

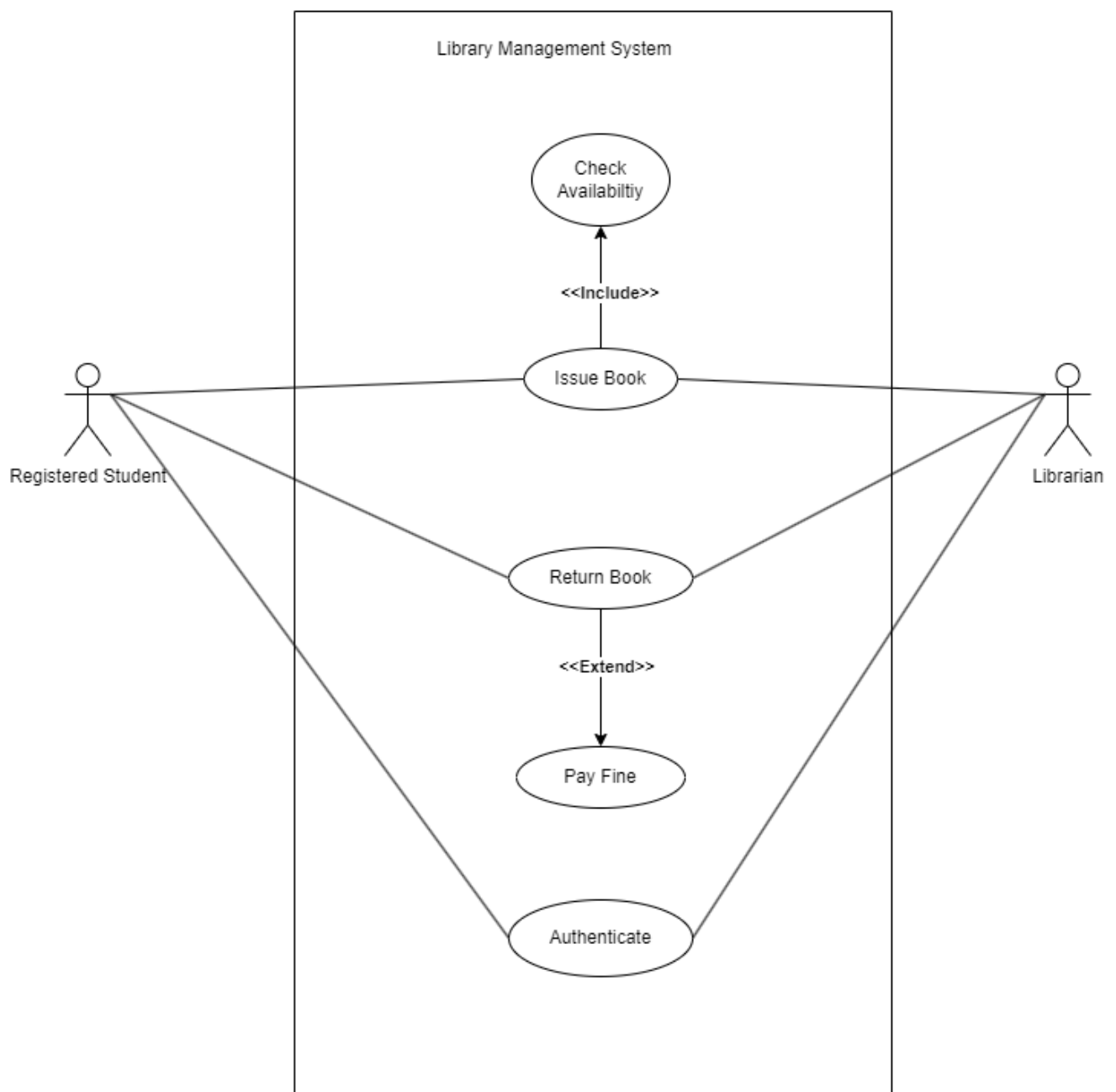
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**Lab Group: 5**

## 1) LIBRARY MANAGEMENT SYSTEM

### a) Use case Diagram



## **Use Case Documentation**

Use case name : Issue Book

Description: Represents the process Issuing bookPrimary

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.

