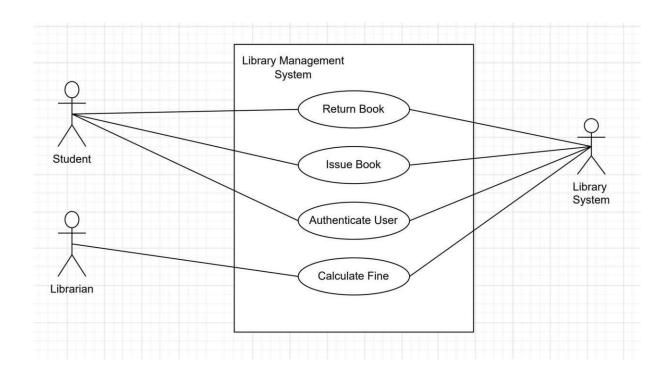
Name : Zala Dhruvrajsinh

ID: 202101242

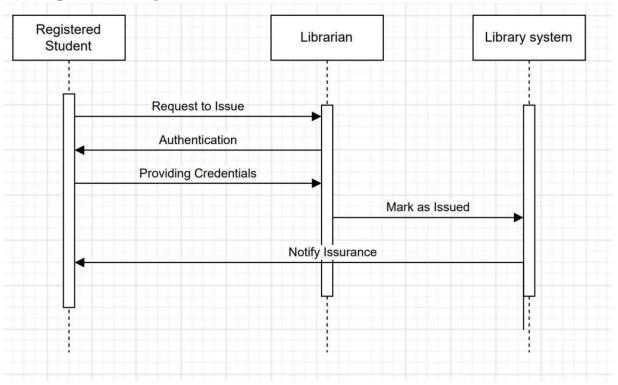
Group: 4

Lab : 7

Que 1 :- (1) Use Case Diagram



## (2) Sequence Diagram



Documenting "Issue Book" Use Case:

Use Case Name: Issuing a Book

Description: This use case outlines the process by which a registered student

borrows a book from the library.

Primary Actor: Registered Student

Secondary Actors: Library System and Librarian

### **Preconditions:**

- --> The registered student must log in and be verified by the librarian.
- --> The desired book must be available in the library's collection.

### Postconditions:

--> The book is marked as issued to the student.

- --> A due date for book return is established.
- --> The student receives a notification confirming the successful issuance.

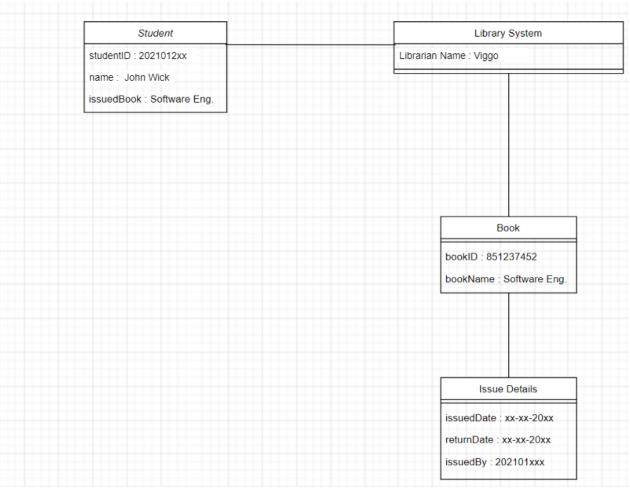
### Main Flow:

- --> The registered student initiates a book issuance request.
- --> The system verifies the student's authentication status.
- --> The system checks the availability of the requested book. --> If the book is available, the system records it as issued to the student.
- --> The system sets a due date for the book's return.
- --> Notifications are sent to both the student and the librarian to confirm the successful issuance.

### Alternate Flows:

- --> If the requested book is unavailable, the system notifies the student that it cannot be issued at the moment.
- --> In case the user's authentication fails, the system informs the librarian of the issue.

# (3) Object Diagram



# Que 2:-

