Software Requirements Specification

for

Social Media App & Automation

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

The purpose of the project is to design a website that automatically generates social media applications for different institutions. It covers user interfaces, hardware and software requirements and use cases.

1.2 Project Scope

Our project is a platform for generating applications for educational institutions. It will reduce the time taken and the cost needed for creating a social media application. And also limited expense is needed for its maintenance.

The main goal of the project is to automate the process of application development. The aim of this project is to create a low cost methodology which will help institutions without technical knowledge to develop educational apps.

1.3 Definitions, Acronyms, and Abbreviations

- iOS: iPhone Operating System
- App: Application
- RAT: Rational
- DEP: Dependencies
- FR: Functional Requirements

2. Overall Description

2.1 Product Perspective

Nowadays, the interaction between students and faculties are diminishing. So this application will provide an environment for interaction. So this application will improve the communication between students-student and student-faculty relationships. This application can be generated without the help of professionals. Updates can be done by the person in-charge of the institutions. Other interruptions such as advertisement can be avoided. So, there will be an increased privacy of user's data.

2.2 Product Features

The major feature of the project is the automated app generation. Generated applications contain features such as updating story, chat, accessing college updates from the admin, attendance details etc.

2.3 User Classes and Characteristics

Students are the main users of our app since the app will help them to interact with faculties and other members in the college. Beside students the admin can also use the app to add notifications.

2.4 Operating Environment

The app can be used by anyone if he/she has an android phone that runs in android version greater than or equal to 5.0 and it is also run in iOS devices.

2.5 Assumptions and Dependencies

- Assume the phone is **Android** 5.0 or later

- Assume users provide permission for accessing necessary features.

3. Specific Requirements

This section contains more detailed information regarding the needed functionalities of our application, including interfaces, internal functions, and testing requirements.

3.1 External interface Requirements

3.1.1 User Interfaces

The first time user should see a log-in page when he/she opens the app. The user could be able to register for the app. After login he/she will be directed to the main home page or dashboard. From here the user can go for either AR based study or looking for other study materials like pdf notes, Video lectures, etc. These facilities should be easily accessible from the home screens.

3.1.2 Software Interfaces

The mobile app needs to communicate with various databases that contain the study materials like videos, pdf notes etc. Since users are only viewing the content the communication only contains reading operations.

3.2 Functional Requirements

3.2.1 Automation of Application development

3.2.1.1 Functional requirement 1.1

ID: FR1
Title: Input data for website
DESC: Metadata for social media app development
RAT: In order to collect information for generating application
DEP: None

3.2.1.2 Functional requirement 1.2

ID: FR2
Title: Automation
DESC: Automatically generate the application based on the collected data.
RAT: In order for a user to download the application
DEP: FR1

3.2.2 User Interface - User

3.2.2.1 Functional requirement 2.1
ID: FR3
Title: User login
DESC: The user should be able to login to the application using given login details.
RAT: In order for a user to login to the application
DEP: FR1

3.2.2.2 Functional requirement 2.2
ID: FR4
Title: Home screen
DESC: The user should be directed to the home screen or the dashboard of the application immediately after login for the ease of accessing the features of the application.
RAT: In order to help users find the resources.
DEP: FR3

3.2.2.3 Functional requirement 2.3
ID: FR5
Title: Chat Option
DESC: A module for exchanging messages
RAT: In order to allow the user to communicate with each other.
DEP: None

3.2.2.4 Functional requirement 2.4
ID: FR6
Title: Help options
DESC: The user should be directed how to use the application. For that there should be good manuals or proper documentation that can be accessed from the home screen.
RAT: In order to identify the various options available in the application
DEP: FR3

3.2.3 User Interface - Admin

3.2.3.1 Functional requirement 3.1
ID: FR7
Title: Library Management
DESC: Information regarding library usage
RAT: Details of books borrowed- date, book name, student name, book number etc
DEP: FR1

3.2.3.2 Functional requirement 3.2
ID: FR8
Title: Database Management
DESC: Manipulating data regarding new users.
RAT: Remove and update the metadata.
DEP: FR1

4. Other Non-functional Requirements

4.1 Performance Requirements

The performance of the application should be very good. There should not be any delays when switching between different pages and updating story.

4.2 Safety Requirements

Trespassers cannot login to the application. Only certified members can access the application using login details like user-id and passwords. Users can change the password after first login in order to ensure the security.

4.3 Security Requirements

Chats are end-to-end encrypted. The details of the user like name, class, etc. should be collected with the proper permission of the user. There will be an option for users to select the viewers of the story.

4.4 Software Quality Attributes

4.4.1 Adaptability
The application can be run on any android device and iOS devices.

4.4.2 Reliability
The app would not crash while using it except the error caused by external reasons like OS error.

4.4.3 Availability

The application will be available for admin and he/she can provide application to the users.