

# ***SOFTWARE ENGINEERING***

## ***Lab Assignment: 7***

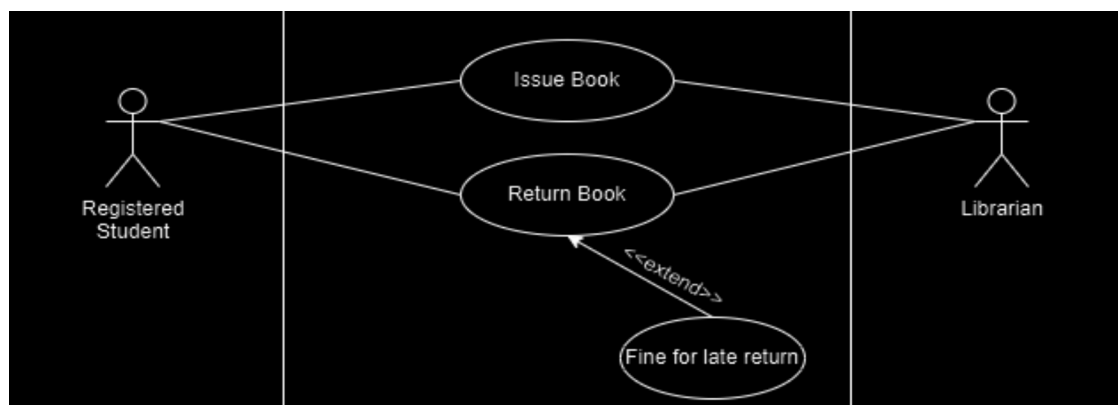
**Name: Jay Sanghani**

**Lab Group: 3**

**I'd: 202101185**

## **Question: 1**

### **Use case Diagram:**



**Description:** Students, faculty members, and staff all use this mechanism to distribute books. Students may borrow a book from the available inventory in this case, but they are required to return it. The pupils are required to pay a fine if the book is returned beyond the due date.

This section should provide a description of both the reason for using the use case and the expected outcome of the use case.

**Actors:** Student, Librarian, Library

**Preconditions:** Students must have to register in the library.

**Trigger:** students come to the library for issue and return a book.

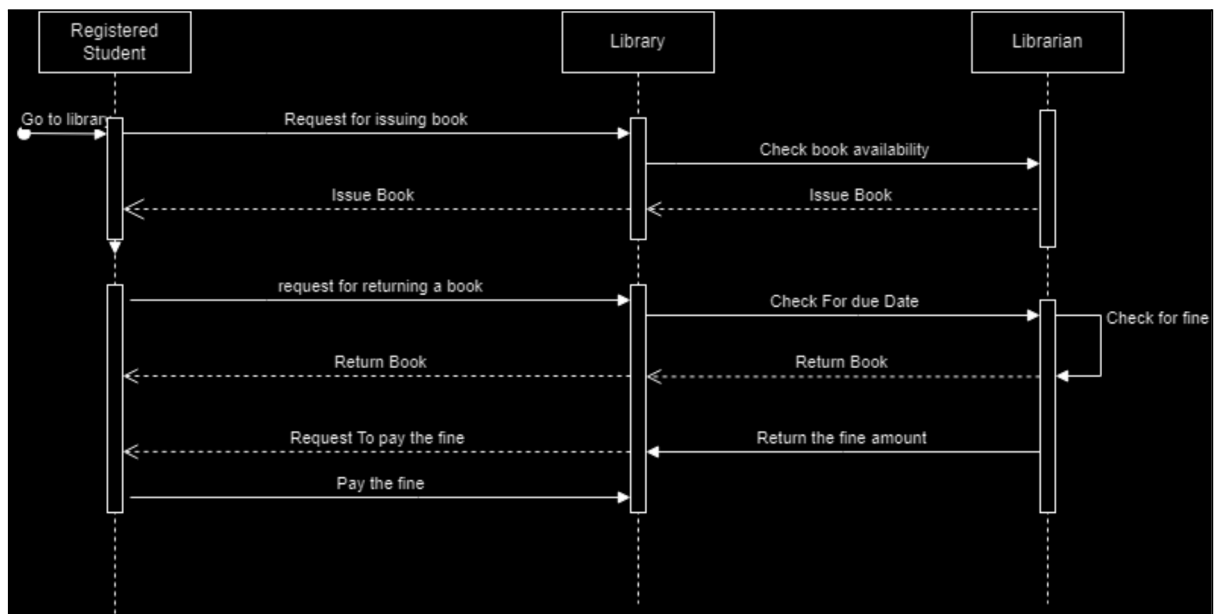
**Postcondition:** The entry of an issued or returned book must be added to the database of the library.

