# Software Engineering

IT-314 Lab-7

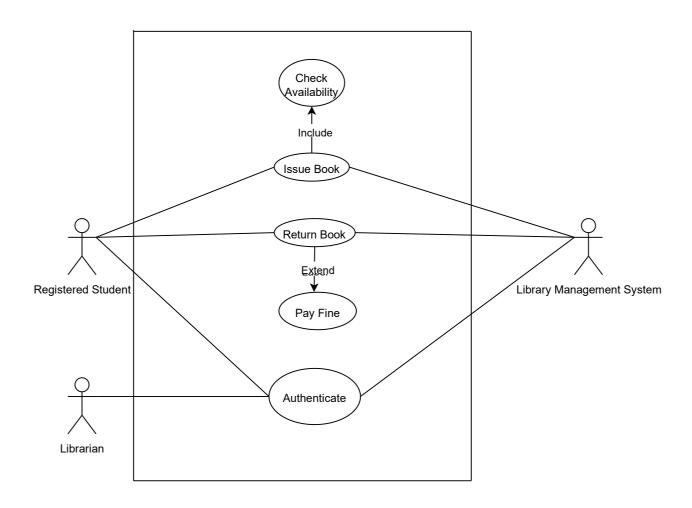
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Group -6

## 1) LIBRARY MANAGEMENT SYSTEM

## a) Use case Diagram



### **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.

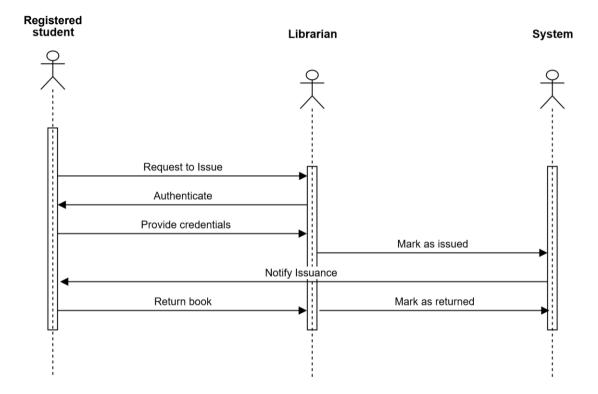
#### Main flow:

- 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.

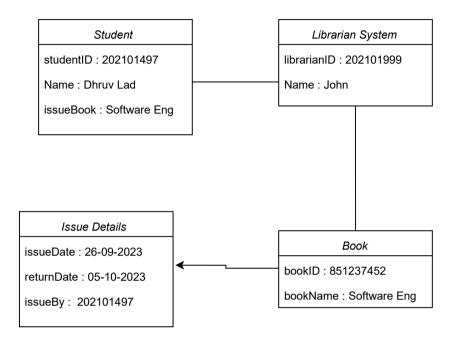
#### Alternate Flows:

- 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

## b) Sequence Diagram



## c) Class Diagram



## 2) Examination Management System

