

LIBRARY MANAGEMENT SYSTEM APPLICATION

The Library Management System Application is a software application designed to streamline and automate the management of library resources, including books, magazines, and other materials. It provides features such as cataloging, circulation, member management, and reporting, making it easier for library operations to be handled efficiently by the librarians.

PROBLEM DESCRIPTION

The Library Management System Application aims to address these challenges by providing a digital platform that automates key library functions, improves accuracy, and enhances user experience for both librarians and library members. Traditional library management processes involve manual cataloging, check-in / check-out procedures, and record-keeping, leading to time-consuming tasks and potential errors. This are the problems to be solved.

IN SCOPE / FUNCTIONS

Catalog Management: Allow librarians to create and manage the library's catalog, including adding new items, updating information, and organizing materials into categories.

Circulation Management: Facilitates the process of checking in and checking out library materials, tracking due dates, managing reservations, and handling overdue items.

Admin - Dashboard: Provides librarians with a centralized dashboard to monitor library activities, manage settings, and perform administrative tasks.

Member Management: Enable librarians to manage member ^{records} including registration, issuing library cards, and tracking borrowing history.

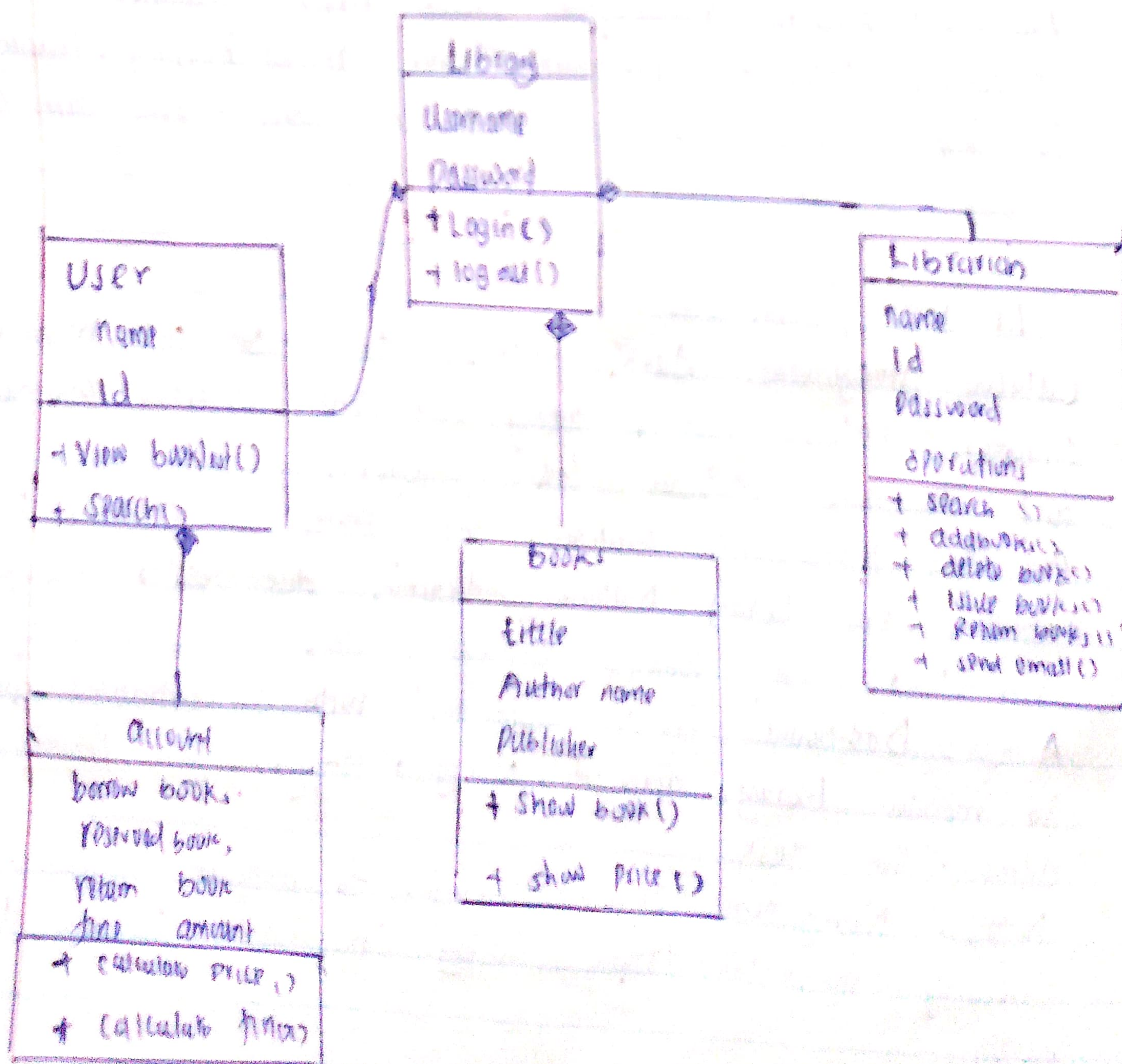
Search and Discovery: provide a search functionality for library members to find available materials based on titles, authors, genres or keywords, with the ability to place holds request inter-library loan.

Risks

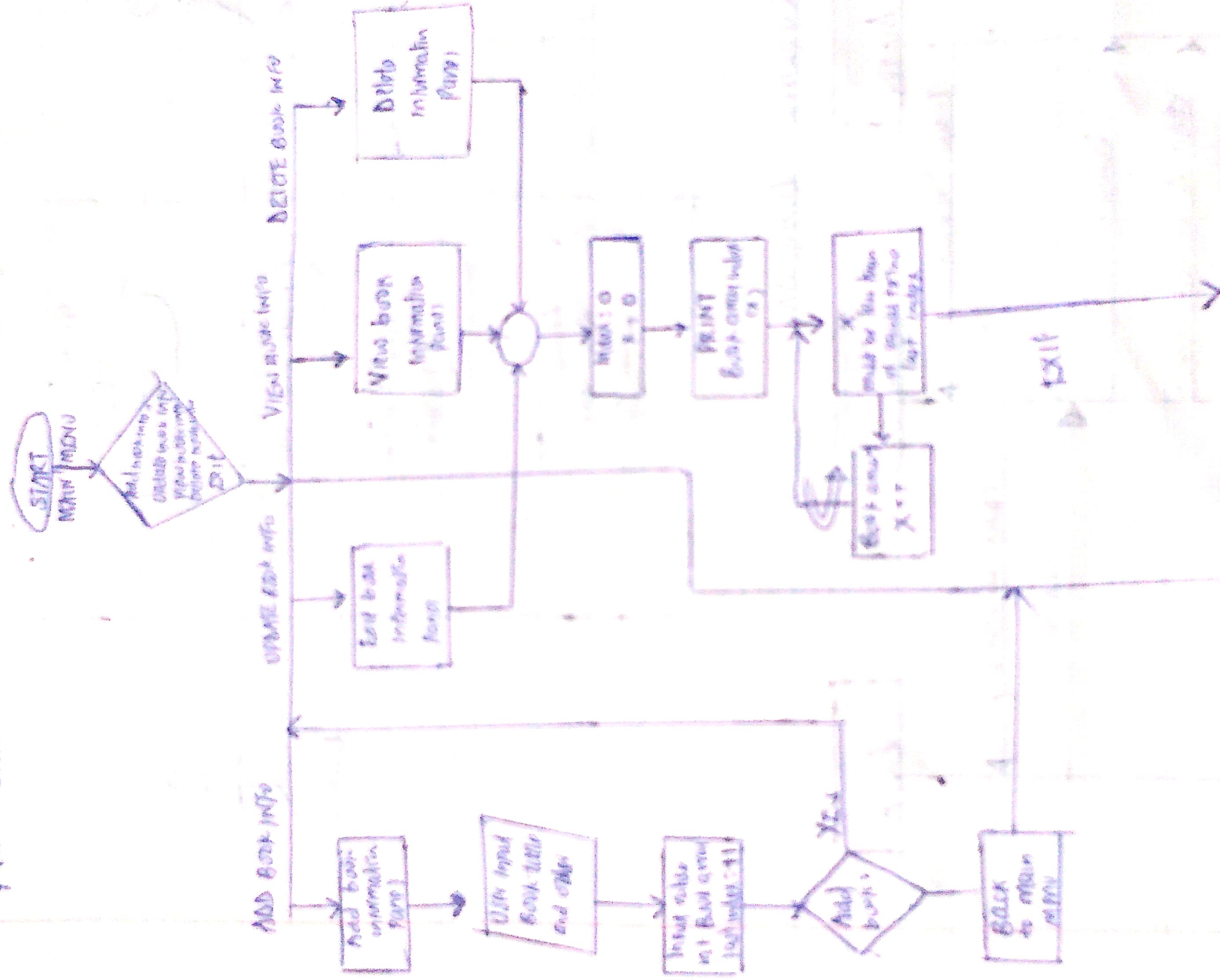
competition sabotage: There is a risk of competitors attempting to undermine the application's reputation or market position through negative reviews, misinformation or hacking attempts.

User Resistance: Some librarians may resist the adoption of a new new library management system if they are accustomed to traditional manual processes or finding custom solutions.

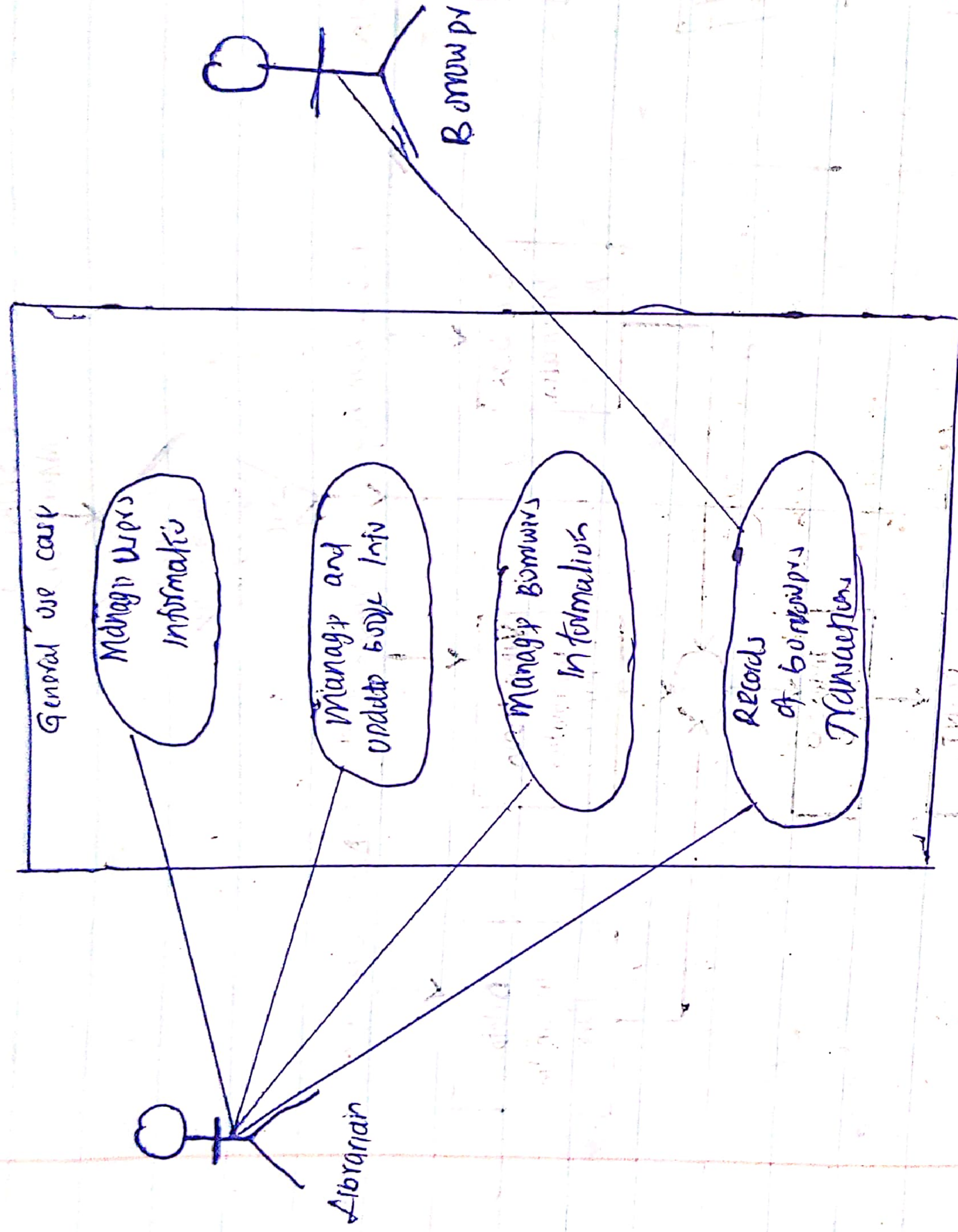
Class Diagram



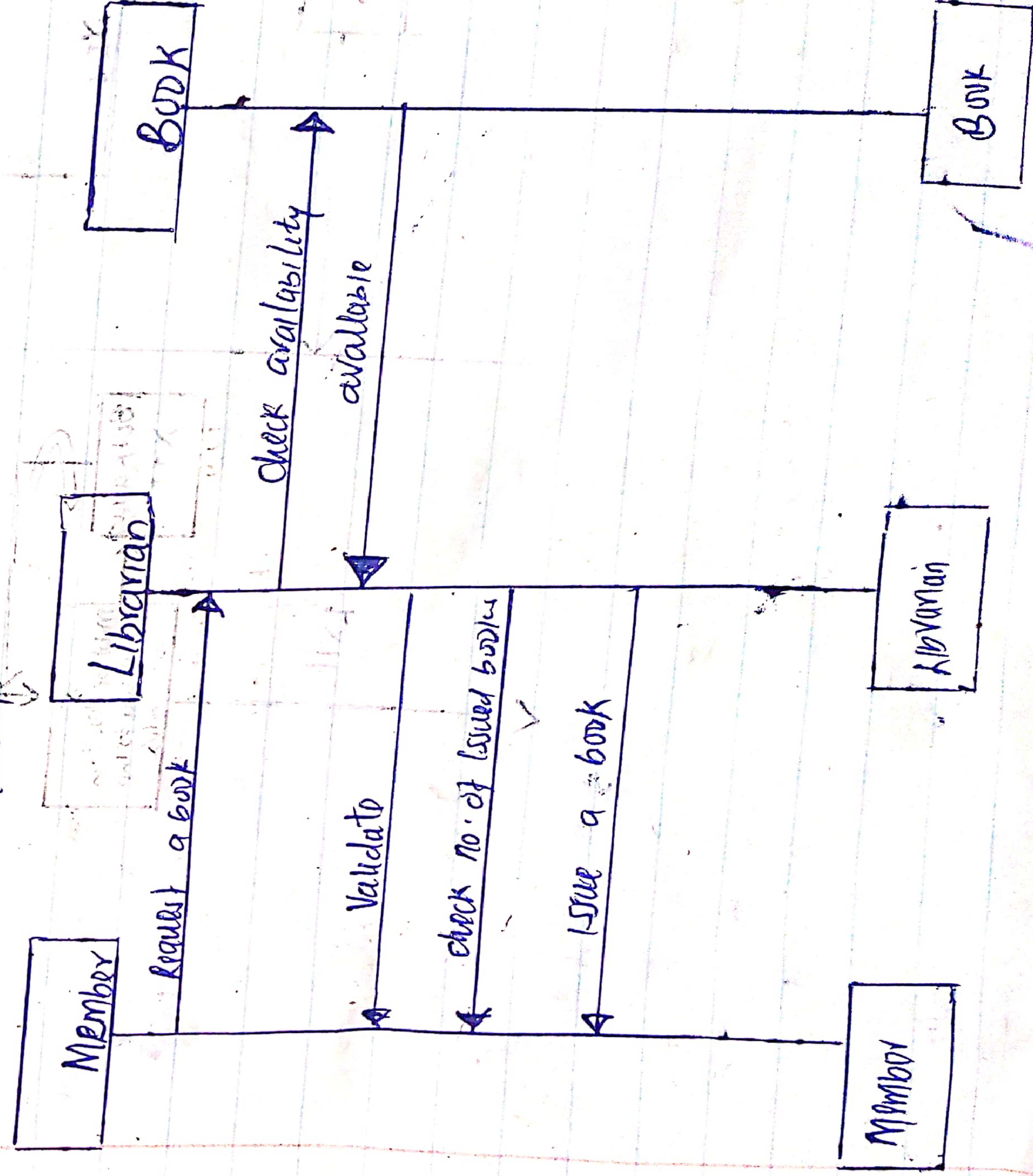
Flow Chart



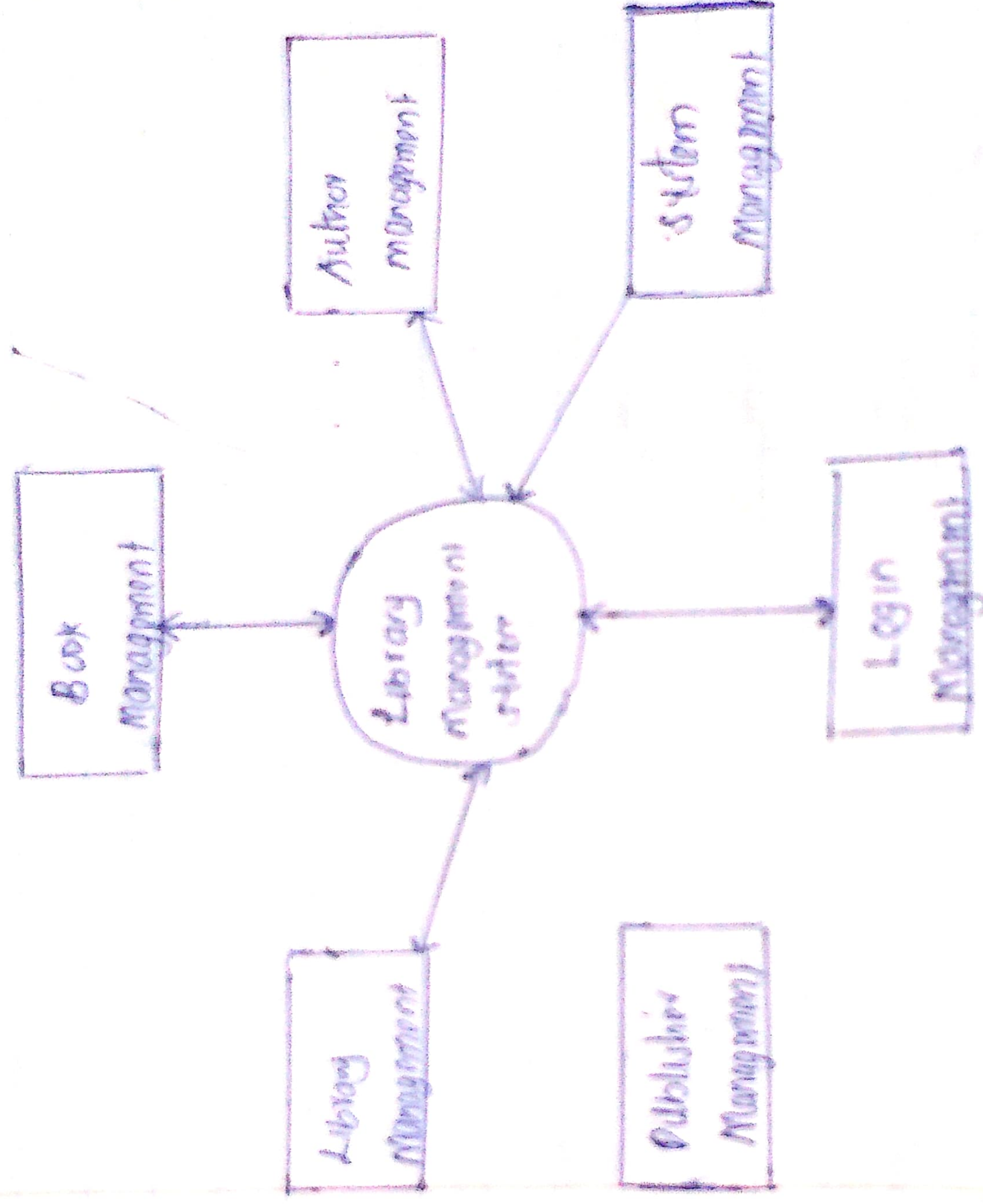
USE CASE DIAGRAM



SEQUENCE DIAGRAM



High level DFD



Zgna to m DFD - library management system