High level Software Requirements Specification

Library Management System

Purpose

The main objective of this document is to illustrate the requirements of the project Library Management system. The document gives the detailed description of the both functional and non-functional requirements proposed by the client. The purpose of this project is to provide a friendly environment to maintain the details of books and library members.

Scope of the project

Library Management System is basically updating the manual library system into an internet-based application so that the users can know the details of their accounts, availability of books and maximum limit for borrowing.

The project should be designed specifically for the use of librarians and library users. The product will work as a complete user interface for library management process and library usage from ordinary users. Library Management System can be used by any existing or new library to manage its books and book borrowing, insertion and monitoring.

User Classes and Characteristics

The system should provide different types of services based on the type of users (Admin/Librarian/Reader). The Admin will be acting as the controller and he will have all the privileges of an administrator. The Reader can be either a student or staff of the institution who will be accessing the Library online or onsite.

- → The features that are available to the Admin are:
 - ◆ Admin can create new Librarians/Readers with proper information.
 - Admin can modify/delete Librarians/Readers.
 - Admin can create/modify/delete book records.
 - ◆ Admin can see the list of books available in the library, list of books that have been borrowed, list of users with their book borrowing history.
- → The features that are available to the Librarian are:
 - Librarians can create new Readers with proper information.
 - Librarians can modify/delete Readers.

- Librarians can create/modify/delete book records.
- ◆ Librarians can see the list of books available in the library, list of books that have been borrowed, list of users with their book borrowing history.
- → The features that are available to the Reader are:
 - Readers can search for any books using the system, and locate desired books
 - ◆ Readers can borrow books after they are issued by a Librarian.
 - ◆ Remote readers can also download ebooks using the system if there are any available.

Reader Use Case Workflow

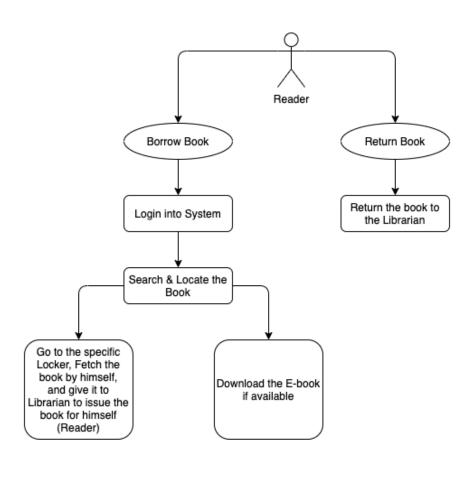


Fig 1: Reader Use Case Workflow

• Librarian Use Case Workflow

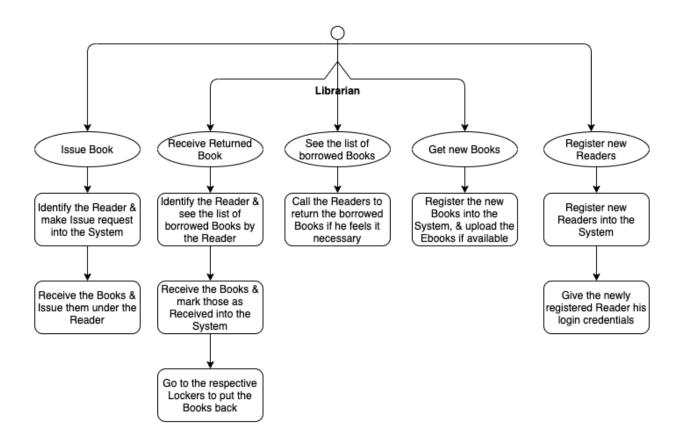


Fig 2: Librarian Use Case Workflow

Admin Use Case Workflow

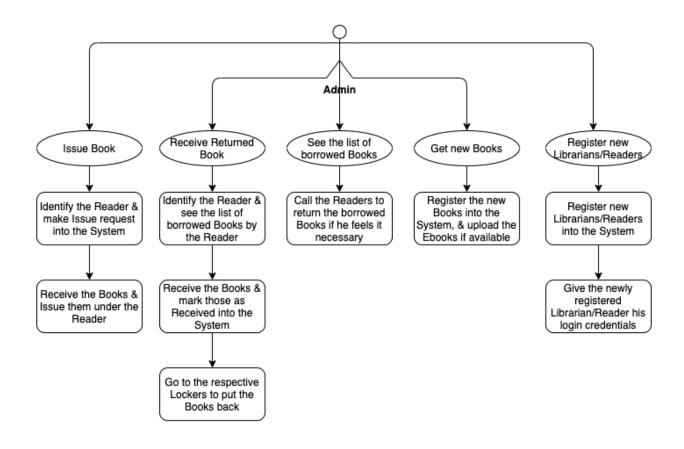


Fig 3: Admin Use Case Workflow

Other Requirements

- → System should be accessible through: *Internet*
- → Mobile (smaller) device friendly UI: Not required
- → Statistical report generation feature: *Not required*
- → Migrate old DB into the newly proposed system: **Not required**
- → Mobile App: *Not required*
- → Specific preferences of Development Technologies: **No**
- → Number of books: *Around 5,000*
- → Number of users: Around 1,500

- → System home/landing page should show a picture of the institute.
- → UI should be user friendly.
- → Maximum number of books can be borrowed by one user: 3
- → Book returning deadline: 30 days
- → Notification to the users about the deadlines: *Not required*