IT313: Software Engineering
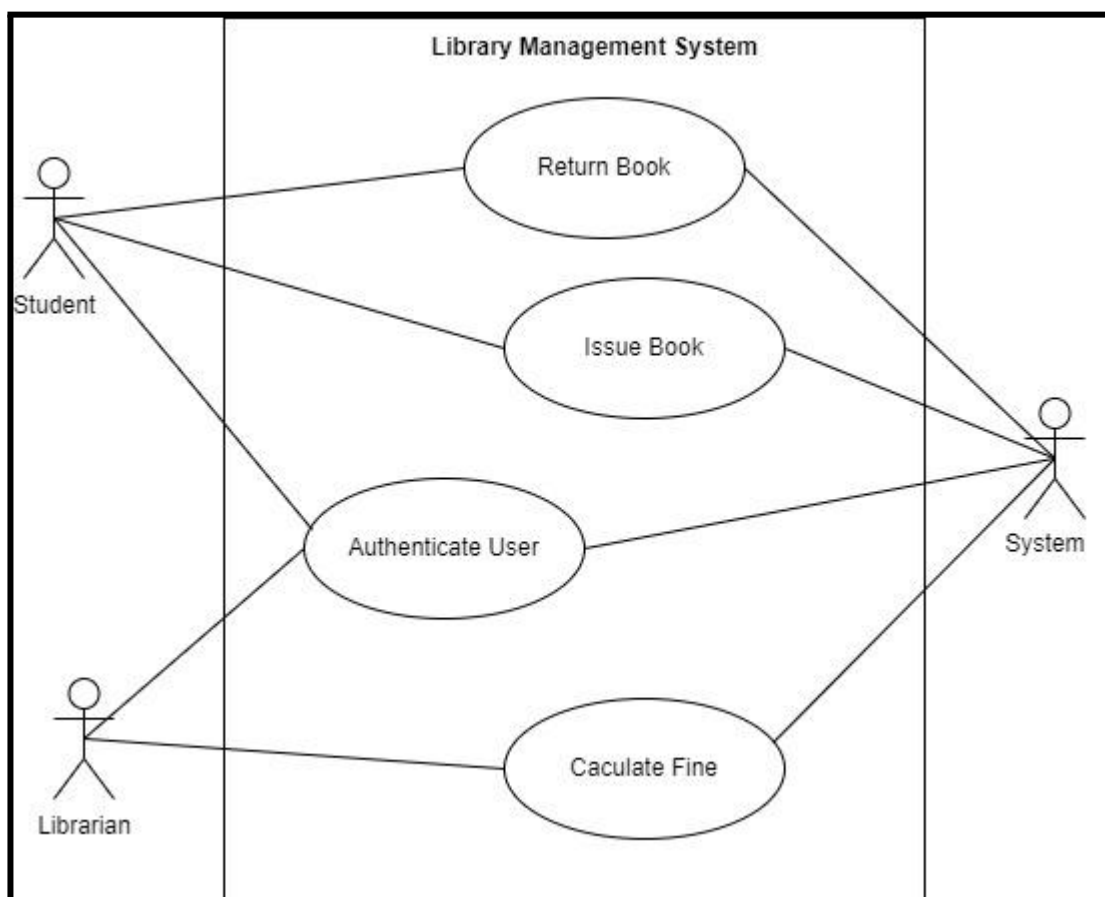
Name: Devansh Dharmendrakumar Dalwadi
ID: 202101184
Group : 3

Lab7 Domain Analysis Modeling & Sequence Diagram

Use Case Diagram:-

Documenting "Issue Book" Use Case:

Use Case Name:- Issuing a Book

Description:- The procedure for a registered student to borrow a book from the library is described in this use case.

Primary Actor:- Registered Student

Secondary Actors- : Library System and Librarian

Preconditions: -

- The enrolled student must sign in and have the librarian confirm their identity. - The library's collection must contain the required book.

Postconditions: -

- The student's name is listed as the issuer of the book. - A return deadline for books is set. - The student is informed that the issuance was successful.
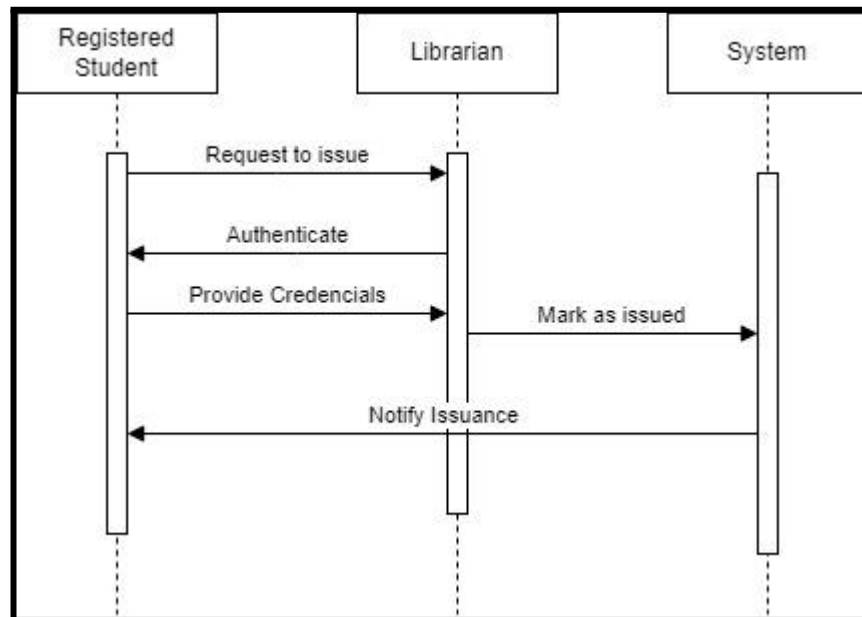
Main Flow:-

- A request for a book to be issued is made by the enrolled student.

- The student's authentication status is confirmed by the system.

- The system verifies whether the requested book is still available.

- The system notes that the book was issued to the single student if it was accessible.

- The mechanism establishes a return deadline for the book.

- To verify the successful issue, notifications are sent to both the student and the librarian.
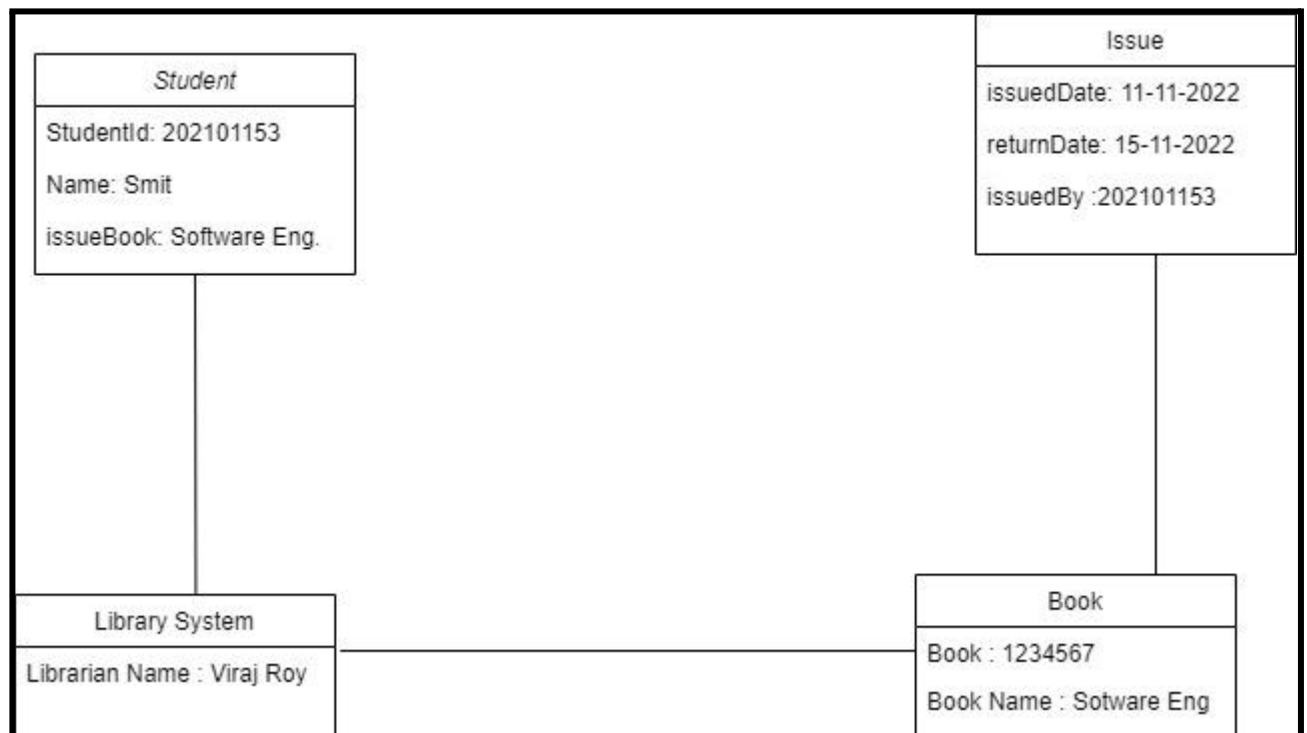
Alternate Flows: -

- The system alerts the student that the requested book cannot be issued at this time if it is not available.

- The system alerts the librarian if the user's authentication is unsuccessful.

Sequence diagram:-

Object diagram:-

Q2) Sequence Diagram:-