

LIBRARY MANAGEMENT SYSTEM

correctness of the diagrams depends on the problem statement she gives so copy mindfully!

Termwork 1:

Functional requirements:

Book Catalogue: The system should be able to manage the catalogue of books, including adding new books, updating existing books, and deleting books from the catalogue.

User Management: The system should allow for the management of library users, including creating new users, updating user information, and deleting user accounts.

Borrowing Management: The system should allow for the management of borrowing books, including checking out and returning books, setting due dates, and tracking overdue books.

Reservation Management: The system should allow for the management of book reservations, including placing a hold on a book and sending notifications when the book is available.

Reporting: The system should allow for generating reports such as the list of overdue books, the list of borrowed books, and the list of reserved books.

Online Public Access Catalogue (OPAC): The system should allow library users to search and browse the catalogue of books using an online public access catalogue.

Book Recommendation: The system should be able to suggest books to users based on their reading history and interests.

Non-Functional Requirements

Security: The system should have robust security measures in place to protect user information and prevent unauthorized access.

Usability: The system should be easy to use and navigate, with an intuitive interface that makes it easy for users to perform tasks.

Performance: The system should be able to handle a large number of users and books, with fast response times and minimal downtime.

Reliability: The system should be reliable, with minimal errors and failures.

Scalability: The system should be scalable, with the ability to handle increasing numbers of users and books as the library grows.

Accessibility: The system should be accessible to users with disabilities, including support for assistive technologies.

Compatibility: The system should be compatible with a range of devices and platforms, including desktop computers, laptops, tablets, and smartphones.

Ambiguities:

->The requirement states that the system should be "easy to use," but it is not clear what this means in terms of specific user interface design or features.

->The requirement states that the system should be able to "manage borrowing books," but it is not clear how the system will handle overdue books or damaged books.

Inconsistencies:

->One requirement states that the system should be able to "manage book reservations," but another requirement states that the system should not allow reservations for reference books. These requirements are inconsistent.

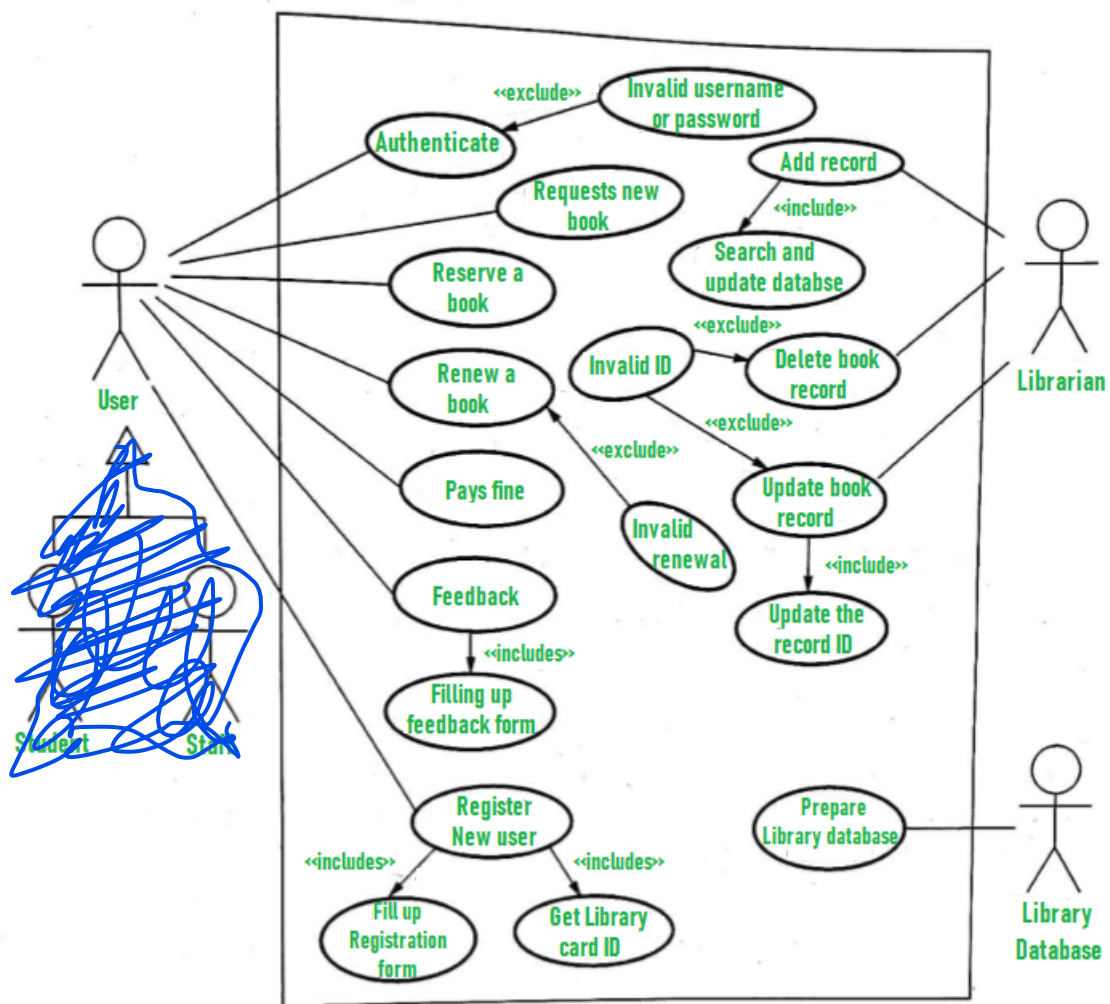
->One requirement states that the system should be able to generate reports, but another requirement does not specify what type of reports the system should generate. This is an inconsistency.

