Software Requirements Specification

(SRS) 1.1 Purpose

This document outlines the Software Requirements Specification (SRS) for the project.

1.2 Scope

The system will provide functionalities for the code.

2. Functional Requirements

2.1 User Management

1. The system will allow users to create an account with an email and password.

2. The system will allow users to log in using their credentials.

3. The system will allow users to reset their password via email verification.

4. The system will allow users to update their profile information.

2.2 Data Management

5. The system will allow users to create new records.

6. The system will allow users to edit existing records.

7. The system will allow users to delete their own records.

8. The system will provide search functionality for retrieving records.

2.3 User Interaction & Notifications

9. The system will display real-time notifications for important updates.

10. The system will allow users to send and receive messages within the platform.

11. The user will be able to change the theme of the program.

2.4 Security & Access Control

11. The system will enforce role-based access control (RBAC) to restrict user permissions.

12. The system will encrypt sensitive user data before storing it in the database.

2.5 System Performance & Logging

13. The system shall log all critical user activities for security auditing.

14. The system shall automatically log out inactive users after a configurable timeout period.

15. The system shall provide an error logging mechanism to track and report system failures.

2.6 File Management

16. The program will be able to open files from any user specified directory.

17. The system shall convert 4 digit and 6 digit files to work together.

3. Non-Functional Requirements

3.1 Performance Requirements

1. The system shall respond to user requests within 2 seconds under normal load conditions.

3.2 Security Requirements

2. The system will use HTTPS to encrypt all communications between the client and the server.

3.3 Usability Requirements

3. The system will be accessible on both desktop and mobile devices with a responsive design.

4. The system will allow up to 250 liners per file.