Instagram Clone(using ReactJS, firebase, spring data jpa)

Software Requirement Specification

Introduction:

The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

With increasing number of people and ideas there always has been a need of an online social web application or platform where people can easily share pictures, videos and connect with each other. The online social platform should be useful in the following ways:

i.   User friendly
ii.   Should be more efficient
iii.   Should provide security.
iv.   Should be robust.
v.   Should be accessible all around the globe (wherever we have
        internet connectivity)

Purpose

The purpose of Instagram clone is to maintain and provide a platform to the people across the globe for sharing ideas, pictures, models, videos, content etc. It provides us a deep picture of the technology (like reactjs, firebase springboot, spring data jpa) that has been implemented for these kinds of social web applications. It also helps to understand the needs of the present generation and come up with new projects and platforms in order to meet the demands. This system has been made for unhindered sharing of ideas.

Scope

The scope of the Instagram clone solely depends on the users' feedback and needs depending upon the availability of resources.

It is well equipped to provide a good experience to the social media app users and the facilities mentioned for the same.

<u>Definitions, Acronyms, and Abbreviations.</u>

SRS – Software Requirements Specification
IC– Instagram Clone

<u>Overview</u>

The SRS is organized into two main sections. The first is The Overall Description and the second is the Specific Requirements. The Overall Description will describe the requirements of the IC from a general high-level perspective. The Specific Requirements section will describe in detail the requirements of the system.

<u>Reference</u>

Internet and real-life requirements for online social platforms.

2.The Overall Description

Describes the general factors that affect the product and its requirements. This section does not state specific requirements. Instead, it provides a background for those requirements, which are defined in section 3, and makes them easier to understand.

<u>Product Perspective</u>

The Instagram Clone is a real time social media project which fulfils the purpose of automating the sharing process.

<u>Product Functions</u>

Registration and System
- Allows for typing in users' information
- Allows for viewing posts/comments
- Allows for updating/adding stories
- Allows certain other functionalities as required by a social media app user

<u>User Characteristics</u>

Educational level for using the IC – Low
Experience of IC software – None
Technical Expertise – Very Little

3.Specific Requirements
<u>System Requirements:</u>

- React JS set up in Visual Code Studio
- Internet connectivity for firebase
- PostgreSQL
- PostgreSQL JDBC Connector
- JAVA
- Eclipse IDE

<u>**Functional Requirements**</u>

Functional requirements define the fundamental actions that system must perform. The functional requirements for the system are divided into three main categories, register/login options for the users, post and comment options and Email verification. For further details, refer to the use cases.

1. Register/Login
   1.1 The users(new) should be able to register themselves and then post content.
   1.2 The registered users can login/logout as and when required.
2. Displaying Posts
   2.1. The IC will display posts uploaded on the platform.
   2.2. The application should display users' name as well.

3. Displaying Comments
   3.1. The application software should display comments.

4. Add/Update Stories
   4.1. The users should be able to add/update/upload stories.

5. Remove Posts

5.1 The manager must be able to remove or delete user/borrower's name when the book/books is/are returned.

Nonfunctional Requirements

Non -Functional requirements define the needs in terms of performance, logical database requirements, design constraints, standards compliance, reliability, availability, security, maintainability, and portability.

Performance Requirements

Performance requirements define acceptable response times for system functionality.

- The load time for user interface screens shall take no longer than five seconds.
- The log in information shall be verified within five seconds.
- Updates will be returned within five seconds.

Logical Database Requirements

The logical database requirements include the retention of the following data elements. This list is not a complete list and is designed as a starting point for development.

Management System

- User's full name
- User's email id
- User's feed/post/comments
- User's Password

Reliability

The IC won't crash abruptly.

Availability

The application is operable 24/7.

Security

The user alone has the right to make changes in his/her account only as the interface requires the exact user id and password as registered by the user.

Maintainability

The IC is being developed using reactjs, spring data jpa and firebase. Hence, it is easy to maintain.