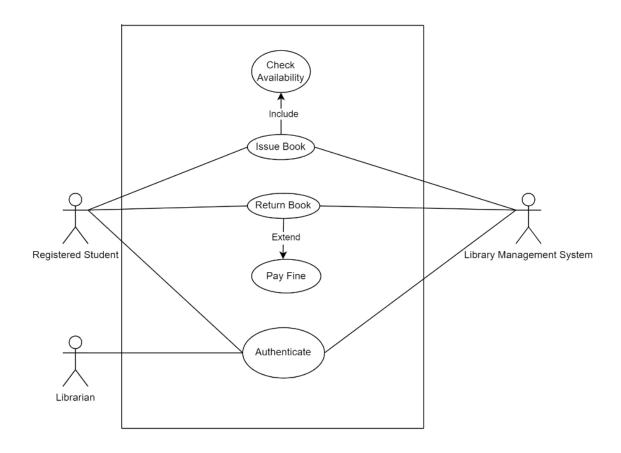
Yash Kodwani 202101418 Lab 7 Software

# QUESTION 1

# Use Case Diagram



User Case Doc

## **Use Case Documentation**

Use case name : Issue Book

Description: Represents the process Issuing book

Primary Actors : Registered Students Secondary Actors : Library, Librarian

### Pre-conditions:

• Registered student must be logged in and authenticated by the librarian.

• The book being issued must be available in the library.

#### Post-conditions:

- The book is marked as issued to the student.
- The due date for returning the book is set.
- The student is notified of the successful issuance.

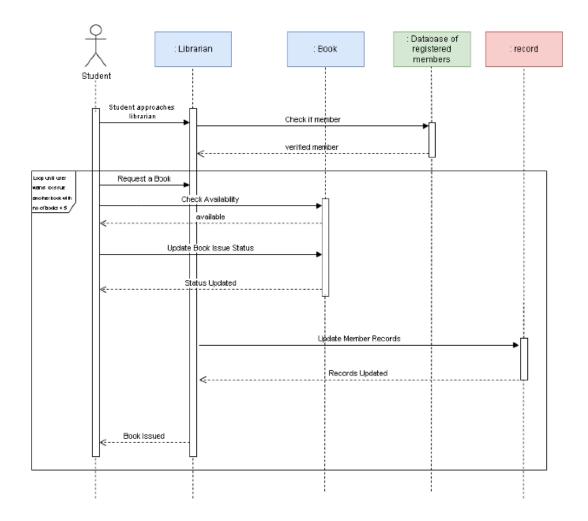
### Main flow:

- The registered student requests to issue a book.
- The system validates the student's authentication status.
- The system checks if the requested book is available.
- If the book is available, the system marks it as issued to the student.
- The system sets the due date for returning the book.
- The system notifies the student and the librarian about the successful issuance.

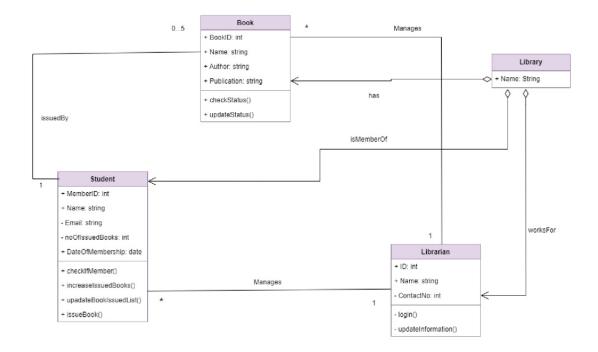
### Alternate Flows:

- If the book is not available, the system notifies the student that the book cannot be issued at the moment.
- If the user is not authenticated, the system notifies the librarian

Sequence Diagram



Class Diagram



# **QUESTION 2**

