American International University-Bangladesh (AIUB)

Department of Computer Science and Engineering

Faculty of Science &Technology (FST)

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CSC 00191- Object Oriented Analysis And Design (OOAD)

Section: H

Project Title: Library Management System

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Project Title : Library Management System

Project Overview:

A library management system is the most efficient system for managing all the processes involved in a Library in the most effective ways. Firstly, an user need to fill up library registration form by providing his/her NID or birth certificate. An librarian verifies the registration form and confirms the registration. After confirming the registration that person becomes the member of the library. If he provide wrong information then the session ends. After got membership librarian provide him a library card. A member can search any book according to his/her requirement from the search catalog. He can search by a book by the book name or author name from the catalog. After that a member can read book in the library. He also can borrow a book from the library. If any member wants to borrow a book then the librarian issue the book to the member. Librarian add new books and remove unnecessary books from the library and after adding or removing some books he updates the catalog of the library. A member should return the borrowed book within a limited time period to the librarian. Members need to pay fine for late returning. If a member regularly visited the library than he promoted to special member and special member gets reward. All the information of the library are stored in the library database.

User Groups:

i> Users

ii> Members

iii> Special Members

iv> Librarian

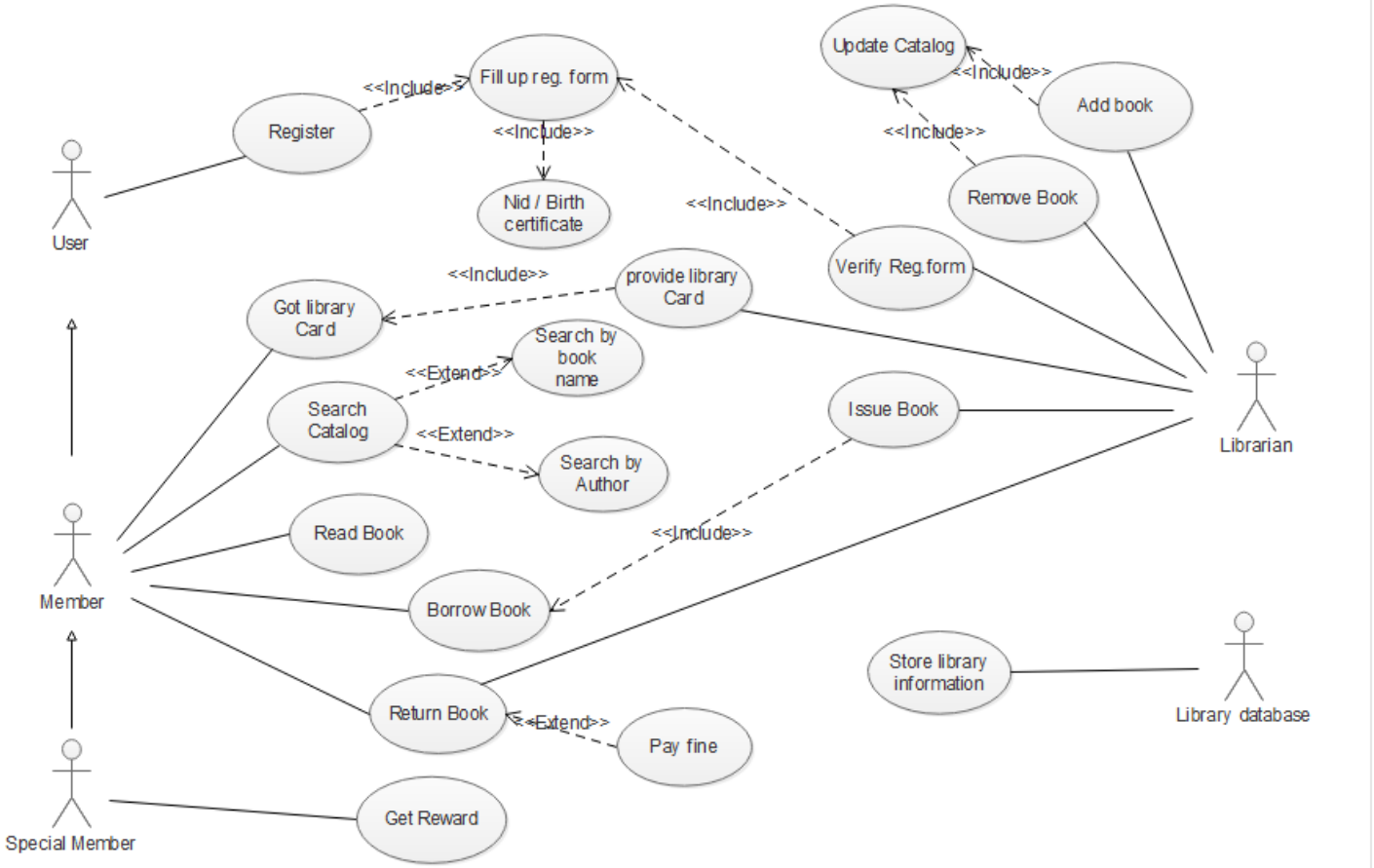
Component:

