SRS for Library Management System.

1. Introduction

1.1 Purpose of this Document:

This document outlines the requirements of a Library Management System that manages library operations such as borrowing, returning and reserving books.

1.2 Scope of this Document:

The LMS will streamline the management of library resources, allowing users and librarians to interact with book data efficiently. It also covers system costs and time req.

1.3 Overview

The system provides essential features for managing books, tracking user activity and automating fines for late returns.

2. General Description:

The system will be used by students, faculty and librarians to manage library operations, improving efficiency in book borrowing, catalog management and fine calculation.

3. Functional Requirements

User registration and login.

Book search and filter options

Borrow, return, and reserve functionalities

Fine calculations and overdue notifications

Reports on current and overdue books.

4. **Interface Requirements**
Web-based interface for users and administrators.
Database for sorting book and user data
Notifications via email for overdue books

5. **Performance Requirements**
The system should handle 500+ simultaneous users
Response time for searches should be under 2 seconds.

6. **Design constraints**
System should operate on common hardware and browsers.
Implementation must adhere to library regulations.

7. **Non-Functional ~~Attributes~~ Requirements**
Security: User authentication and data encryption.
Reliability: System should have 99.5% uptime.

8. **Preliminary Schedule and Budget.**
Development ~~Team period~~: 6 months ₹16,00,000
Estimated ~~budget~~: $25,000
Infrastructure and security: ₹10,00,000
Integration with Govt Databases: ₹6,00,000
Testing and Quality Assurance: ₹4,00,000
Miscellaneous Cost: ₹4,00,000