

5/4/24

Library Management System

Problem Statement:

The current manual system of library management is inefficient & prone to errors. There is lack of centralized system. We need a LMS that can streamline library operations, improve user access to resources, and enhance overall efficiency. The proposed LMS aims to provide librarians with a user friendly interface for managing library resources and empowers users with easy access to search, borrow, & return books seamlessly.

1) Introduction:

- 1.1) Purpose of this document: To outline requirements for development of LMS to streamline management of lib resources & enhance user's experience.
- 1.2) Scope of this document: It includes functionality, performance, interface & constraints of the LMS.
- 1.3) Overview: LMS provides features such as cataloging of books, managing member information, tracking book loans, and generating reports. It will be accessible to both librarians & library members.

2) General Description

The LMS will serve as a centralized system for managing all library operations. It will cater to the needs of librarians for efficient management and users for easy access to library resources.

The system will be user-friendly & scalable to accommodate future growth.

3) Functional Requirements

- user Management
- Catalog Management
- Loan Management
- Reporting
- Notifications

4) Interface Requirements

- The system will have user-friendly web interface for both librarians & users.
- It shall support multiple languages & be accessible on different devices.

5) Performance Requirements

- The system shall be able to handle a large no. of concurrent users.
- Response times for searches & transactions shall be within acceptable limits.

6) Design Constraints

- The system shall be designed using Java for the backend & Angular for the front end.
- It shall utilize a relational database for data storage.

7) Non functional Attributes

- Security
- Portability
- Reliability
- Scalability

2) Preliminary schedule & Budget
- development time estimate: 6 months
- Budget: \$50,000.