharing, talk with their friends, and learn more about them. People can also form social groups such as university clubs, football clubs, or social awareness organizations. People may be kept up to date on happenings by joining these groups or talking to their friends.

Type: Information

1.3 Product perspective

[SRS-4] InstaHUB is a self-contained, global social networking platform. It is free to use on the internet for anyone. The InstaHUB is not a component of a bigger system; it is a stand-alone unit. It allows individuals from all over the world to communicate and exchange information with one another. InstaHUB has a control system in place to keep track of the contents of other people's sharing and comments. People can contact the "InstaHUB Administrators" with concerns about any aspect of the InstaHUB. The "InstaHUB Administrators" may then take necessary action in response to the reported scenario that is in violation of the guidelines.

Type: Information

1.3.1 System interfaces

[SRS-5] Proposed Database is intended to store, retrieve, update, allocate information related to customer which include room allocation, generating token number & billing while checkout the room. This will also include discounting in bill if customer check in more than one time. Also billing receipt will have ordered food details, rate and quantity.

Type: Interface Requirement

1.3.2 User interfaces

[SRS-6]

- User interface is designed in a user friendly manner. User can see profile with his profile section, See post and videos in feed section.
- The software provides good graphical interface for the user can operate on the system, performing required tasks such login/logout, post, view profile and other tasks.

Type: Interface Requirement

[SRS-7]

- processor: 16 Ghz or above
- Processor Speed:1.7Ghz
- RAM:1GB
- Hard Disk:10GB HDD
- Monitor: 15" Colour Monitor
- Keyboard: Mercury 110Keys

Type: Interface Requirement

1.3.4 Software interfaces

[SRS-8]

- Front end : ReactJS
- Back end : NodeJS and ExpressJS
- Database : MongoDB Server
- Image storing : cloudinary

Type: Interface Requirement

1.3.5 Communications interfaces

[SRS-9]

- It will use Windows as communication interfaces.

Type: Interface Requirement

1.3.6 Memory constraints

[SRS-10]

- User image should be less than 5MB.
- Video size should be less than 100MB.

Type: Non-func. Requirement

1.3.7 Operations

[SRS-11]

- Signup, Login, Logout
- Create a post
- Delete a post
- Like a post
- Comment on a post
- Profile Page
- Update profile pic
- Follow Unfollow other users
- A page where we can see posts of the users whom we are following
- In Home Page we will show all posts created by any of the users
- Block User for his ID
- Report user for violating post
- Edit post with filter feature
- Go live with live feature.
- Save live post/story
- Archive post with this feature
- User can send view once image using chat service
- Permanent chat service available
- Vanish chat service after 7 days

Type: Information

1.3.8 Interfaces with services

[SRS-13]

- We can use this as a PaaS in cloud service. where software and data is managed by us but globally available by cloud service provider.

Type: Interface Requirement

1.4 Product functions

[SRS-14] The first thing he or she will do after opening an account and starting to use InstaHUB is look for friends. The user may look for people by their names and issue them an invitation to become friends and see their shared stuff on InstaHUB. If the person accepts the invitation, the two become InstaHUB friends and can interact more closely, such as sending each other messages.

Any user can broadcast his or her present status, such as what he or she is thinking, where he or she is, or what mode they are in. This is something that friends of this individual can comment on. Furthermore, if a person shares a photo, video, link, or anything else, that user's friends can likewise share that item.

Users can build an album and post photos and videos to their profiles. Anyone can start a group and invite other individuals to join it. People can also participate in activities to which they have been invited.

Type: Functional Requirement

1.5 User characteristics

[SRS-15] Except for the developers and administrators of InstaHUB, no specific technical skills is required to use it. Standard users are considered to be anybody of any age, gender, or nationality who can utilise a computer's browser. Administrators and potential developers, on the other hand, require a high level of competence to understand web technology.

Type: Information

1.6 Limitations

[SRS-16] As a social networking site, the programme should protect the security of the user's information and provide certain privacy settings options.

For starters, InstaHUB allows users to select which categories of people will be able to see their shared products. Some users may not want others to have access to their shared objects and data. If this is the case, users can alter their privacy settings to block certain people from seeing their data.

