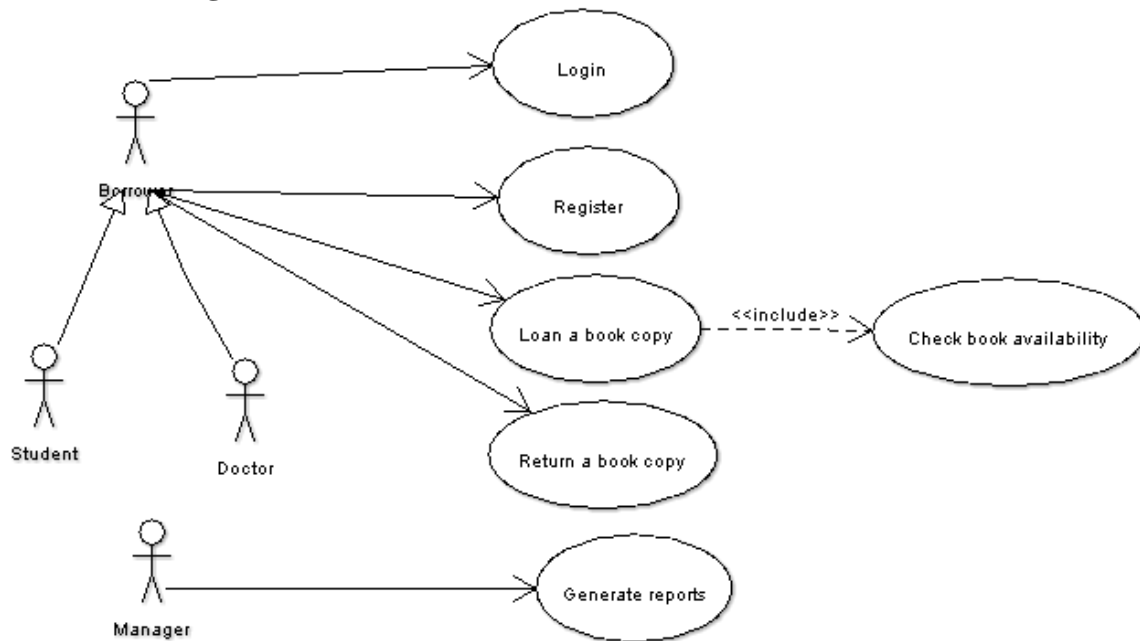


## Assignment #1(Model Answer):

### a) Use case Diagram:



### b) Return Book Copy Use case:

**Primary actor:** Borrower (Doctor or Student).

**Stakeholders and interests:**

- Borrower: wants fast search for, loan, and return books.
- Manager: wants to accurately record loan and delayed return transactions and satisfy borrower interests. wants to automatic generate transaction reports.

**Precondition:** Borrower should be identified and authenticated.

**Post-conditions:**

1. Returned Book Copy status becomes available, and the number of copies of book should be increased.
2. If there is a delay, it should be stored.
3. Loan transaction of the borrower should be removed.

**Main Success Scenario:**

1. Borrower chooses "Return Book Transaction".
2. Borrower enters Book ISBN and Copy No.
3. System computes the actual loan period.
4. System changes the book copy status to be available and increases the number of copies of the book.
5. System removes the loan transaction of the Borrower.

**Extensions:**

2a. Invalid ISBN and/or Copy No.

1. System signals error and asks Borrower to enter valid data.

3a. the actual loan period exceeds the demanded loan period.

1. A delay should be recorded.

**c) Activity Diagram of Return Book Copy:**

