

High Level Document

COLLEGE LIBRARY MANAGEMENT SYSTEM

Library management system is a project which aims in developing a computerized system to maintain all the daily work of library, manage books, track borrowed books, issue books and managing fines. It helps the librarian manage the books and books borrowed by members and automates most of the library activities. It has a facility where student after logging in their accounts can see list of books issued and its issue date. It increases efficiency and reduces the cost needed for maintaining a library and saves time and effort for both the user and the librarian.

System Requirements

The key requirements that need to be offered by the library management system can be classified into functional and non-functional requirements.

Functional Requirements

Implement the below feature in your application.

1. Student Registration.
2. Book Management: Add a new book, delete a book, update a book's details, and search a book.
3. Allow students a maximum of 15 days to borrow the book. If the book is not returned within 15 days, calculate the fine. One day equals ten rupees.
4. Limit each pupil to three books.
5. Enable book searches by author, title, and category.
6. Registration of librarians
7. Any Librarian may issue books to any student.

Actors for the project

1.Librarian

2.Student/User

Non - Functional Requirements

EFFICIENCY REQUIREMENT

When a library management system will be implemented librarian and user will easily access library, since searching and book transaction will be very faster.

USABILITY REQUIREMENT

The system is designed for a user friendly environment so that student and staff of library can perform the various tasks easily and in an effective way.

ACCURACY REQUIREMENT

Accuracy is another important non-functional requirement for the library management system. The data stored about the books and the fines calculated should be correct, consistent, and reliable.

RELIABILITY REQUIREMENT

The system should accurately performs member registration, member validation, report generation, book transaction and search

MAINTAINABILITY

The software should be easily maintainable and adding new features and making changes to the software must be as simple as possible. In addition to this, the software must also be portable.

SOFTWARE REQUIREMENT

- A server running Windows Server

- A multi-threading capable backend language Java (servlets)
- Web server tomcat 9.0
- Front-end frameworks like html,css,jsp
- Relational DBMS MySQL

CONTROL FLOW

