

# Library Management System

.The library management system is a software to handle the primary housekeeping function of a library.help keep track of the books and their check-outs.

## System Requirement(set of requirement)

.Any library member should be able to search books by their title,author,subject category as well by the publication date.

.Each book will have a unique Identification number and other details including where we can find the books in the library.

.There could be more than one copy of the book and library member should be able to check-out and reserve any copy.

.The system should be able to retrieve information like who took a particular book or what are the books checked out by a specific library member.

.library member can only borrow one book at a time,must return the book if he/she want to borrow another book.

.The library member can borrow a book for only 5 days ,if the library member does not return the book within 5 days after borrowing it,the admin will have the rights to add penalties to the library member.

# Main actor in the System

## 1. librarian

-Mainly responsible for adding and modifying books,book items and users.The librarian can cancel the request to borrow a book made by the library member if the he/she does not collect the book within few hours (5) .

## 2.library member

-All members can search the catalog, as well as check-out, reserve, renew, and return a book.

# Use case of the library Management System

## 1. Add,Remove asnd Edit books

- To add,remove or modify book or book item

## 2.Search catalog

- To search books by title author,subject or publication date.

## 3.Register new account/cancel member ship.

4.Check-out-book

- To borrow a book

5.Reserve book

- To reserve a book which is currently available.

6.Renew a book

-To reborrow an already checked out book

7.Return a book

# Main classes of the System

1. Book

- Every book will have a title,subject and publication date

2.Book item

- Any book can have multiple copies

3.Account

- There will be three types of account \*admin account

\*The librarian account

\*The general member account

# The Librarian

1. Manage booklending (manage the check-out of book items).

2. Library member must return the book before 5 days of borrowing it or the Librarian will have to punish the library member.

## Major modules

1. Admin/The librarian

- sign in
- manage users (can add, remove and update users' information)
- manage books (can add, remove and update books)
- View orders (admin can view orders and prepare books for collection)

2. Users

- login
- view profile
- browse books
- view the orders

## Advantage of the System

1. Users can check for books without even visiting library

2. If user have access to the software, he/she can avoid waiting in the library queue and do everything on his/her mobile phone.