**Flow:** The student will come to issue a book to read, the Librarian will check for the availability of books in the library. Then he will issue the book and record it in the library database.

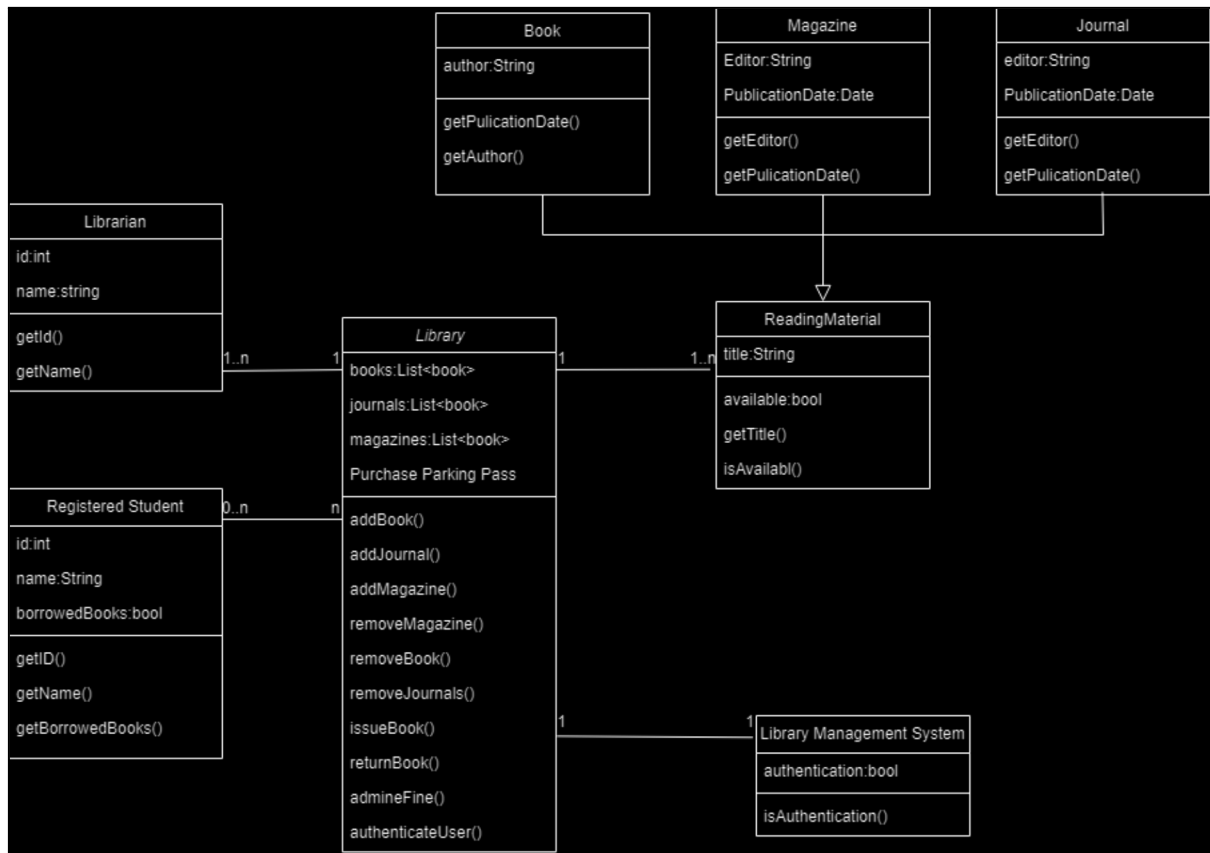
At the time of returning the book, the student will return the book, librarian will check the due date, if the student is already late in returning then he/she should pay the fine. Librarian will accept the fine and take the book back and update the database.

**Alternative Flows:** If the book which student wants to read is not available then the librarian will notify this to the student.

### Sequence Diagram:



### Class Diagram:



## Question: 2

### Sequence Diagram:

