**AIM:** To create a UML diagram of Library Management System.

PROBLEM STATEMENT:

      The system manages all activities in the library. Library contains two types of member's faculty and student. A member of library can barrow a book from library, if a book is not available for issue he can reserve the book, member can return the book to the library. A member can search and borrow books, magazines and journals. If a book is not returned within due date then system calculates fine and collects it from member. A librarian purchases the books for library. A clerk is responsible for issue or return of books. Librarian maintains everything in the library from books, journals and magazine etc.
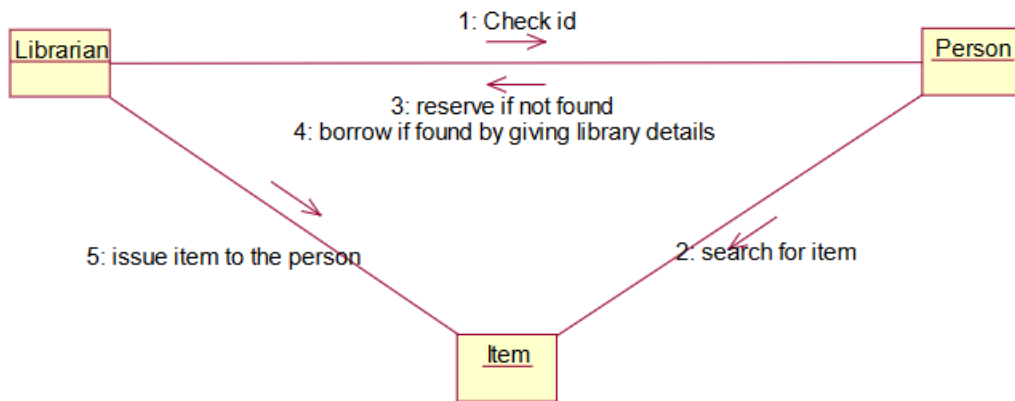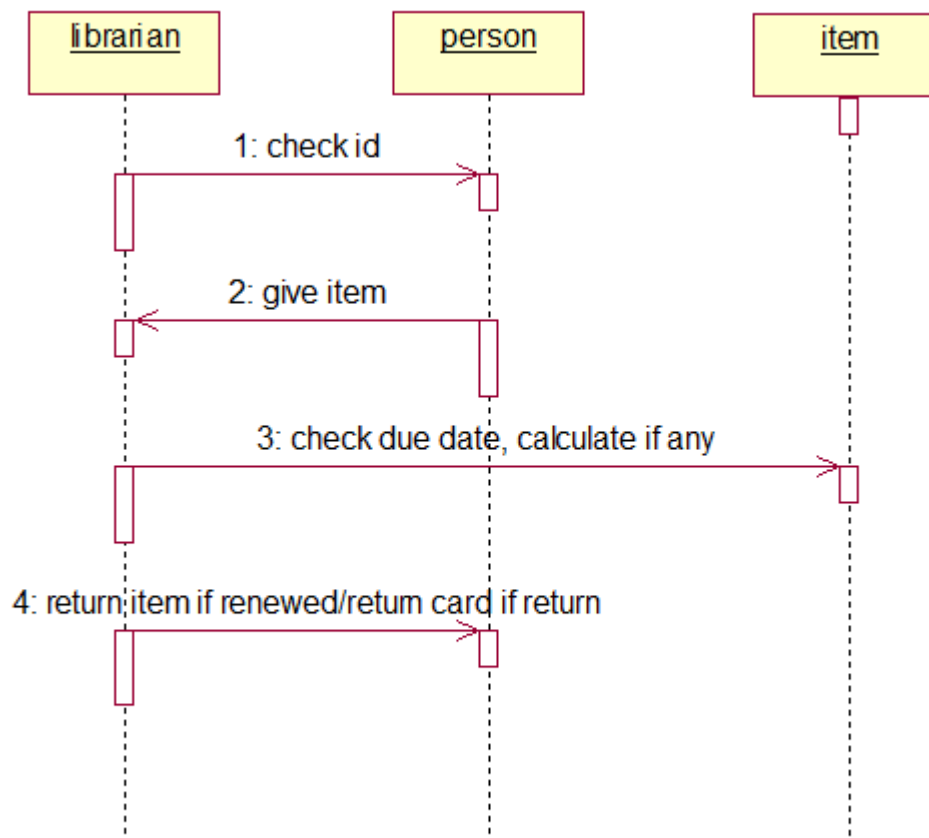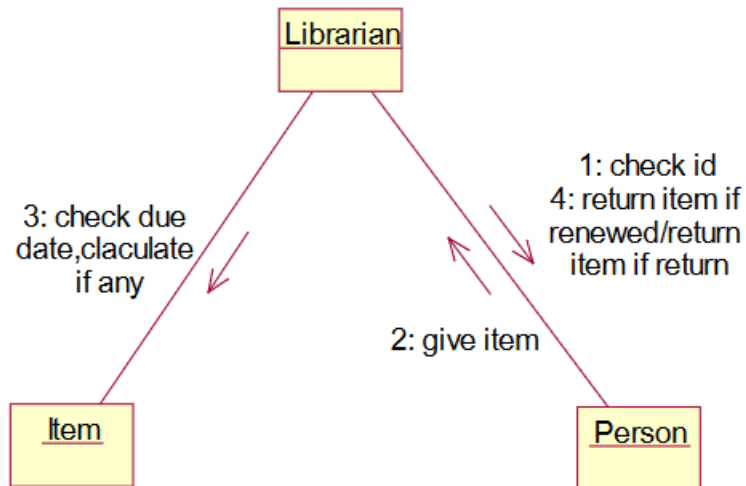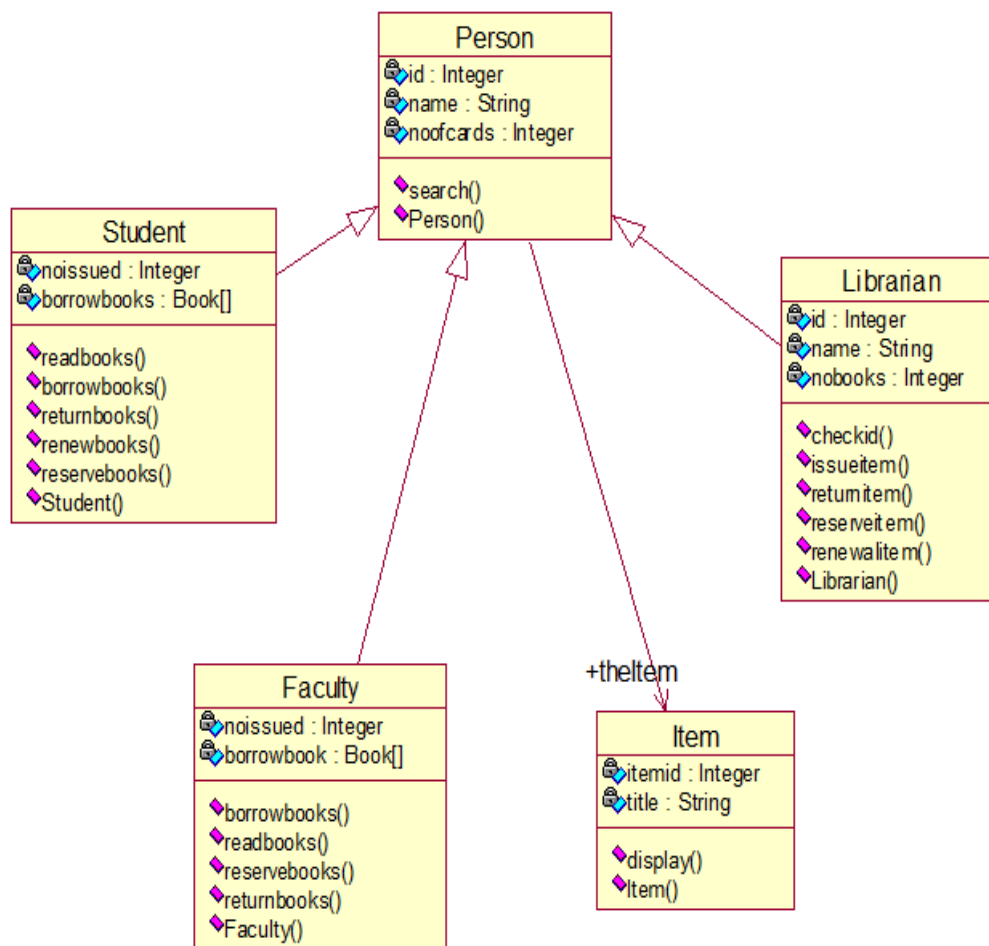
1. USECASE DIAGRAM:
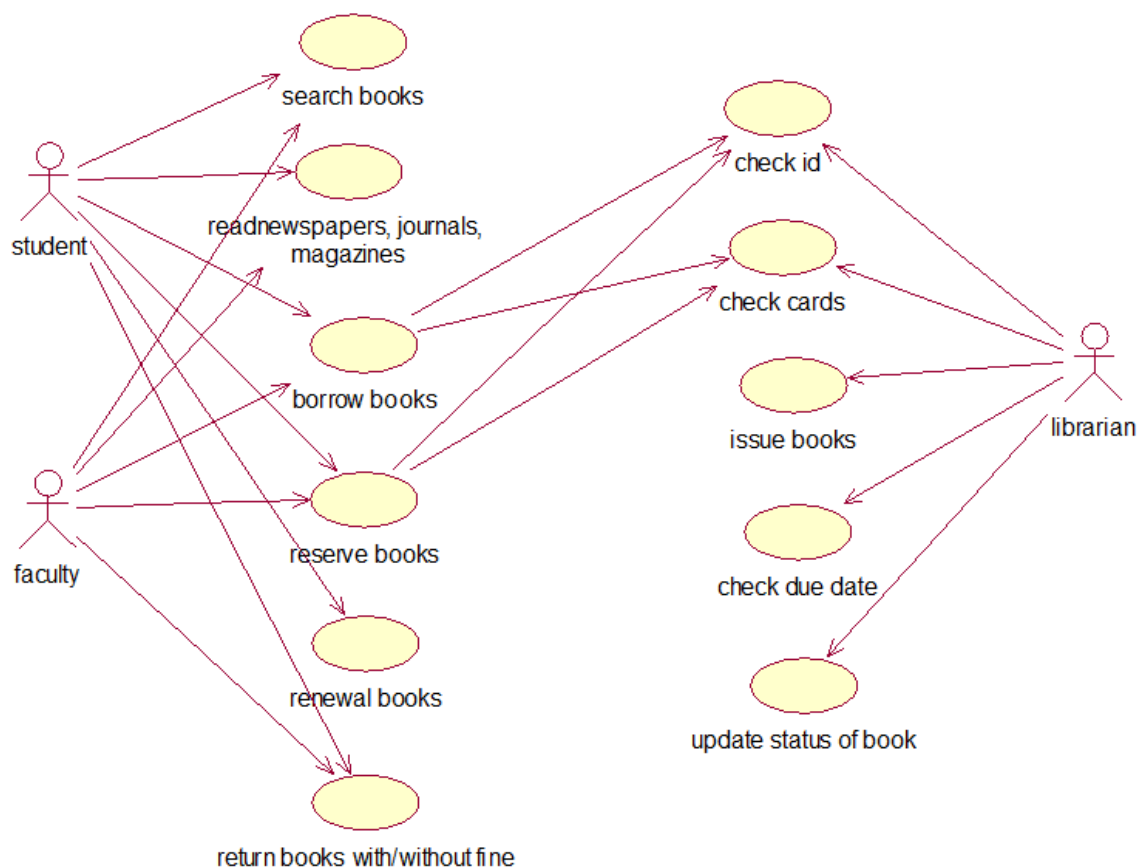
2. SEQUENCE DIAGRAM:
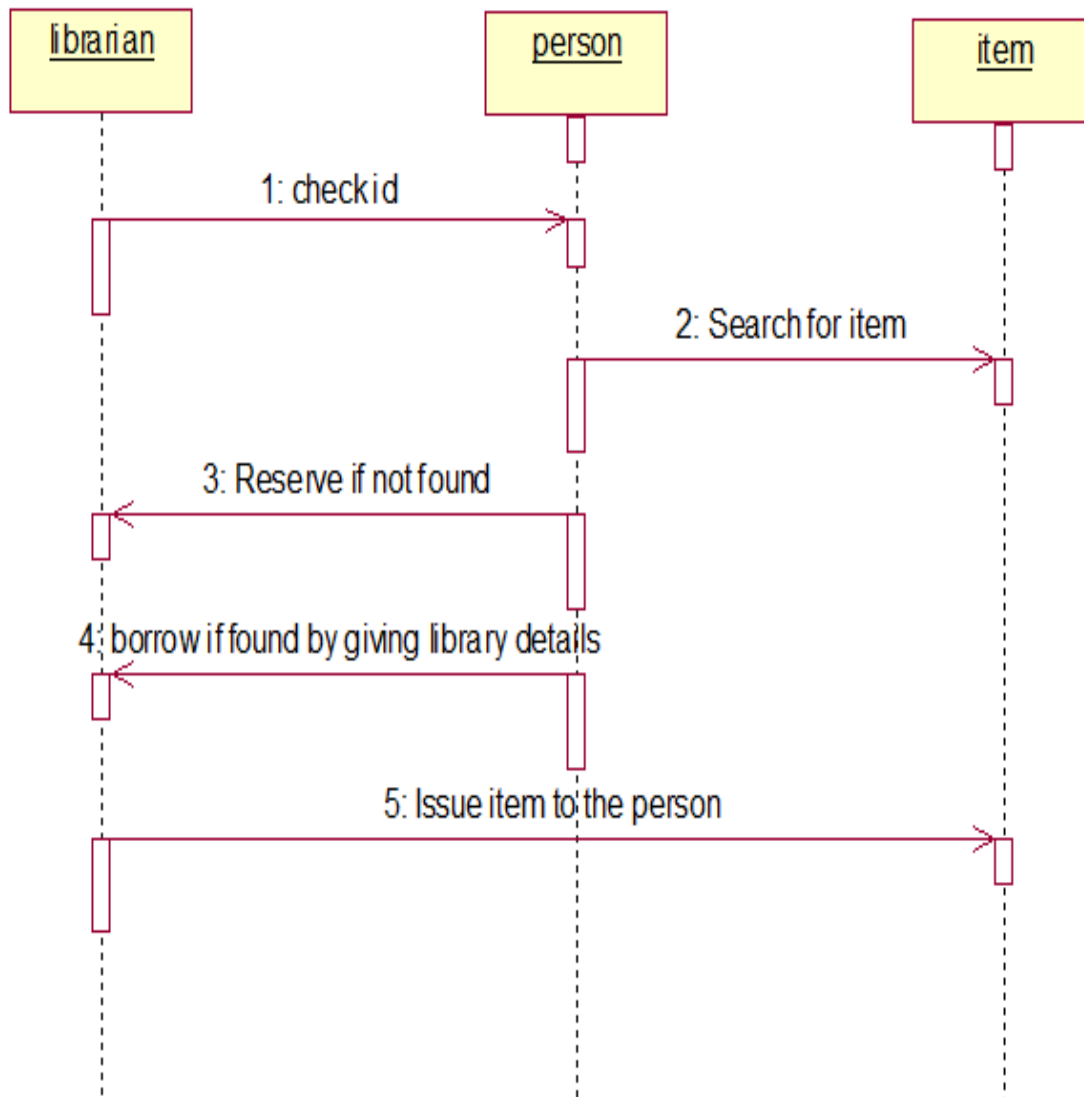
3. COLLABORATION DIAGRAM:
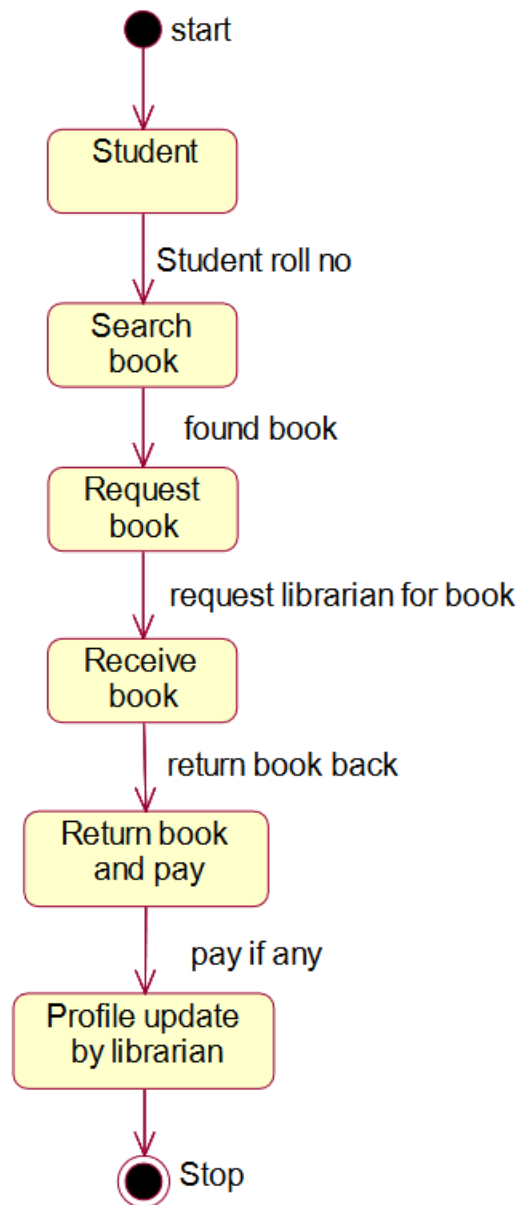
SEQUENCE DIAGRAM 2:

COLLABORATION DIAGRAM:

4. CLASS DIAGRAM:

5. STATECHART DIAGRAM:

● start

Student

↓ Student roll no

Search book

↓ found book

Request book

↓ request librarian for book

Receive book

↓ return book back

Return book and pay

↓ pay if any
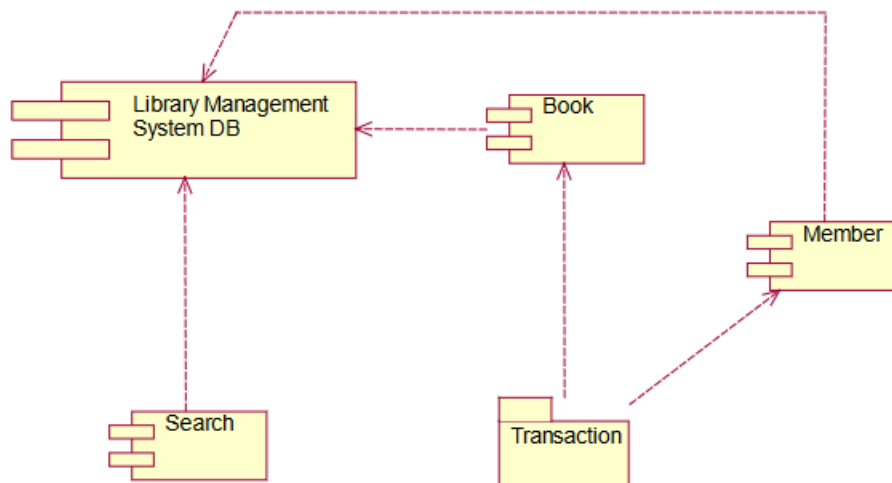
Profile update by librarian

↓

◉ Stop

6. ACTIVITY DIAGRAM:
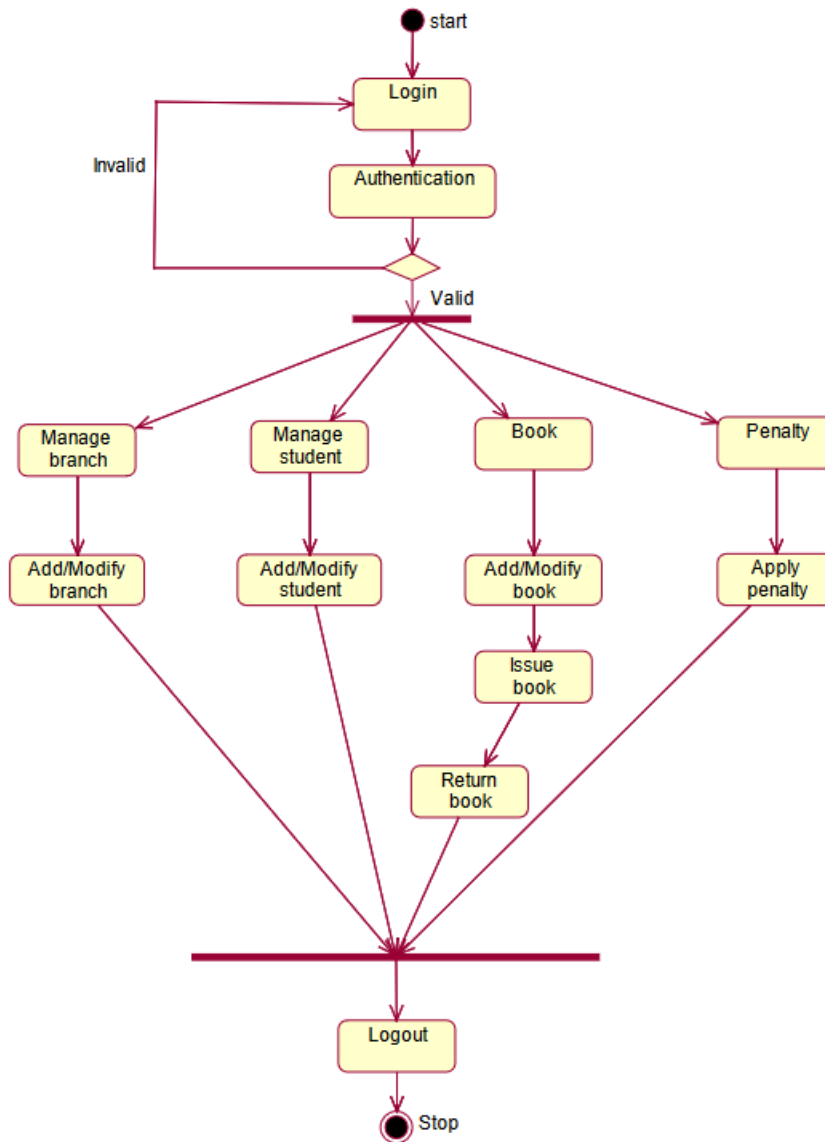
7. COMPONENT DIAGRAM:

8. DEPLOYMENT DIAGRAM: