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# IT304 Computer Networks

## Lab-7 Report

### Domain Analysis Modelling and Sequence Diagrams

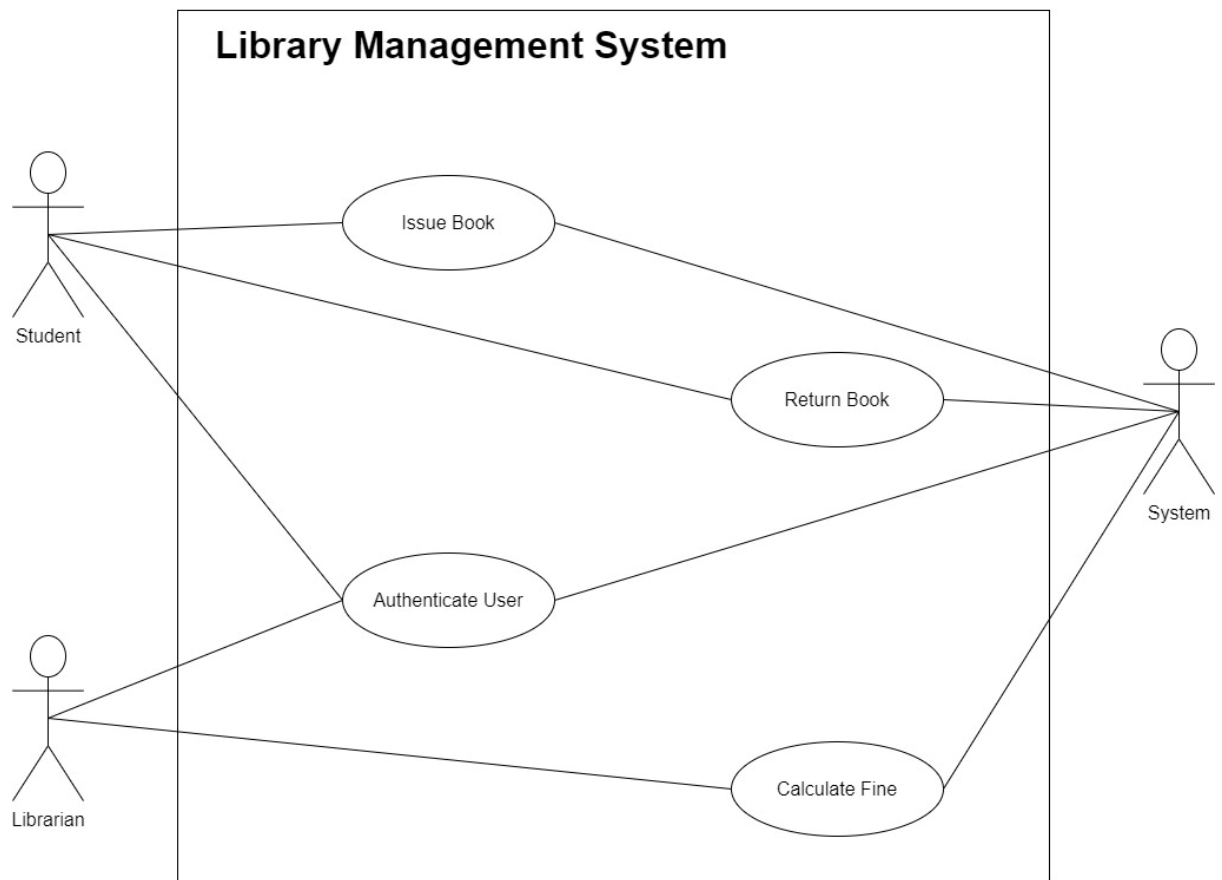
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# 1. Library Manangement System

## 1.1 Use Case Diagram



## 1.2 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.

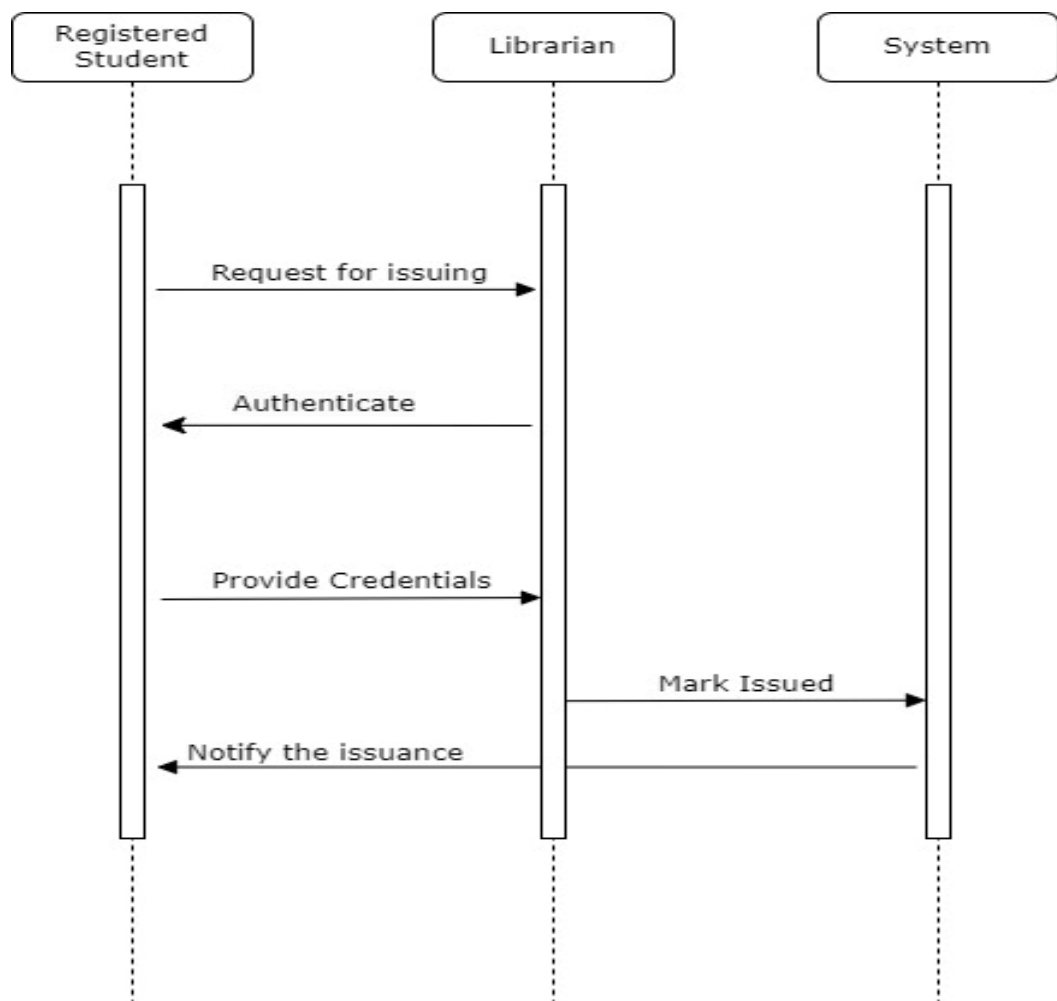
Main flow:

- 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.

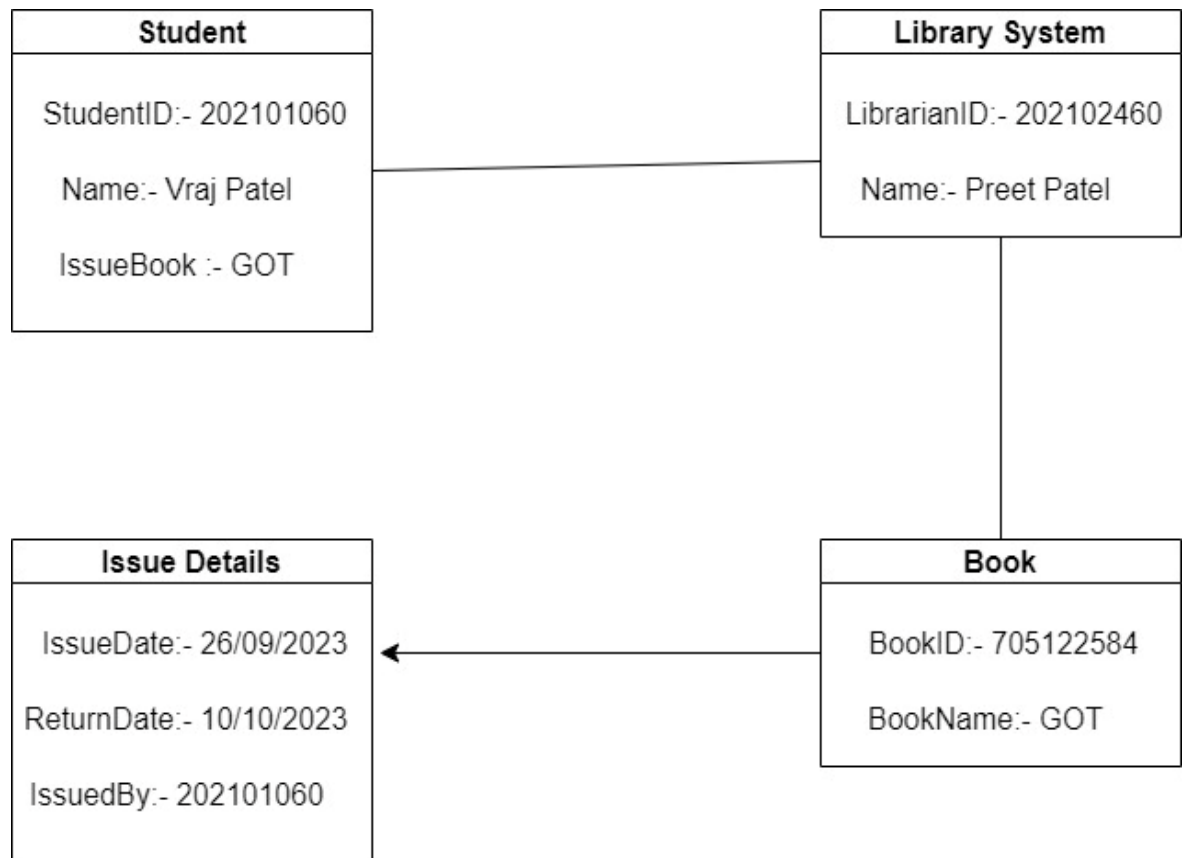
Alternate Flows:

- 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 libraria.

### 1.3 Sequence Diagram



#### 1.4 Analysis Object Diagram



## 2. Examination Management Process