i> Registration component
ii> Verify component
iii> Card issue component
iv> Search catalog component
v> Issue book component
vi> Update catalog component
vii> Library database component

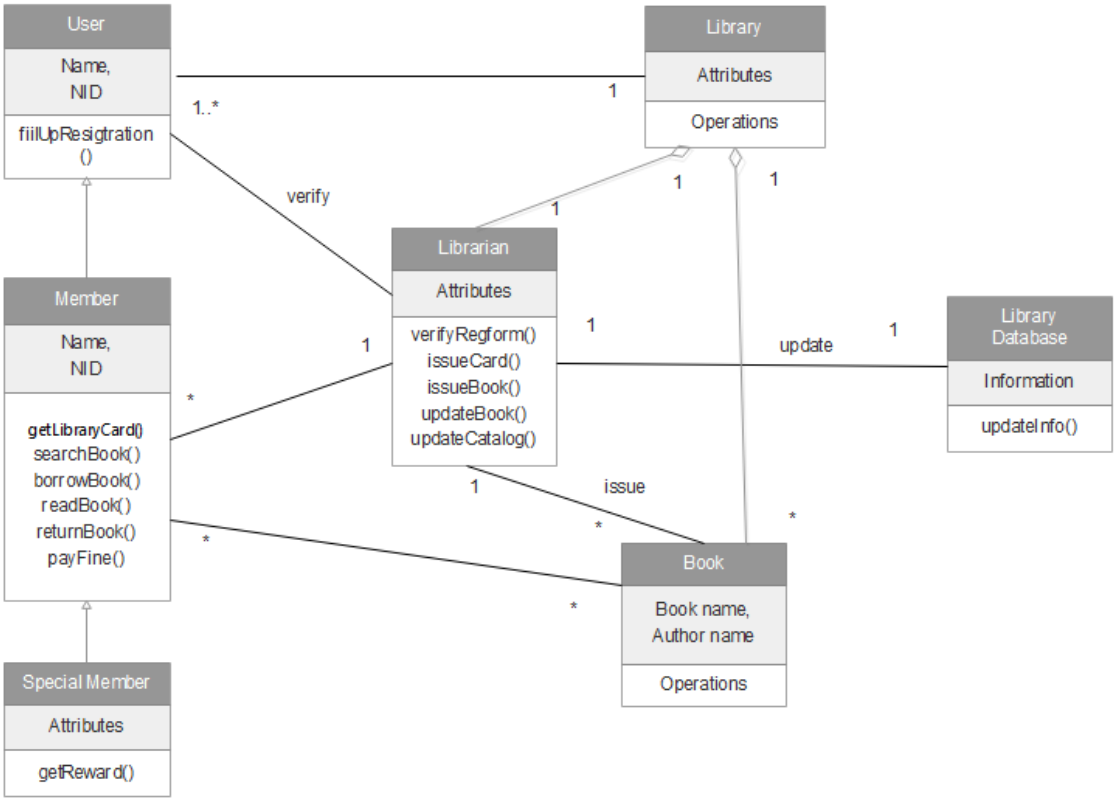
Justification:

A Library management system is a software that uses to maintain the record of the library. It contains work like the number of available books in the library, the number of books are issued or returning or renewing a book or late fine charge record, etc. Library Management Systems is software that helps to maintain a database that is useful to enter new books & record books borrowed by the members, with the respective submission dates. Moreover, it also reduces the manual record burden of the librarian.

