
IT313 Software Engineering



Lab Report - 7

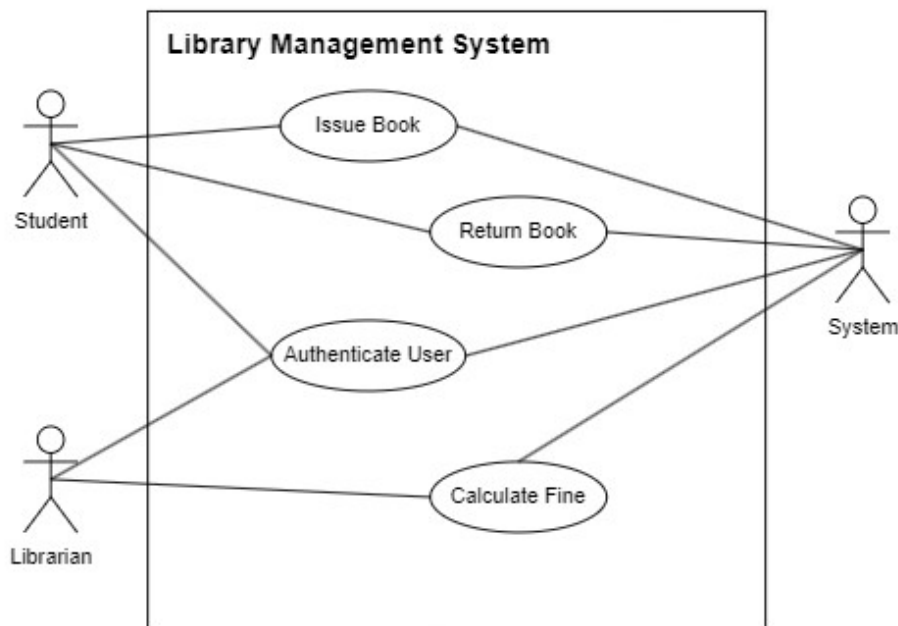
Domain Analysis Modeling Sequence Diagram

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• Question: 1

1. Use case diagram



Use case documentation for 'Issue book' use case:

Use case name : Issue Book

Description : Represents the process Issuing book

Primary Actors : Registered Students

Secondary Actors : System, Librarian

Pre-conditions:

- Registered student must be logged in and authenticated by the librarian.
- The book being issued must be available in the library.

Post-conditions:

- The book is marked as issued to the student.
- The due date for returning the book is set.
- The student is notified of the successful issuance.

Main flow:

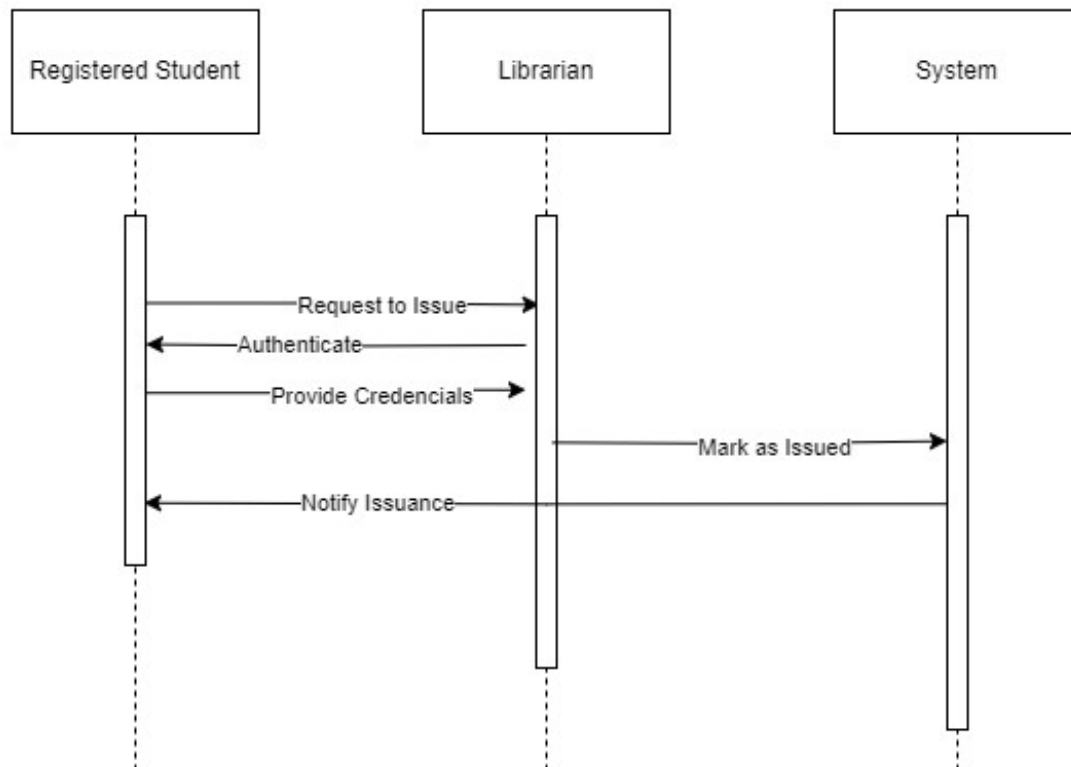
- The registered student requests to issue a book.
- System validates the student's authentication status.
- System checks if the requested book is available.
- If the book is available, the system marks it as issued to the student.

- The system sets the due date for returning the book.
- The system notifies the student and the librarian about the successful issuance.

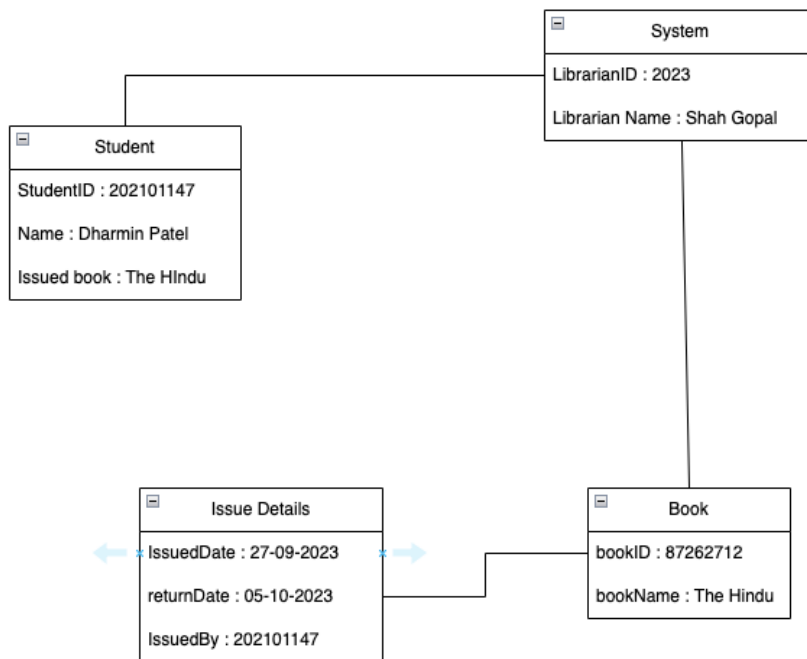
Alternate Flows:

- If the book is not available, the system notifies the student that the book cannot be issued at the moment.
- If the user is not authenticated, the system notifies the librarian

2. Sequence diagram



3. Analysis object diagram



• Question: 2 : Sequence diagram