Second, InstaHUB cannot sell a user's personal information to a third party. However, if the user agrees, an application can access part of the user's data.

Type: Non-func. Requirement

1.7 Assumptions and dependencies

[SRS-17] A1 : User must have stable internet connection of 5 MBPS.

A2 : User must have his email ID for creating account.

A3 : User have enough RAM and storage in his device for running webapp.

A4 : User should enter his valid age or birthday.

D1 : If User enters his birthday then age will be calculated automatically.

Type: Non-func. Requirement

1.8 Definitions, Acronyms and abbreviations

[SRS-19] When a person logs into InstaHUB, they are sent to their home page, which is called "News Feed," and it allows them to see what their friends share and how they update their status. Furthermore, the user may see event invitations and birthdays of their friends on the left side of this page. As a result, the main page, News Feed, is where you'll find all of your daily friend interactions.

Type: Information

2 Requirements

[SRS-20] In this section, all software requirements will be explained in detail.

Type: Functional Requirement

2.1 External interfaces

[SRS-21] External interface requirements for user and communication channels will be detailed in this part in order to clarify the software's interaction with other entities and systems.

The layout information, textual elements, and error handling kinds for two sorts of users of the system, regular users and InstaHUB administrators, will be discussed in the first half. The second section will outline our system's communication interfaces in order to illustrate the interaction with other systems that share information with InstaHUB.

Type: Functional Requirement

2.2 Functions

[SRS-22]

- Register() : User can register with his email-ID for logging in InstaHUB.
- Login() : User can login with email-ID and password.
- logout() : User can logout from his device.
- View_profile() : User can see his profile section with this feature.
- View feed() : User can see his friend's post like image videos/reels in this feed section.
- Like() : User can like his and other friend's post with this feature.
- Follow_friend_reqst () : User can send friend request to his friend with search button in the top of app
- Unfollow() : User can unfollow as well as block with this feature.
- create Post() : User can post image/video/reels/IGTV videos with this feature.
- comment() : User can comment on friend's post with this feature.
- delete_post() : User can delete his post with this feature
- Update_post() : User can update his profile page with this feature.
- Update_profile() : User can update his profile with this feature.
- Filter() : User can edit his image or make reel with this feature.

Type: Functional Requirement

2.3 Performance requirements

[SRS-24] The system must be accessible at all times from anywhere on the planet. Because InstaHUB is a social network, any disruption in the sharing chain would force users to abandon the platform, hence it is critical that the system be online at all times.

The number of active users in the system will not effect the system until half of the registered users become active. As a global network, expecting that half of the registered users use the website is a reasonable and required assumption.

Type: Functional Requirement

2.4 Logical database requirements

[SRS-25] This database must be NoSQL database. Cause we need to manage huge amount of data like image, video and chat services. This also includes like of posts and videos. So probably we will be using mongoDB as our Database.

2.5 Design constraints

[SRS-26] The system's design must accommodate content sizes that are suitable with many platforms, such as mobile phones, tablets, and desktop PCs. Because InstaHUB is centred on sharing with friends, the system's architecture must allow for a high level of mobile accessibility.

The system's design should allow multiple languages to be displayed without altering the overall appearance and functions. As a global network, several language sets would be able to display as the primary language of the website without causing any operational issues.

Type: Functional Requirement

2.6 Software system attributes

[SRS-28]

- Usability
- Reliability
- Availability
- Portability
- Maintainability
- Performance
- security

Type: Information

2.7 Security concerns

[SRS-33]

- Security systems need database storage just like many other applications.
- User must login with OTP if his IP differs from his created account IP/previous IP.

Type: Functional Requirement

3 Verification

[SRS-29] We must need to check whether our database or our operating environment is latest or smart enough so we don't need to upgrade our database in short time.

i.e. windows OS is good enough to make software compared to macOS cause its more expensive and unfamiliar.

Type: Information

4 Supporting information

[SRS-30]

- Our software must have report and feedback part so if any customer is not able to run it, he or she can report and developer can look into this matter.
- Use-Case Analysis
- Structural Model
- System/software crash report

Type: Information

5 References

[SRS-31]

- [Instagram](#)
- [Twitter](#)
- [Facebook](#)

Type: Information