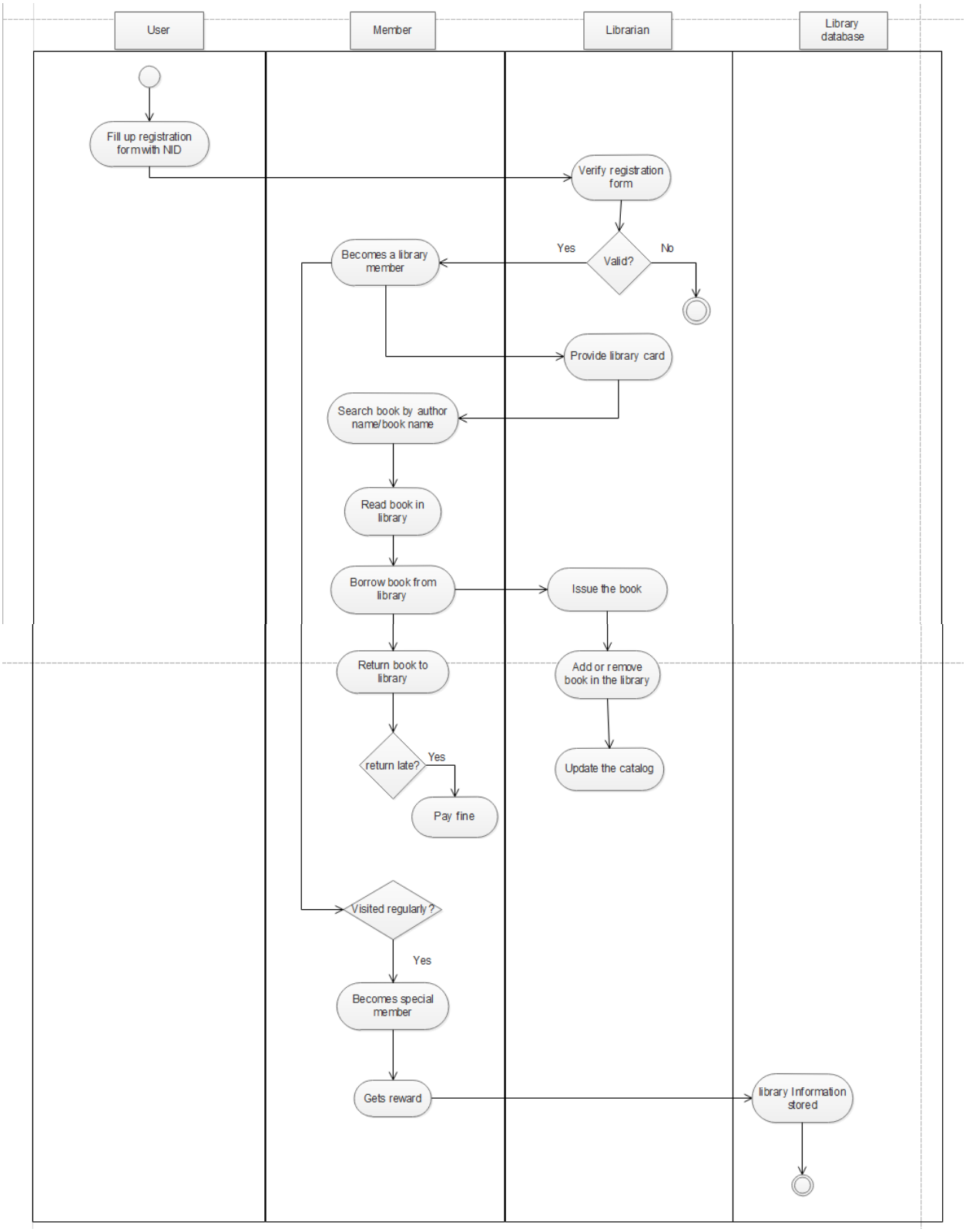
Overall Use Case of the project:



