# IT314 Software Engineering LAB REPORT 7

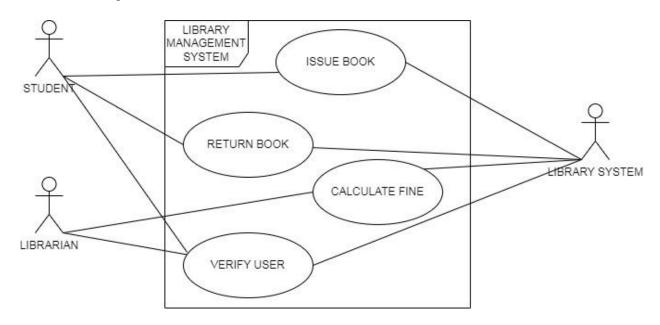
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Group 4

# Q1 Develop the following documents for the Library Management System.

### 1. Use case Diagram: -



Use Case Name: Issue Book

Description: This use case describes the process by which a registered student can issue a book from the library.

Primary Actor: Registered Student

Secondary Actor: Library and Librarian

Preconditions:

- The registered student must be logged in and authenticated by the librarian.
- The book being issued must be available in the library.

### Postconditions:

• 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.

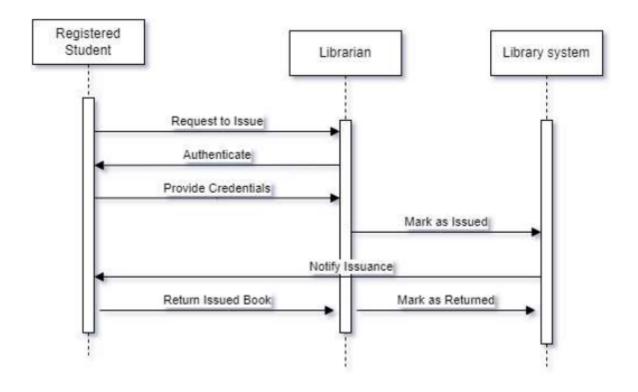
### Main Flow:

- 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 successful issuance.

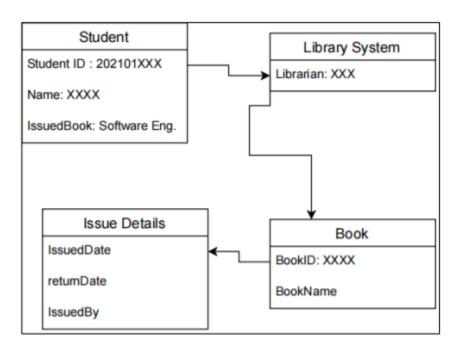
### Alternate Flows:

- 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.

## 2. Sequence Diagram: -



# 3. Analysis Object Diagram: -



Q2 Draw a sequence diagram for the given Examination Management Process.

