

**IT 314 Software Engineering**  
**Lab - 7 Domain Analysis Modeling & Sequence Diagram**

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**Q.1. Consider the following piece of text**

- Use Case Name: Issuing a Book
- Description: This use case process by which a registered student issues a book from the library.
- Primary Actor: Student
- Secondary Actors: Librarian and Library System
- Preconditions: - The registered student must log in and be verified by the librarian.
- Postconditions: - The book is marked as issued to the student.
- Main Flow:

The system checks the student's identity status once the registered user requests a book be issued.

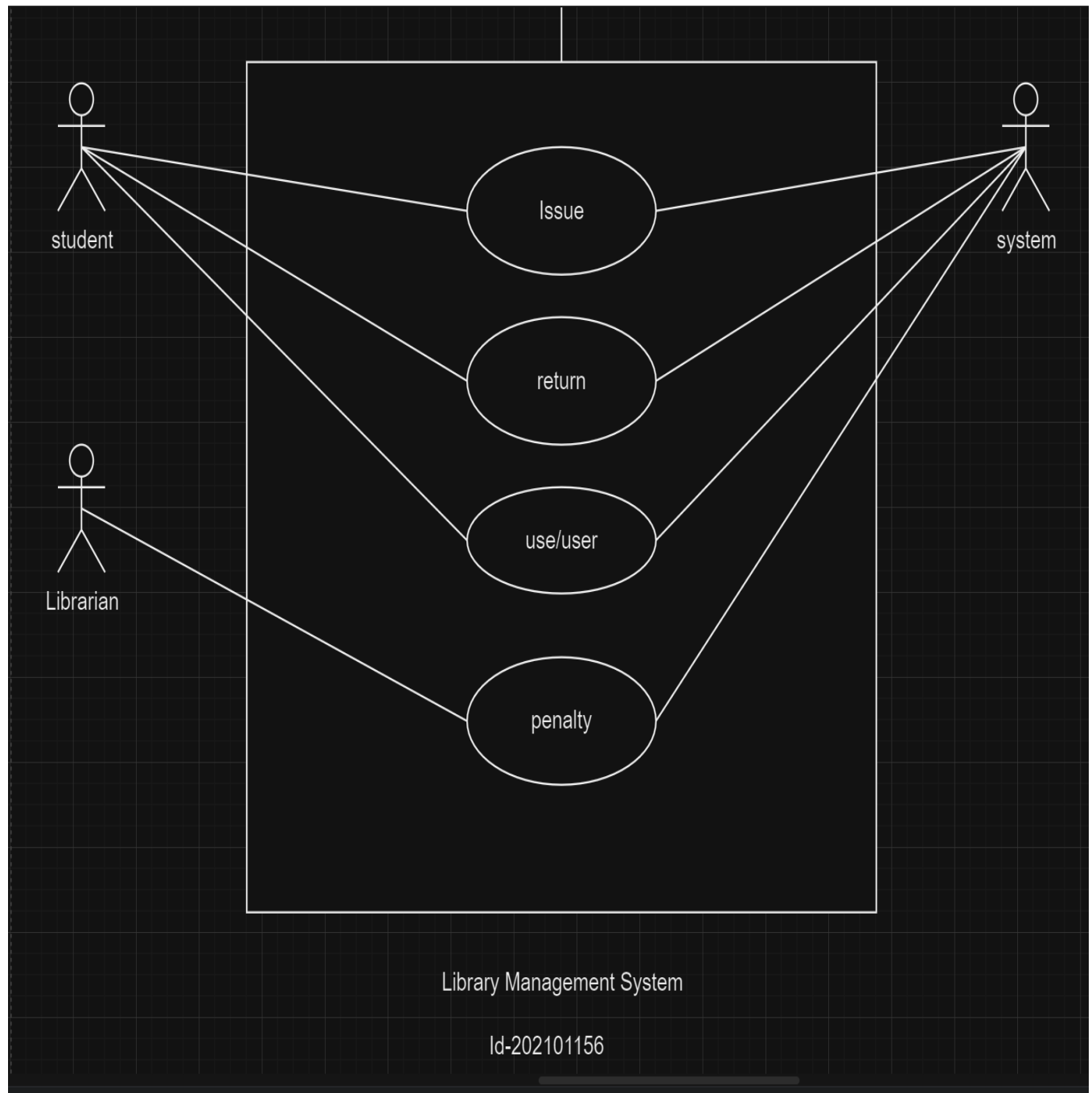
- The system verifies if the requested book is still in stock.
- The system establishes a deadline for returning the book.
- To verify the successful issue, notifications are sent to both the student and the librarian.

- Alternate Flows:

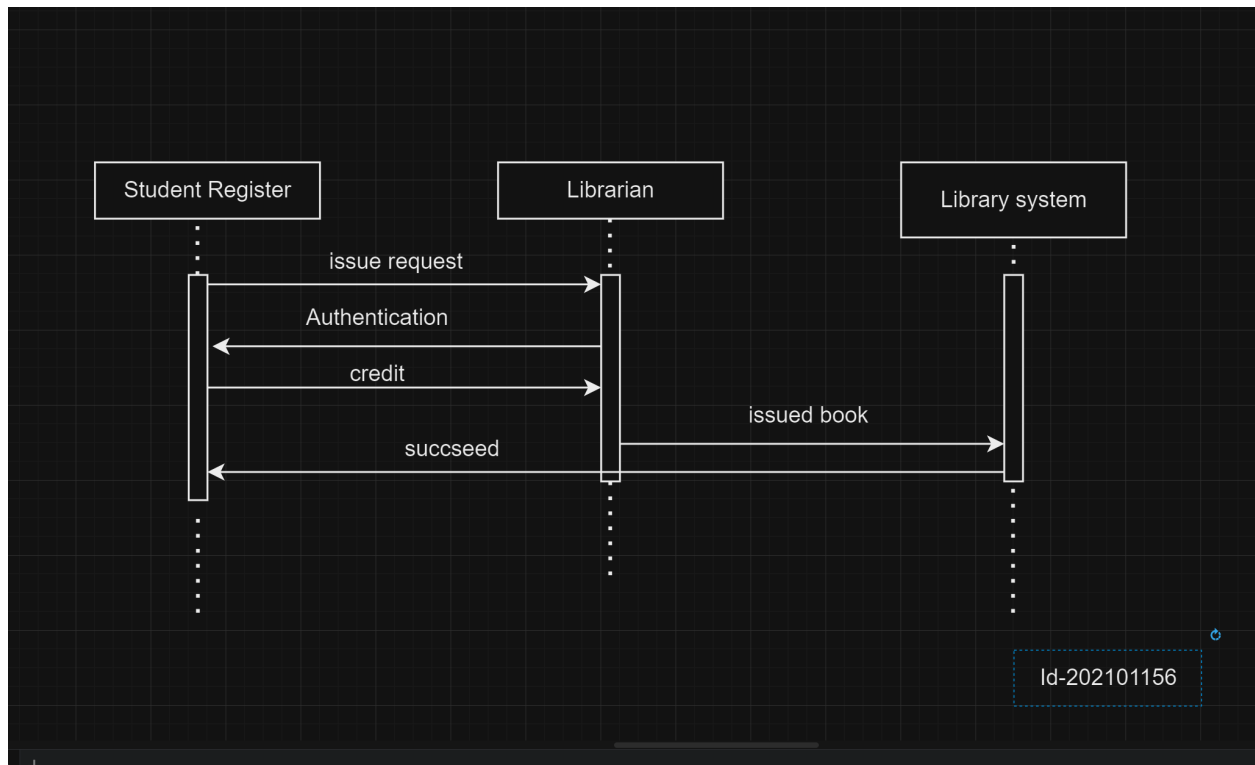
The system reminds the student that the requested book cannot be issued at this time if it is not available.

- If the user's registration is unsuccessful, the system alerts the librarian to the error.

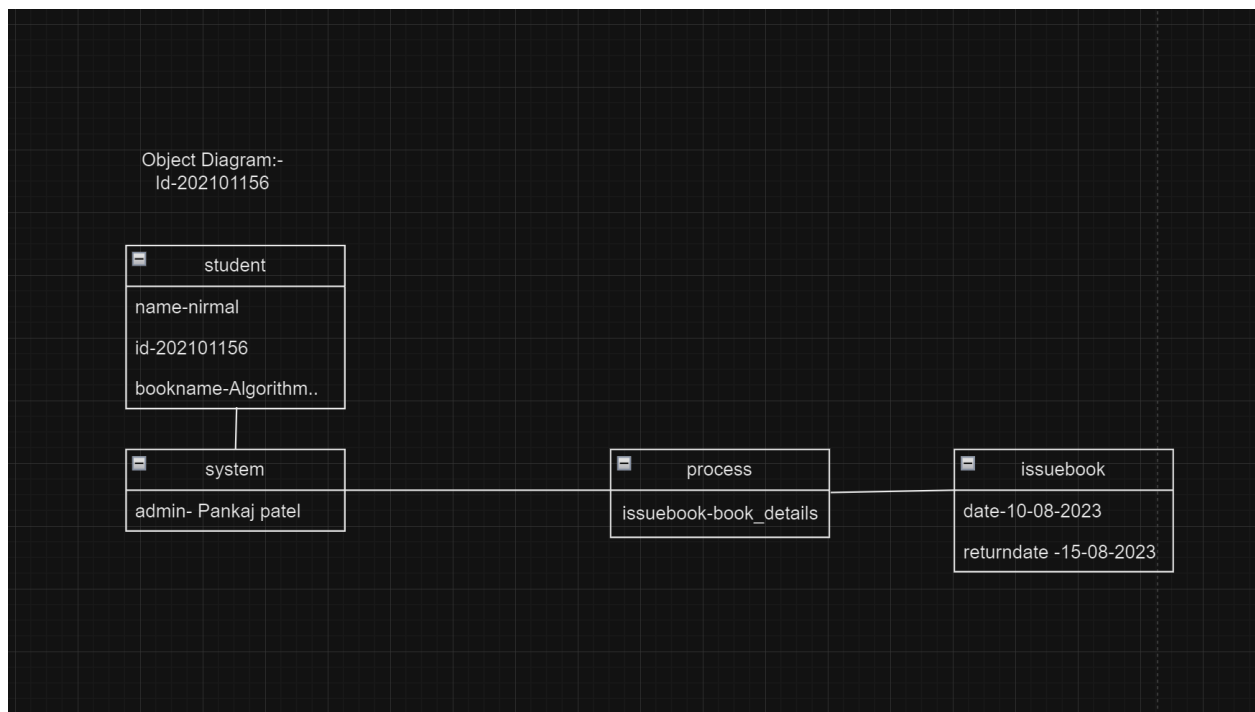
## use case diagram



## sequence diagram



## object diagram



**Q.2. To give an exam, an instructor first notifies the students of the exam date and the material to be covered. She then prepares the exam paper....**