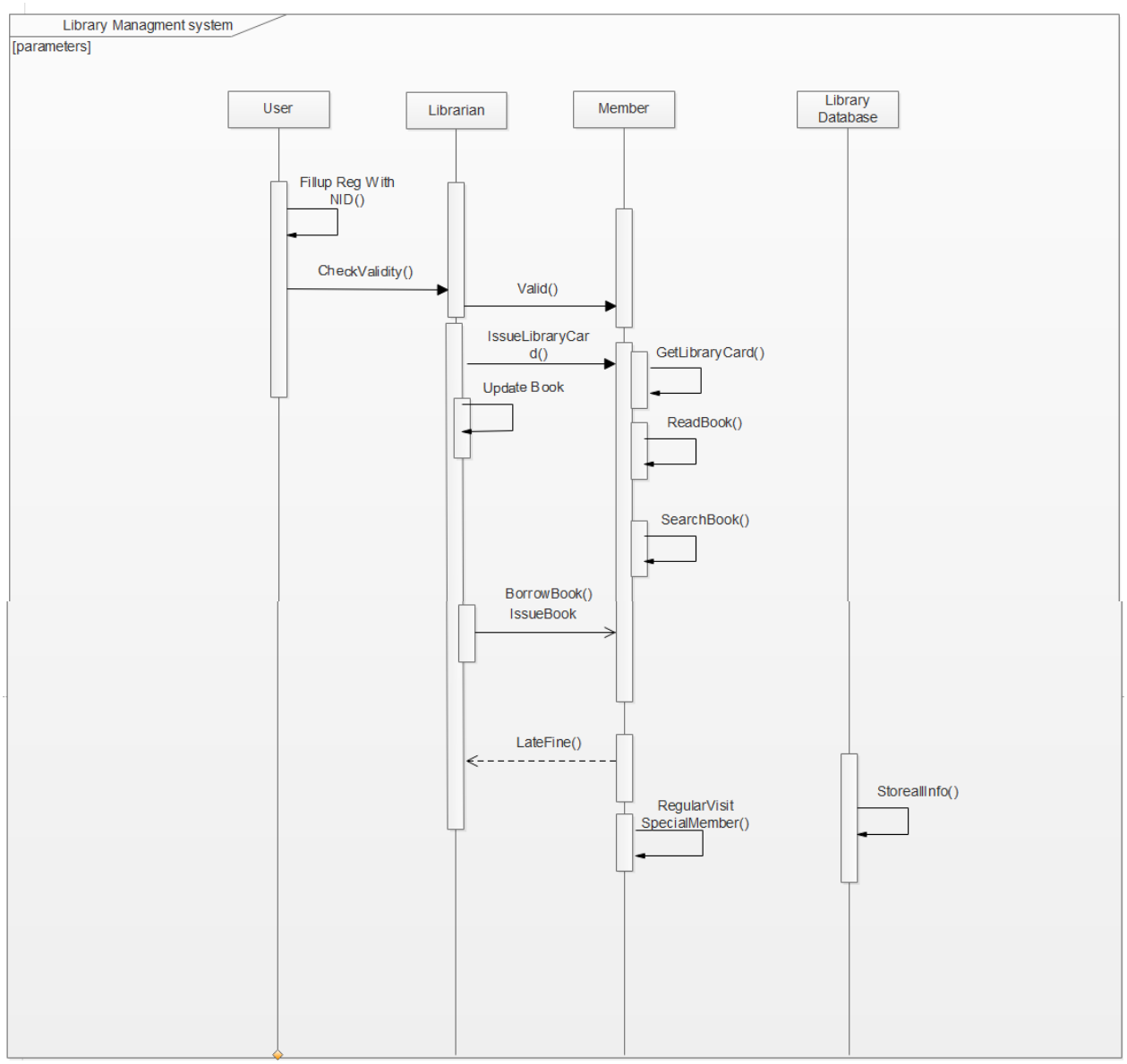
Class Diagram:



Activity Diagram:



Sequence Diagram:



Conclusion:

The project Library Management System is for computerizing the working in a library. This software allows storing the details of all the data related to library. The software takes care of all the requirements of an library and is capable to provide easy and effective storage of information related to books & users. The implementation of the system will reduce data entry time and provide readily calculated reports.