

Statement of Work (SOW)

Project Title: Library Management System – Book Issue and Deposit

Date: 07-02-2025

1. Introduction

This document outlines the scope, objectives, deliverables, and requirements for the development of a **Library Management System**. The system will facilitate book issuance, returns, and tracking for library members. It will be designed to ensure efficient book management, reduce manual errors, and enhance user experience.

2. Scope of Work

Project Description:

The Library Management System is designed to automate the book lending process. It will allow students and faculty to borrow and return books digitally while maintaining an organized database for librarians. The system will include user authentication, book search functionality, real-time book availability updates, and fine calculation for late returns.

Objectives:

- **Library Management Portal:** A web-based or desktop application for book tracking.
- **User Authentication System:** Login verification for students, faculty, and librarians.
- **Book Issue and Return:** Digital record-keeping for book borrowing and deposits.
- **Fine Calculation:** Automatic calculation of penalties for late returns.
- **Search and Filter Options:** Users can search for books by title, author, or genre.
- **Admin Dashboard:** Librarians can add, remove, or update book records.

Key Activities:

- **Requirement Analysis & Planning:** Define system requirements and create a development roadmap.
 - **UI/UX Design:** Develop an intuitive user interface for smooth navigation.
 - **Backend Development:** Implement the database, authentication system, and fine calculation.
 - **Frontend Development:** Create user-friendly interfaces for book search and borrowing features.
 - **Integration:** Connect frontend and backend components for seamless functionality.
 - **Testing:** Conduct functional and user testing for system validation.
-

3. Deliverables

[Dates are tentative and can be adjusted based on your project timeline]

- **Deliverable 1:** Project Plan Document – 15/02/2025
 - **Deliverable 2:** UI/UX Design – 01/03/2025
 - **Deliverable 3:** Backend Development – 01/04/2025
 - **Deliverable 4:** Feature Integration – 10/04/2025
 - **Deliverable 5:** System Testing & Debugging – 25/04/2025
-

4. Timeline and Milestones

Milestone	Description	Due Date
Project Kickoff	Initial project discussion	06/02/2025
Phase 1 Completion	Basic book issue/return feature	01/04/2025
Phase 2 Completion	Fine calculation and search system	10/04/2025
Final Delivery	Fully functional system	05/05/2025

5. Roles and Responsibilities

Roles and responsibilities are subject to change based on project requirements.

Integration part will be done by all the team members

Team Members:

- Ch. Vamshi Krishna Babu [SE22UARI038] - Testing&Debuging
- Ch. Vamsi Krishna [SE22UARI039] - Backend, Integration
- K. Sri Ram Sharan [SE22UARI070] - Frontend
- G. Rithvik Chandan [SE22UARI144] - Frontend
- V. Raja [SE22UARI178] - Frontend
- K. Bhuvan [SE22UARI212] - Backend

Client Contact:

Software Engineering Course, Mahindra University

6. Assumptions and Constraints

Assumptions:

- The system will handle a maximum of 50-100 active users at a time.
- Book database will be manually updated by librarians.
- Users will have access to the system through university credentials.

Constraints:

- The project will be developed using Django (Python) for backend and React.js for frontend.
 - The database will be hosted on PostgreSQL with a free-tier cloud plan.
 - Limited testing environment (e.g., may not support mobile devices).
-

7. Approval Signatures

Client:

Name: _____
Title: _____
Signature: _____
Date: _____

Service Provider:

Name: _____
Title: _____
Signature: _____
Date: _____
