### **QUESTION 1:**

### ->Documentation for use case "issue book"

- Name:issue book
- Actors:Students and librarian
- Authors:developers
- Goal: To issue and get a book
- Preconditions: Any student must be a part of the institute. Student
  must be verified by the library management system. Any book that
  is requested by student must be available. Student should not
  exceed the limit for number of books allowed for issue.
- Postconditions: When library management issue a book, they should make changes in the database, they should update the details of the student who is issuing book. If the book is not available or student has reached the limit the appropriate message should be given
- Description:- The student would request to issue a book, first the student details would be verified, and then the availability of book would be verified after which it would be verified that if the student is allowed to issue, if all of the above is verified the book would be issued and the librarian would mark due date. Otherwise, the request will be pending and the student will get an appropriate message.
- **Primary actor**:Student
- Participants:1)Librarian 2)Library database
- Related requirements:

1)functional :Login,search a book,issue a book,get availability of a Book

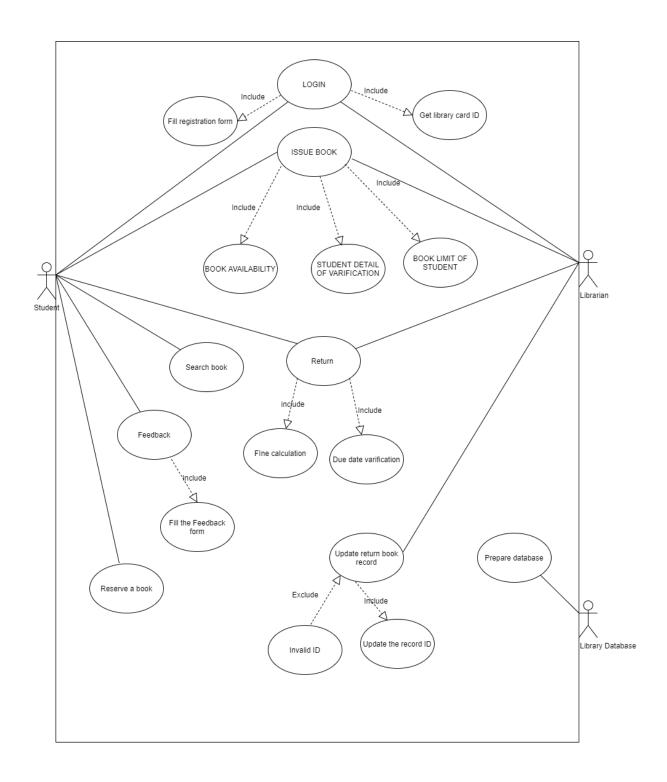
**2)non functional:**Authentication, scalability ,responsive ,privacy, Availability

#### Related use cases:

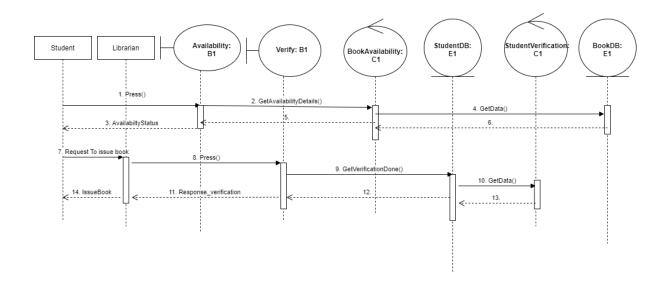
- 1)Register
- 2)Login
- 3)search and check availability

- 4)Return
- 5)check limit for student

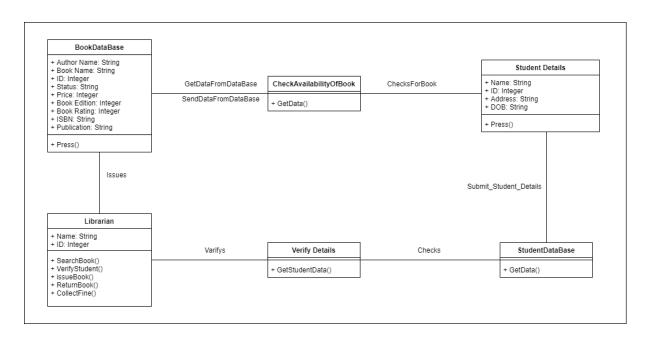
# ->Use case diagram



## ->sequence diagram:



## ->Object diagram:



## **Question 2:**

