

INDEX

SI No	Description	Page No
1	Index	01
2	Case Study	02
3	Use Case Diagram	03
4	Activity Diagram	04
5	Class Diagram	05
6	Sequence Diagram	06
7	State Chart	07
8	CRC Card	08

Library Management System (Case Study)

The case study of Library Management System is library management software for the purpose of monitoring and controlling the reservation system a library. The library management system gives us the complete information about the library and the daily reservation, issue and return of books done in a Library. The library system must keep track of when books are borrowed and returned. The system must support librarian work. Librarian maintain the record of new books and retrieve the details of books available in the library and mainly focuses on basic operations in a library like adding new member, maintains the list of all the member of library, new books, and up new information, searching books and members and facility to borrow and return books.

The customized system will allow book lovers to register as a borrower for which it is mandatory to pay a registration fee. A borrower cannot borrow more than 5 books from the library. A borrowed book has a period of a month. By end of a month from the borrowed date, the borrower must return the book. The borrower will be notified after one week of the due date of return, after delay of 2 weeks there will be a fine imposed on the borrower calculated based on the number of days in delay. This will lead to a suspension for the borrower. If the borrower has been fined 3 times like this, he/she will no longer be considered to be benefitted from the library services and will result in an exclusion.

Use Case Diagram

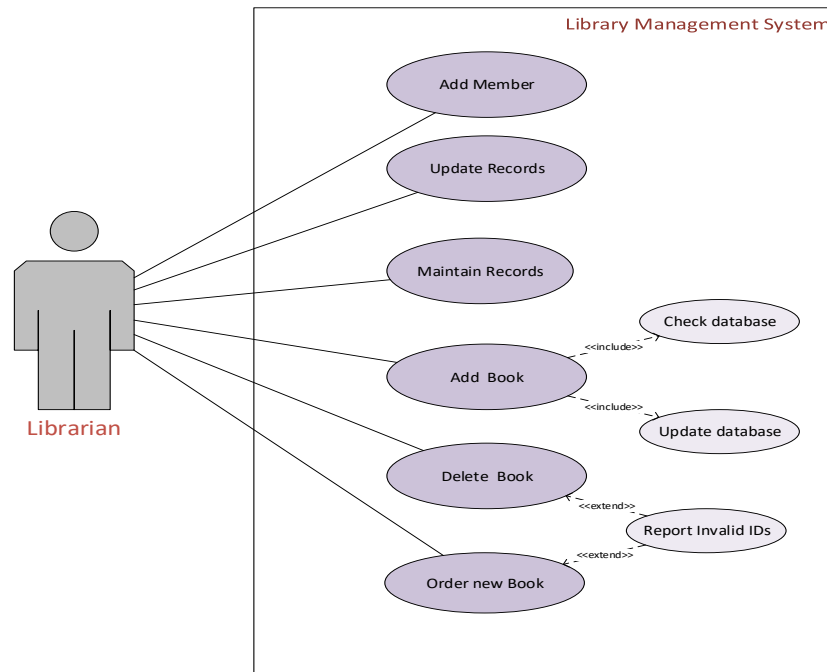


Figure 1.1 Use case diagram for Librarian

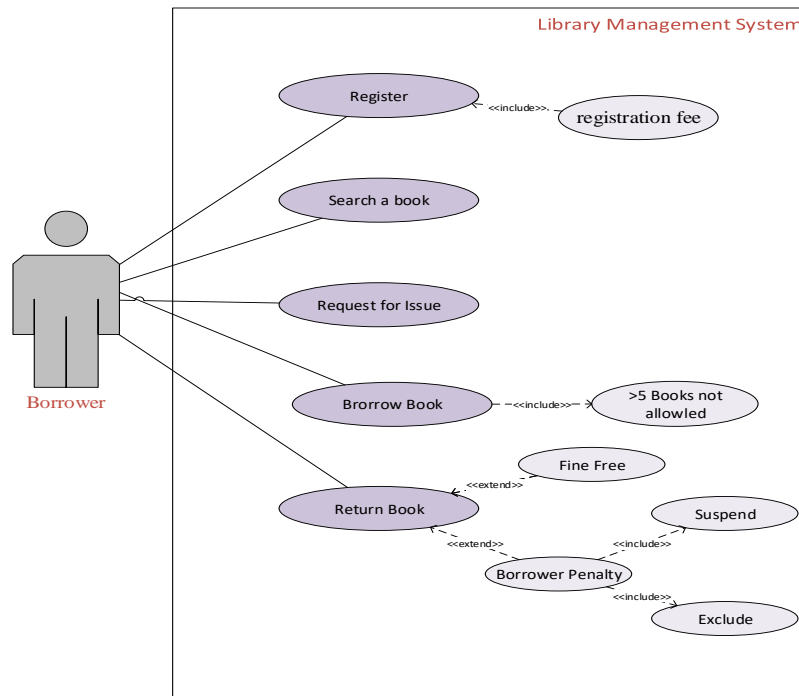


Figure 1.2 Use case diagram for Borrower

Activity Diagram

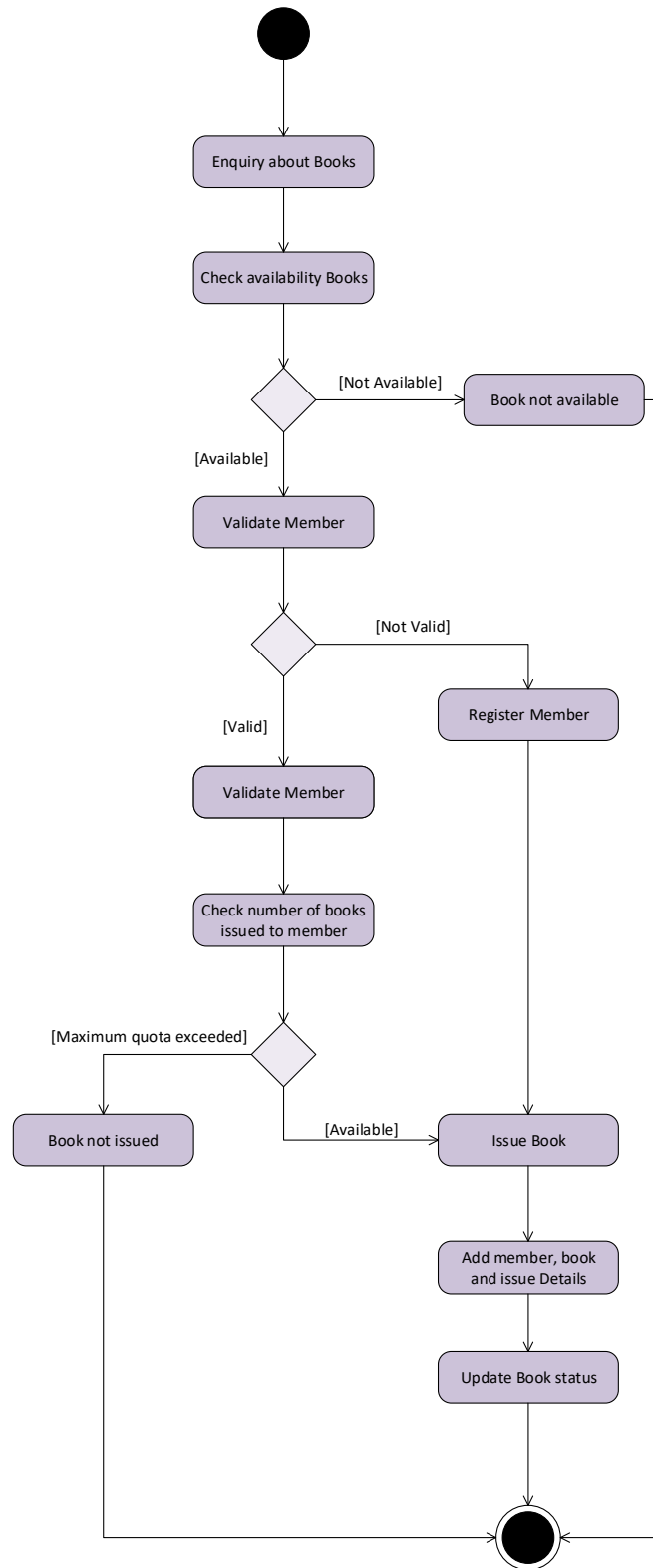


Figure 2 Activity diagram

Class Diagram

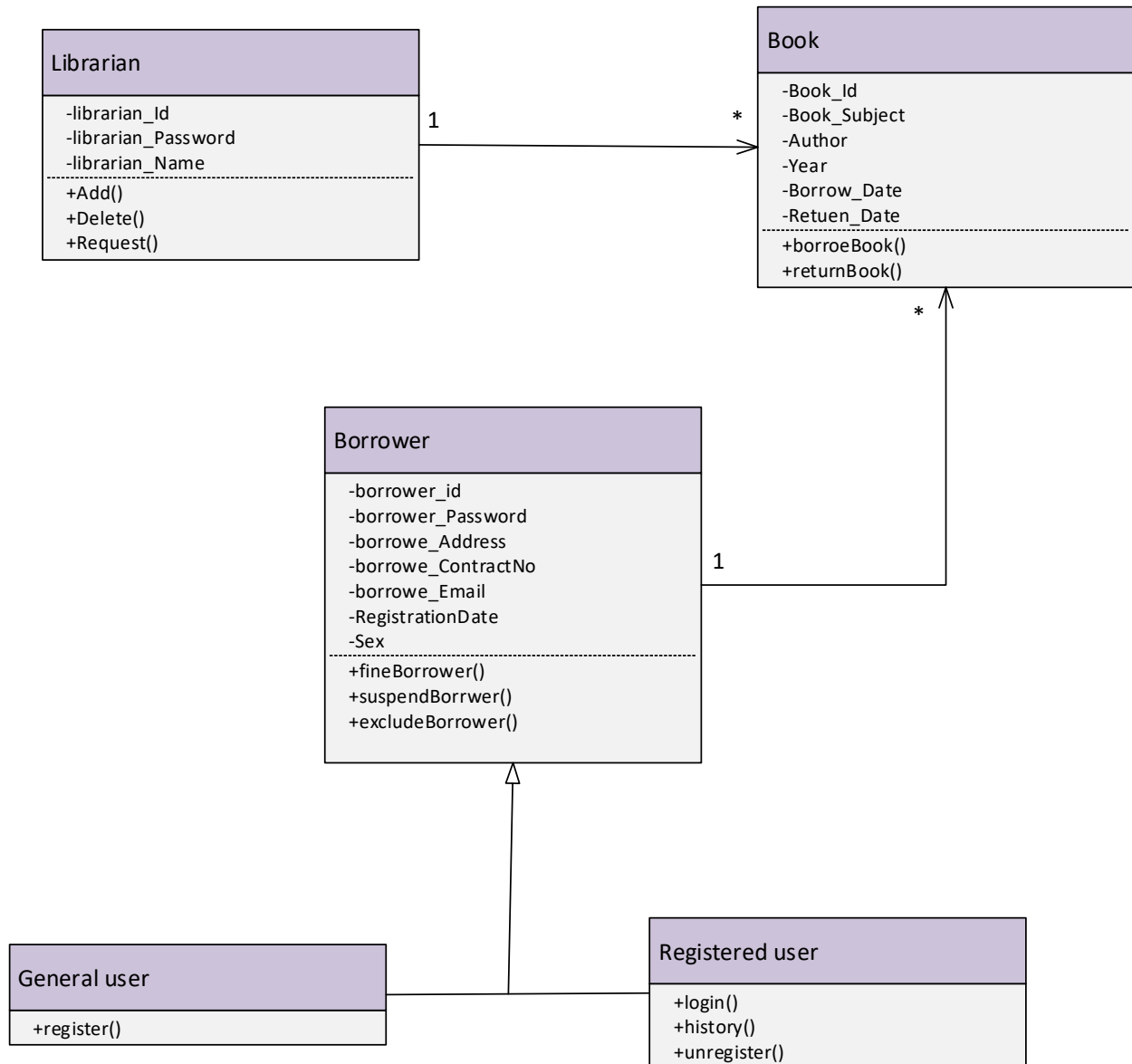


Figure 3 Class diagram

Sequence Diagram

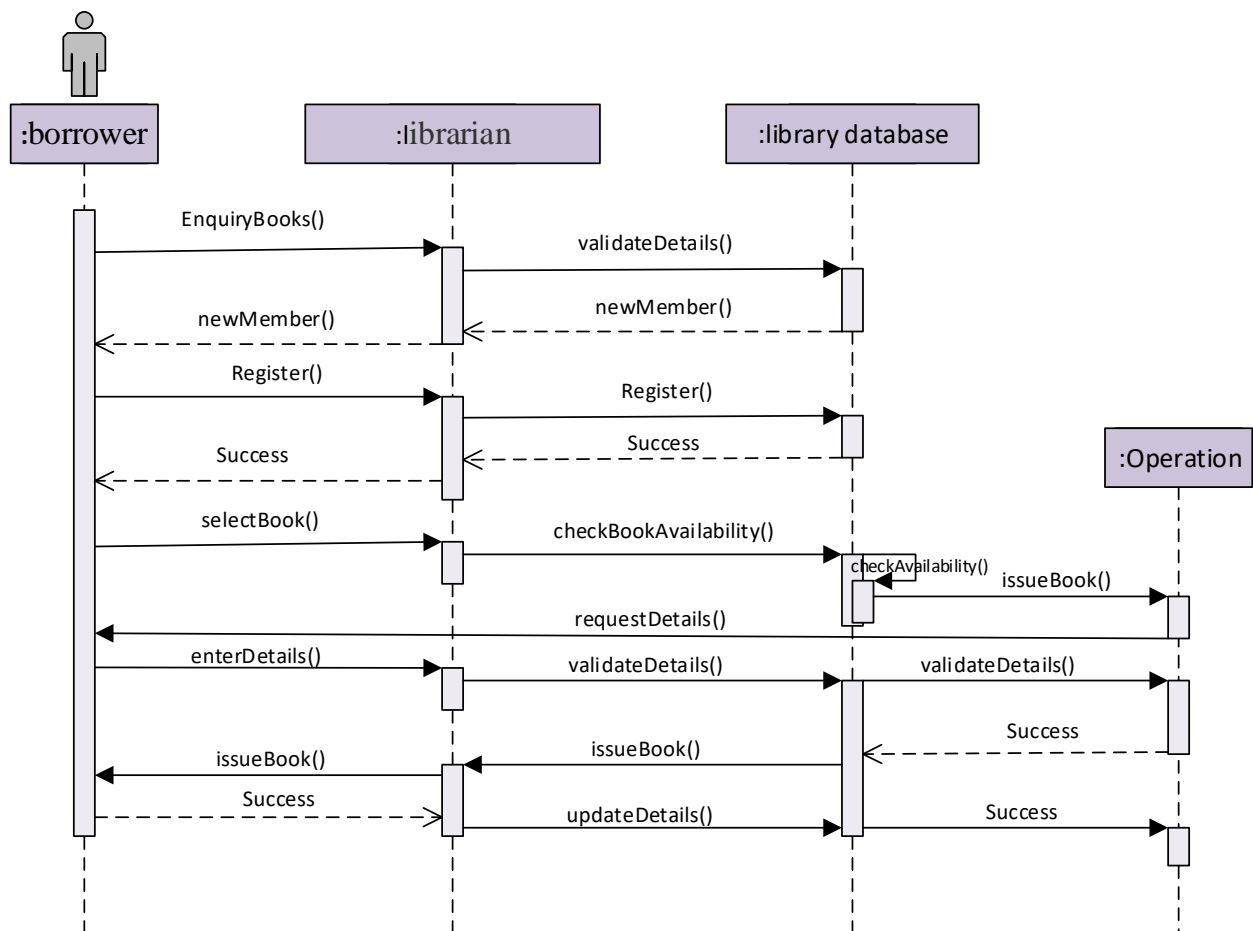


Figure 4 Sequence Diagram

State Chart

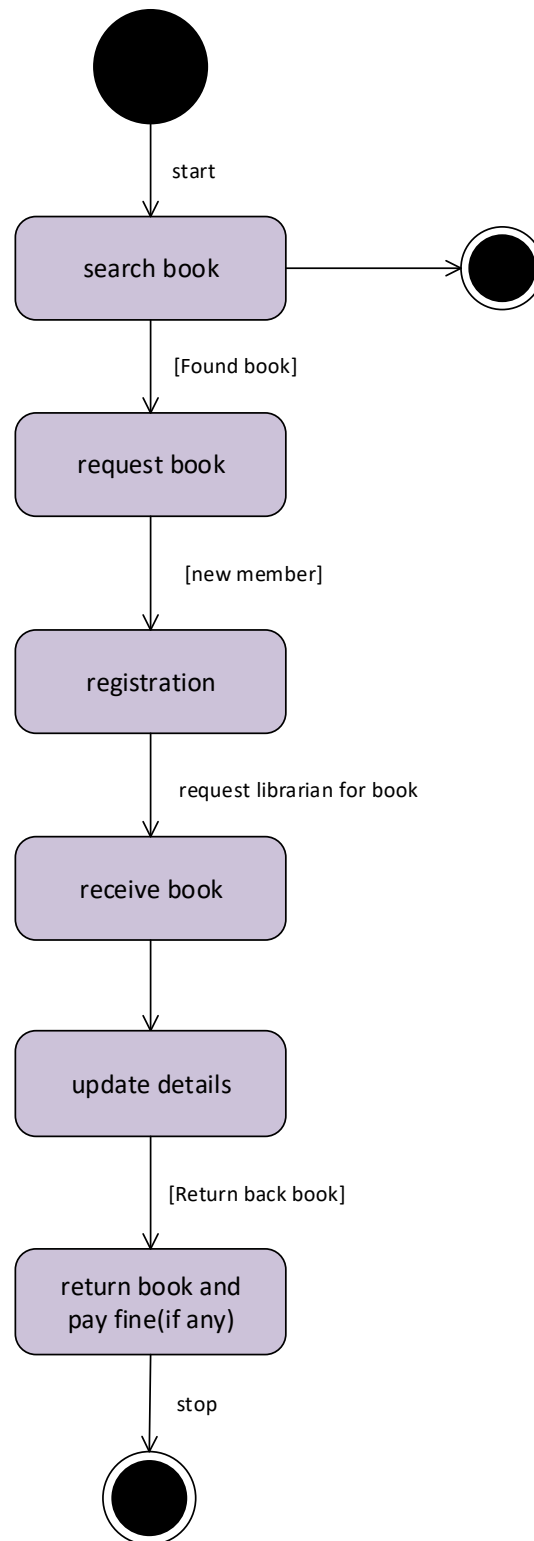


Figure 5 State Chart

CRC Card

Class Name Book	
Responsibilities	Collaboration
Book information	Librarian Borrower

Class Name Borrower	
Responsibilities	Collaboration
Borrow book Return book	Librarian

Class Name Librarian	
Responsibilities	Collaboration
Add Member Add Book Maintain Records	

Figure 6 CRC Card