Incompleteness:

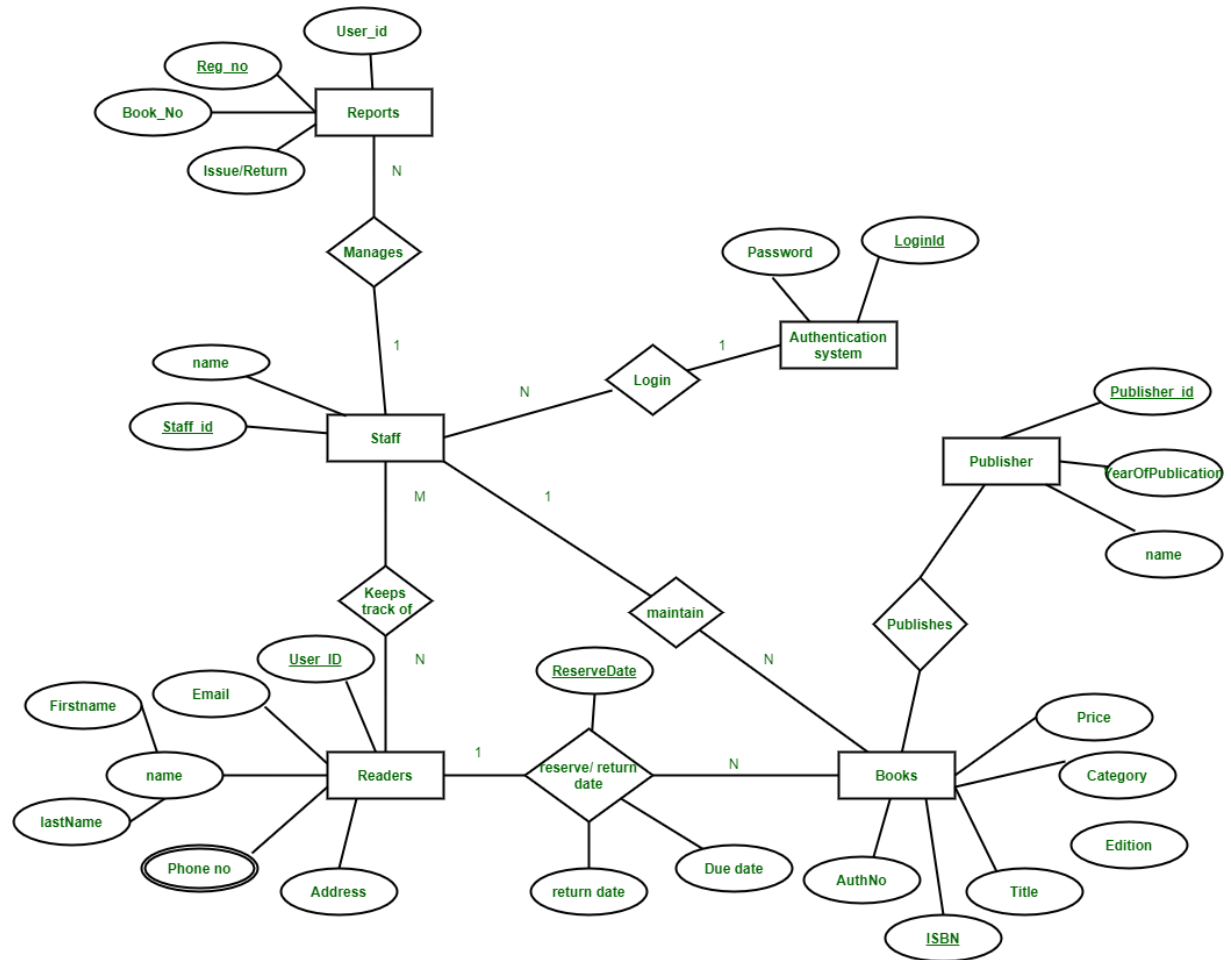
->The requirement does not specify how the system will handle lost books or damaged books.

->The requirement does not specify what type of authentication or authorization measures will be used to protect user information in the system.

Termwork 2:

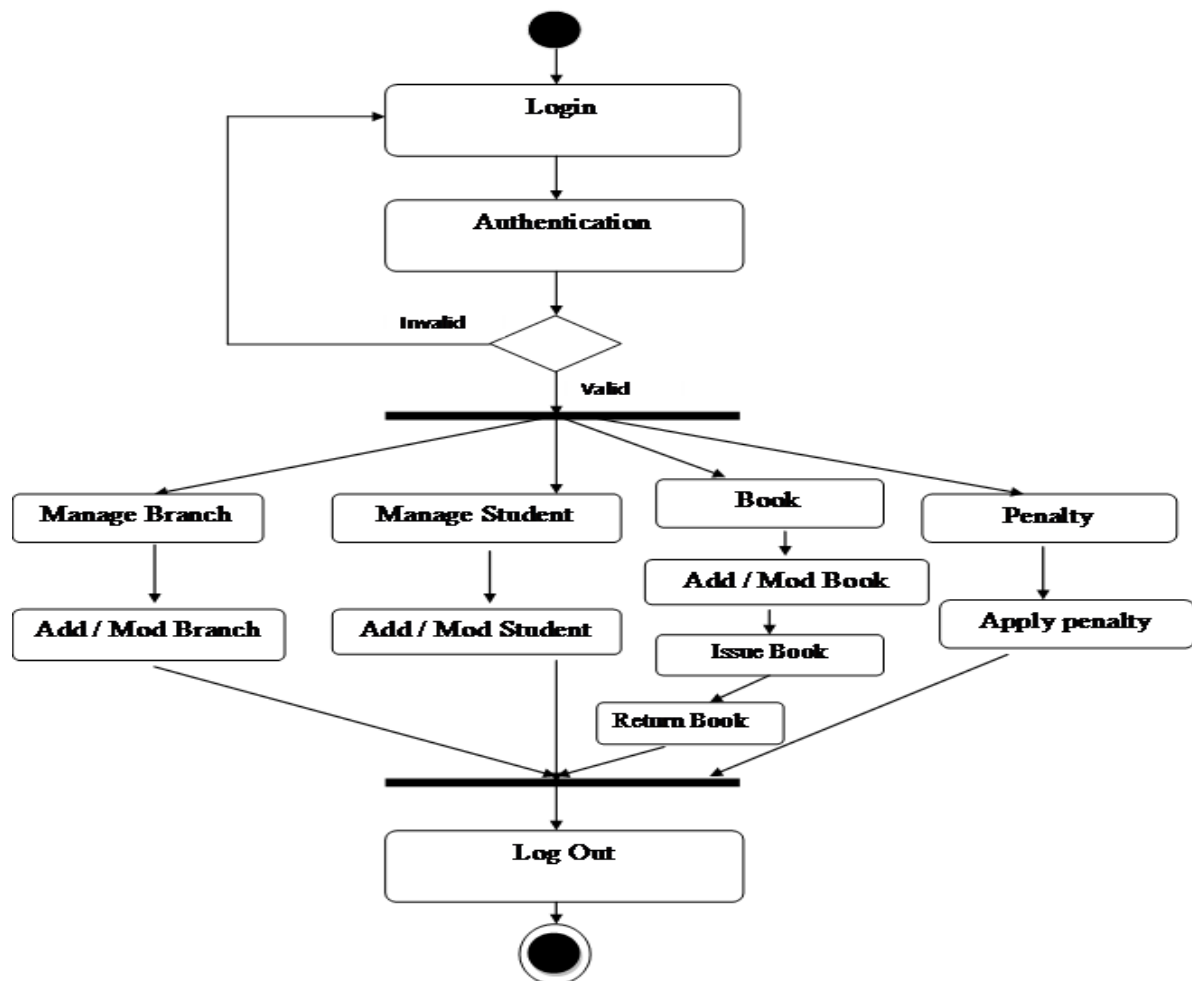


Termwork 3:

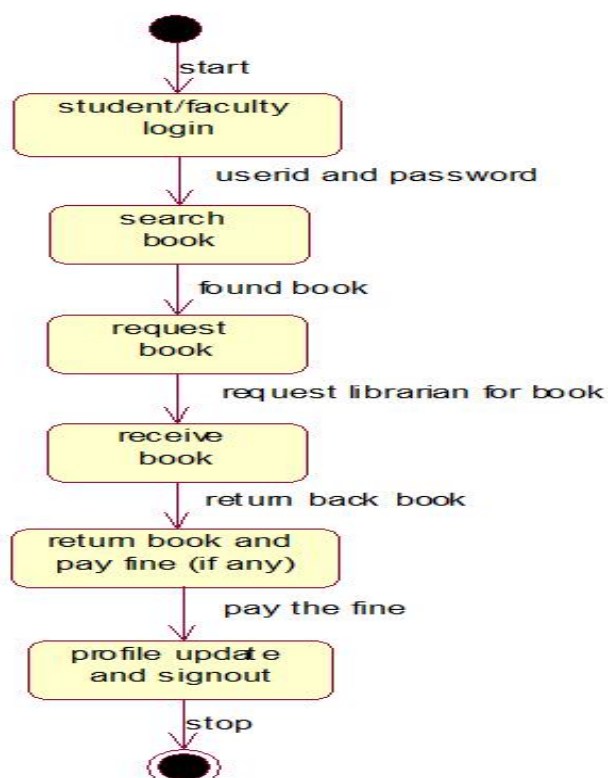


use * for primary keys, don't draw the double oval. eg: ISBN*

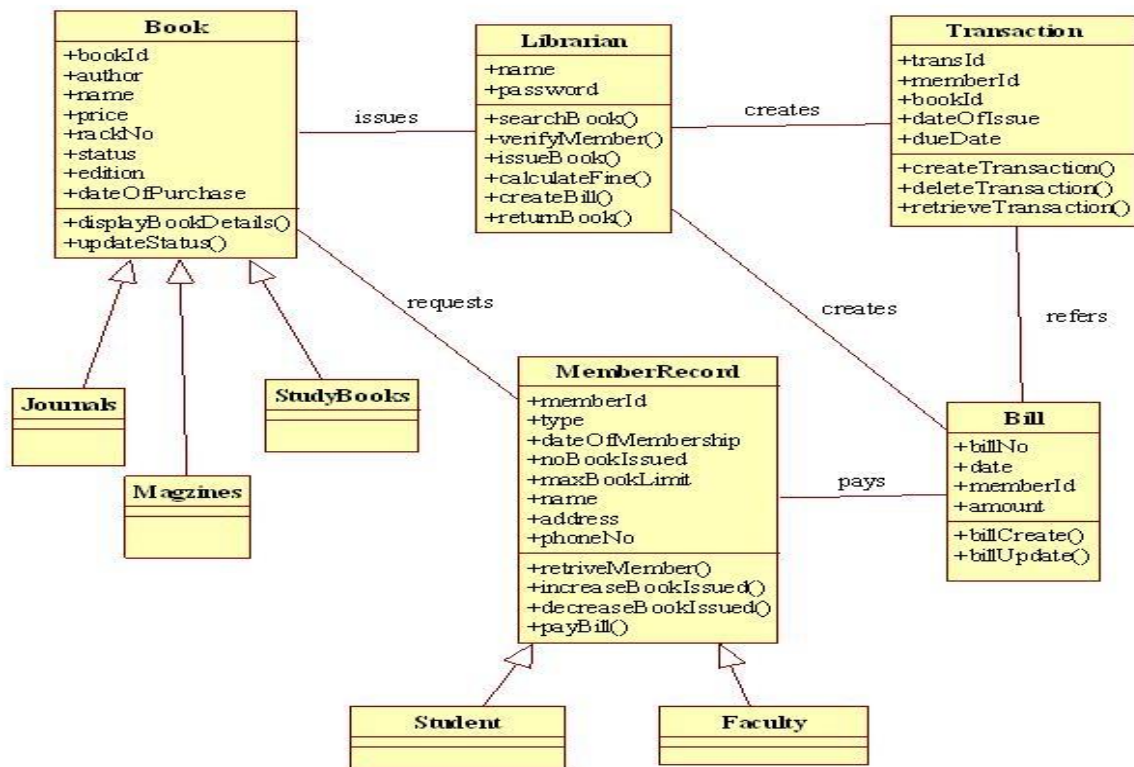
Termwork 5:
activity diagram:



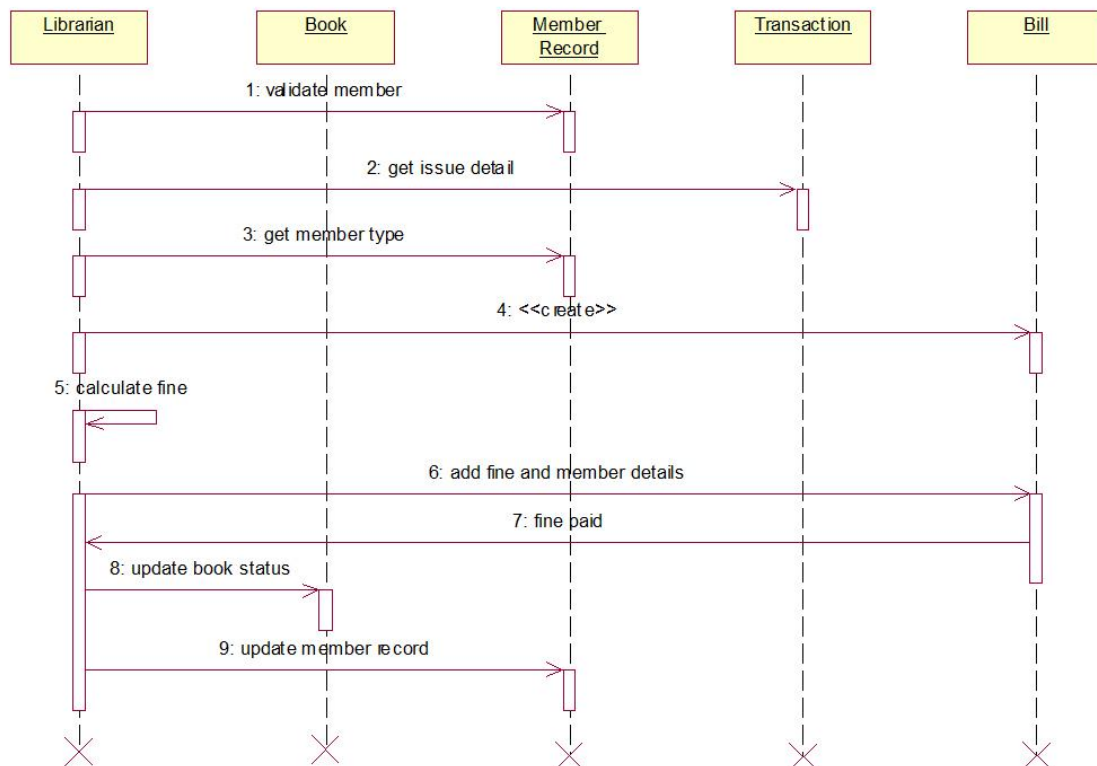
state diagram:



Termwork 6:
class diagram:



sequence diagram:



Termwork 7:

