

SOCIAL MEDIA WEBAPP Task 1



#### Introduction:

The purpose of this Software Requirement Specification (SRS) is to define the functional and non-functional requirements for a social media web application. The application will provide a platform for users to connect, share content, and communicate with each other. The SRS will provide a detailed description of the requirements to help the development team to design, develop, test, and maintain the application.



- 1. Functional Requirements:
- 1.1 User Management: The application should allow users to create an account and manage their profile. Users should be able to log in, log out, and reset their password. Users should be able to edit their profile information and upload a profile picture.
- 1.2 Content Sharing: The application should allow users to create and share content, such as text, images, and videos. Users should be able to create posts, upload images and videos, and comment on other users' posts.



- 1.3 Newsfeed: The application should have a newsfeed that displays posts from users and pages that the user follows.
- 1.4 Messaging: The application should allow users to send private messages to other users. Users should be able to create group chats and send direct messages.
- 1.5 Notifications: The application should send notifications to users when they receive a new message, a new follower, or when someone comments on their posts.



- 2. Non-functional Requirements:
- 2.1 Performance: The application should be able to handle a large number of users and provide a fast response time. The application should be able to handle concurrent user requests and scale according to the load.
- 2.2 Security: The application should have robust security measures to protect user data and prevent unauthorized access. The application should use encryption to secure user data and implement measures to prevent hacking and other security breaches.



- 2.3 Usability: The application should have a user-friendly interface that is easy to navigate. The application should have clear instructions and provide feedback to users.
- 2.4 Compatibility: The application should be compatible with different browsers and devices. The application should be responsive and work on mobile devices.
- 2.5 Reliability: The application should be reliable and available at all times. The application should have a backup and recovery plan in case of system failures.



- 3. Technology Stack:
- 3.1 Front-end: The application should be built using HTML, CSS, and JavaScript. The front-end should use a modern web framework such as React or Angular.
- 3.2 Back-end: The application should use a server-side programming language such as Python or Ruby. The application should use a modern web framework such as Django or Ruby on Rails.





#### 4.Constraints

4.1 Technology Stack

The web application should be built using the following technology stack:

Frontend: ReactJS

Backend: Node.js

Database: MongoDB

#### 4.2 User Interface

•The web application should be designed to be user-friendly and intuitive, with a modern and clean interface.





#### Risk Mitigation:

- 1. Security Risks:
- Implementing a multi-factor authentication process to reduce the risk of unauthorized access to user accounts.
- Performing regular security audits and vulnerability assessments to identify and fix potential security issues.
- Implementing data encryption at rest and in transit to protect user data.
- Providing users with the ability to report suspicious or malicious behavior.



Scheduling and Estimates:

The following is the estimated timeline for the development of the social media web application:

- 1.Requirements gathering and analysis (2 weeks).
- 2. Design and architecture (4 weeks).
- 3. Development (16 weeks).
- 4. Testing (4 weeks).
- 5. Deployment and maintenance (2 weeks).





**Technical Process:** 

The following is the technical process for the development of the social media web application:

- Requirements gathering and analysis
- Design and prototyping
- Implementation
- Testing and debugging
- Deployment and maintenance





- 1. Creation of SRS & Github
- 2. Create SRS: "Your Project"
- 3. Creation & Set-up of Github account
- 4. Creation & Hands-on to various commands of Git Bash

**Evaluation Metric:** 

100% Completion of the above tasks

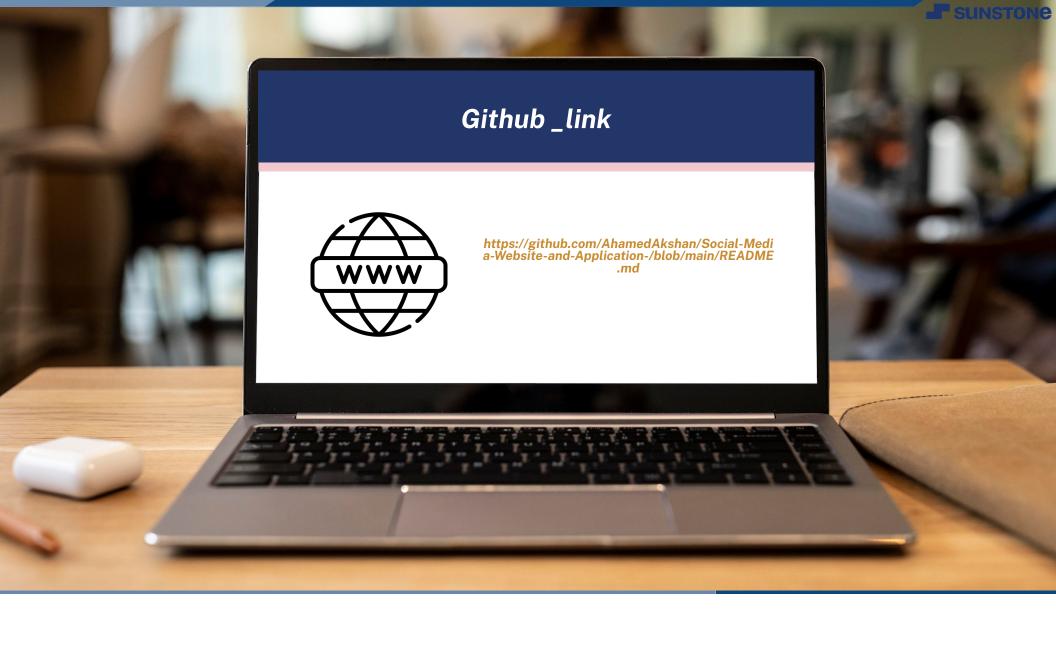




#### Learning Outcomes:

- Get to know about different lifecycle models.
- Understanding importance and how to create an SRS
- Knowing various commands of Github
- Understanding agile and scrum management techniques for efficient product development







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