

## II Library Management System:

### 1. Introduction:

1.1 Purpose: The document outlines the requirements specifications of a library management system. it acts as a guide to the developers and outlines functionalities, objective & constraints.

1.2 Scope of Document: The document of a comprehensive library management system including catalog, circulation, patron management & repositing function.

1.3 Overview: The system is designed to streamline operation such as book acquisition, cataloging, circulation etc.

### 2. General description:

- Well cater to the needs of libraries to catalog.
- Some features are:

cataloging: Allows librarians to catalog books media including meta data

circulation: facilitate borrowing & returning from library

- Patron management: maintain patron records such as registration & borrowing history
- Reporting: Generating regular periodic reports.

### 3. functional requirements:

User Interface: UI for home info is presented to the user.

Library User: Account Management System:

Display acct: info, User ID, name positioning, privilege, use a GUI which allows librarians to change the info.

Book borrowing system: check out books, show borrowing info.

Book Records: list of available books, ISBN, title.

### 4. Interface Requirement:

User interface: intuitive interface for libraries & patrons

Book detail view: Display of book info, options for summarise, reviews.

User profile: system for alert on overdue, access history.

Notification: system for alert on overdue books recommendations,

### 5. Performance Requirements.

Response time: check in & check out in less than 5 sec.

Search function in less than 9 second.

6. Design Control:

- Each user has an IP used for book issuing, fine payment, etc.

- Compatibility w/ multiple platform & data base
- Scalability to accommodate growth, adherence to security standard.

7. Non-functional Requirement:

- ~~Integrate~~ Security.

- Scalability

- Portability

- Reliability.

8. Preliminary schedule & Budget:

- Development timeline: 6 months.

- Estimated Budget: 1,00,00,000



# Class diagram of a Library Management System