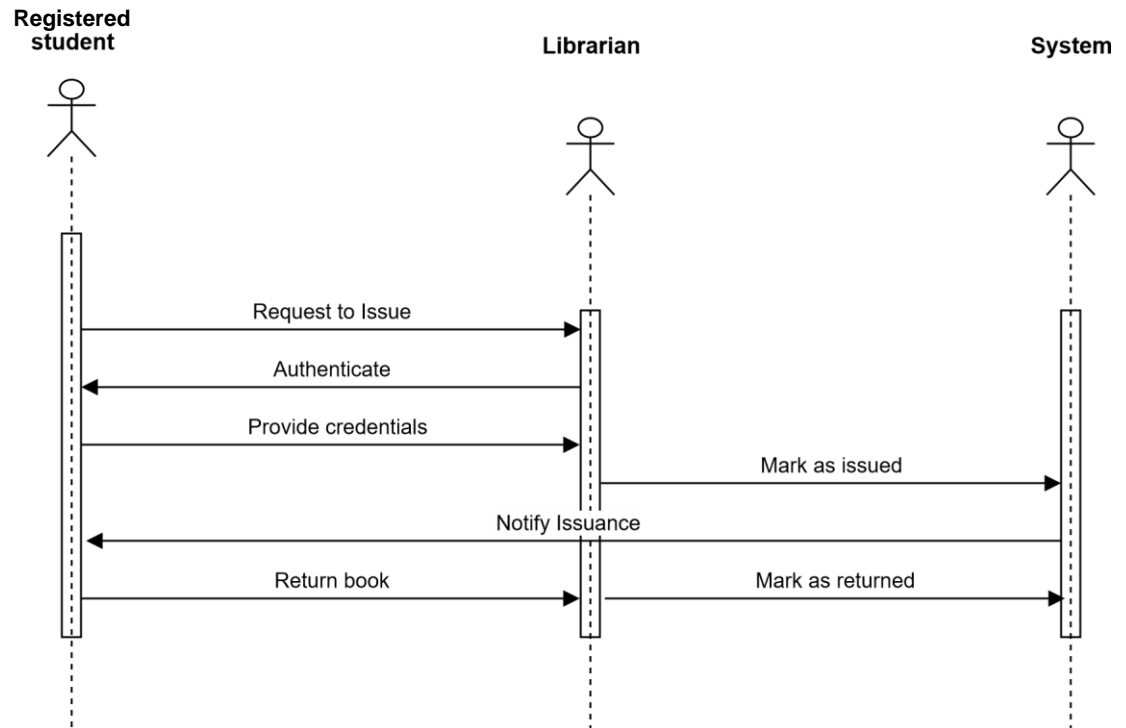
### **Main flow:**

- 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.

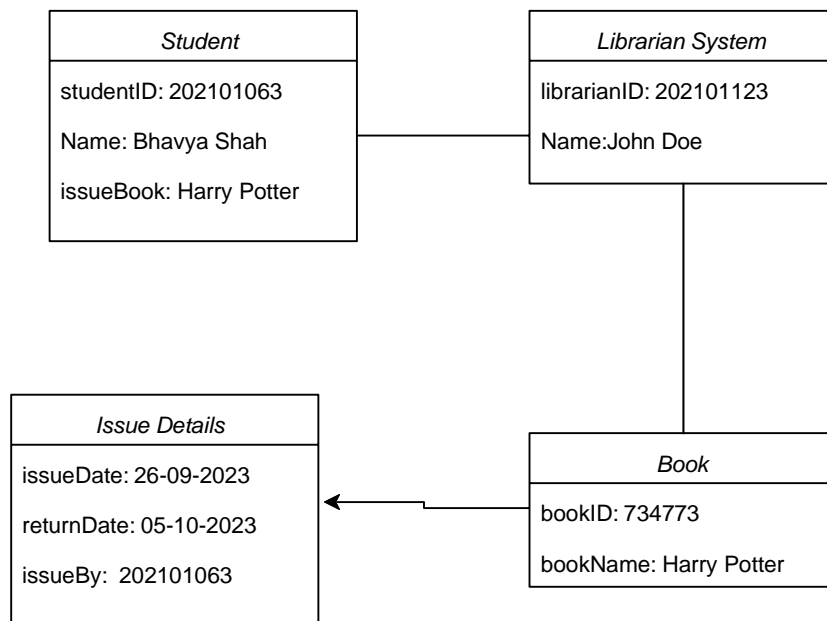
### **Alternate Flows:**

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

## b) Sequence Diagram



## c) Class Diagram



## 2) Examination Management System

