**1. Introduction**

**1.1 Purpose of this Document**

The purpose of this SRS is to define the requirements for the development of the Book Bank system. It serves as a foundation for designing, implementing, and testing the system.

**1.2 Scope of this Document**

This document covers the functional and non-functional requirements, user characteristics, constraints, and interfaces related to the Book Bank system.

**1.3 Overview**

The Book Bank system aims to provide efficient management of books within an educational institution. Users can borrow, return, and search for books using this system.

**1.4 Business Context**

The Book Bank system will enhance the library experience for students, faculty, and staff by streamlining book transactions and ensuring timely availability of resources.

**2. General Description**

**2.1 Product Functions**

Book registration and cataloging

Borrowing and returning books

Book search and availability status

User account management

**2.2 Similar System Information**

The Book Bank system draws inspiration from existing library management systems but focuses specifically on managing educational institution resources.

**2.3 User Characteristics**

The system will be used by students, faculty, and library staff. Users should have basic computer literacy.

**2.4 User Problem Statement**

Users face challenges in locating available books, tracking borrowed books, and managing due dates.

**2.5 User Objectives**

Efficiently borrow and return books

Easily search for specific titles

Receive timely notifications for due dates

**2.6 General Constraints**

The system must integrate with the existing library infrastructure.

Security and privacy of user data are critical.

**3. Functional Requirements**

The Book Bank system shall:

Allow users to search for books by title, author, or category.

Enable users to borrow and return books.

Maintain an up-to-date inventory of available books.

Send overdue notifications to users.

**4. Interface Requirements**

**4.1 User Interfaces**

User-friendly web interface for searching and managing books

Mobile app for on-the-go access

**4.2 Hardware Interfaces**

Standard computers and mobile devices

Barcode scanners for book transactions

**4.3 Software Interfaces**

Integration with the library database

Email notification system

**5. Performance Requirements**

Book search response time: < 2 seconds

Transaction processing time: < 5 seconds

**6. Other Non-functional Attributes**

**6.1 Security**

User authentication and authorization

Data encryption for sensitive information

**6.3 Reliability**

System uptime: > 99%

Backup and recovery mechanisms

**6.4 Maintainability**

Modular design for ease of updates

Version control for codebase

**6.5 Portability**

Web-based system accessible across browsers

Mobile app for Android and iOS

**6.6 Extensibility**

Scalable architecture to accommodate future enhancements

**6.7 Reusability**

Reusable components for efficiency

**6.8 Application Affinity/Compatibility**

Integration with existing student portals and learning management systems

**7. Preliminary Use Case Models and Sequence Diagrams**

**7.1 Use Case Model**

User registration

Book search

Borrow book

Return book

**7.2 Sequence Diagrams**

Borrowing process

Returning process

**8. Updated Schedule**

The project timeline will be defined during the planning phase.

**9. Appendices**

**9.1 Definitions, Acronyms, Abbreviations**

SRS: Software Requirements Specification

API: Application Programming Interface

**9.2 References**

Example SRS for Banking System1

How to Write a Good SRS for Your Project2

SRS for Bank Management System3