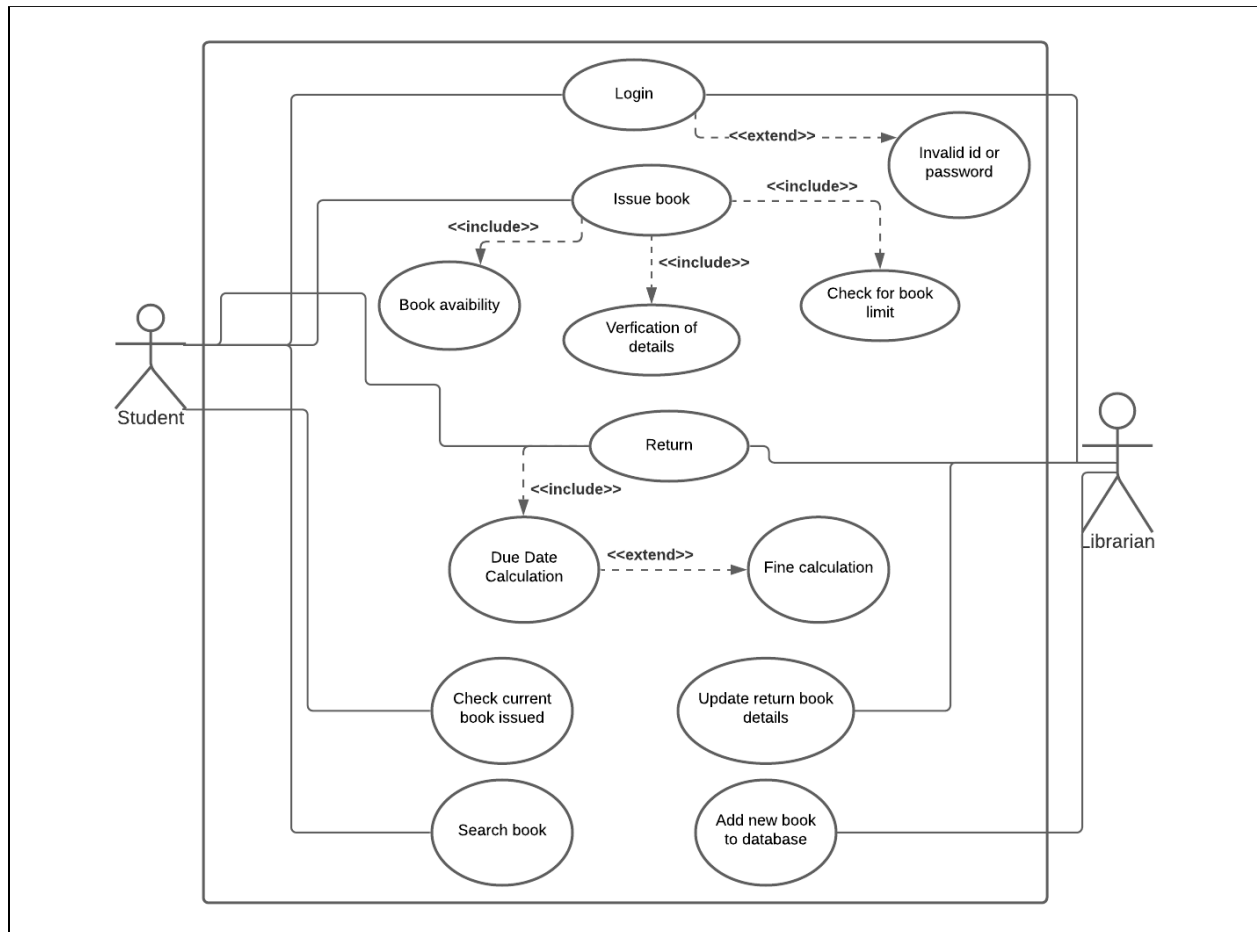# IT314: Lab
Domain analysis modeling and sequence diagram

Q1.

1. **Complete the use case diagram for the above problem text along with the use case**.

Done by: **201801202 Pratham Dhruv**
201801461 Ravi Makwana
201801011 Prashanth vejandla
201801240 Utkarsh Nalvaya

A1. Use case diagram for library management system:

Use case template for "issuebook":

Identifier: UC-1
Name: Issue a book.
Authors: Developers

Goal: issue the book.

Preconditions: The Student should be part of the institute and should have an account of the Library management system. Also, the student should not be exceeding the limit for the number of books allowed for the issue.

Postconditions: The library management system should issue a book and mark it in the database along with the due date.

Primary actor: Student

Participants (secondary actors): Librarian

Related requirements:
Functional : (i) Login (ii) Search a book (iii) Issue book (iv) Get availability of a book
Non-Functional : (i) Authentication, (ii) Reliability, (iii) Scalability, (iv) Responsive, (v)Availability (vi) Privacy , (vii) User friendly interface.

Related use cases:
- Verification of details
- Book availability
- Check for book limit

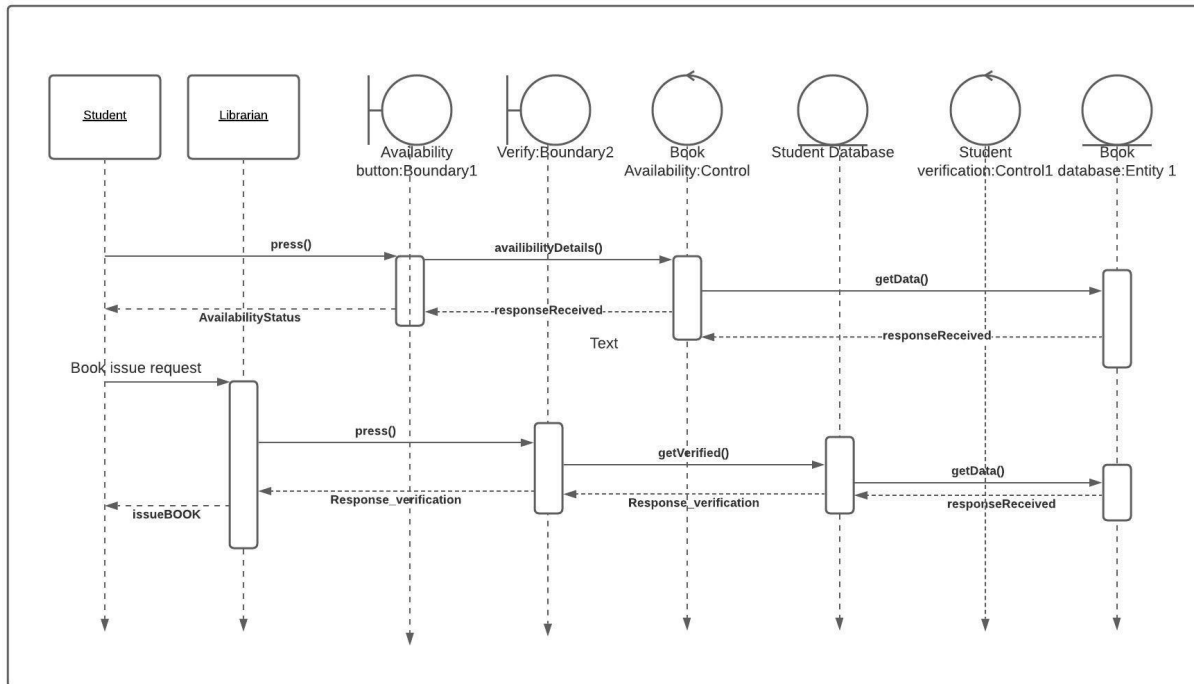**Description of events (scenarios)**
- The student will send a request to issue a book.
- Then the system will send the request to the librarian.
- The librarian will check the availability of the book by looking at the database.
- If the book is available & the student is not exceeding the limit of books to issue, the student will get the book with the due date and the database will be updated.
- Otherwise, the request will be pending & the student will get an appropriate message.

2. The sequence diagram for the issues book uses a case diagram.

Done by: 201801263 Shreeya Godbole
201801010 Sanket Jain
201801225 Chirag Patel

3. Draw the analysis object diagram for the "issue book" use case analysis.

Done by: 201801086 Divyesh Rohit
201801166 Rushi Patel
201801034 Devanshu Vithlani