

## Lab-02

## 3. Library management system

## 1. Introduction

1.1 Purpose: The purpose of this document is to outline the requirements for a library management system which will automate the borrowing, returning of books, management of library books efficiently.

1.2 Scope: Assisting librarians in cataloging books, tracking books borrowing & returned items by generating reports.

All real-time update on availability of books.

1.3 Overview: Reducing manual errors & reliable & speed services by managing book transaction records.

## 2. General description:

System aims to provide user friendly interface for both librarians & book readers (users).

Librarians can manage book records, track overdue books while user can check availability, borrow & return books.

## 3. Functional requirements

\* Book management: Add, remove or update

\* User management: Register, manage & delete user accounts.



#### 4. Interface requirements

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- \* User friendly interface for both librarians & users.
- \* Secure login system for librarians.
- \* Search bar for user to quickly find books.

#### 5. Performance requirements

- \* Quick response time in searching and loading database.

Supporting upto 1000 simultaneous users without slowdown

#### 6. Design requirements

- \* System must run on windows, mac & linux systems.
- \* Database must be reliably designed.
- \* Book records tracking -

#### 7. Non-functional requirements

- \* Security: Ensuring secure user login & librarian login.
- \* Storage: Must handle to store upto 100,000 books.

#### 8. Preliminary schedule & Budget

Development time: 7-8 months

Budget: \$40,000 - \$50,000