IT314 Software Engineering

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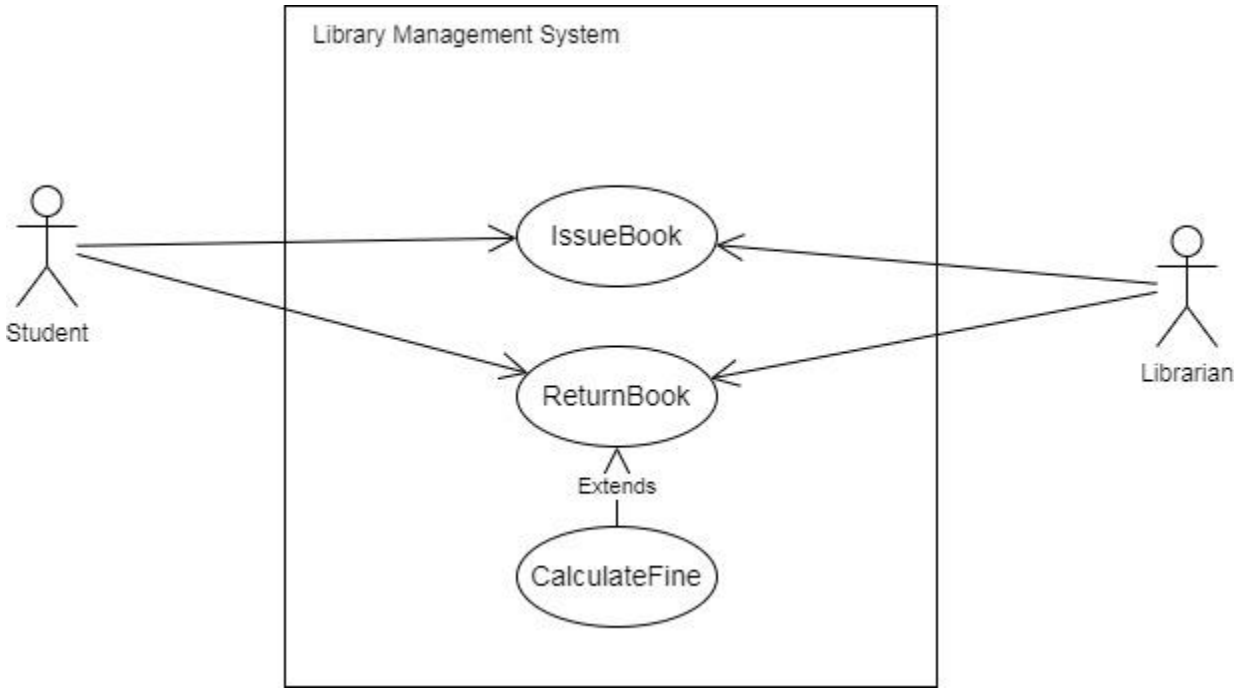
1. **Library System**
   Use case Diagram:



Description:
Use case name: IssueBook
Description: Represents the process of issuing book
Primary actors: Students
Secondary actors: Librarian

Pre Conditions:

- The student is already registered in the University.
- The book to be issued must be available in the library.

Post Conditions:

- The book is marked issued.
- The due date is set.
- The student is notified of the issuance.

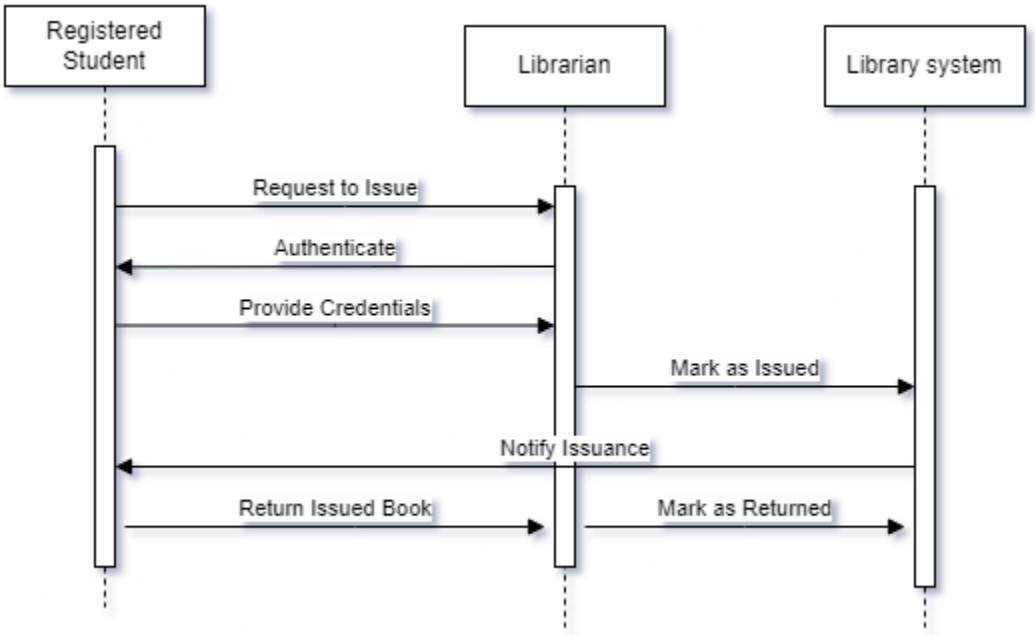
Main Flow:

- The registered student requests to issue a book.
- The system validates the student's authentication status.
- The 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.

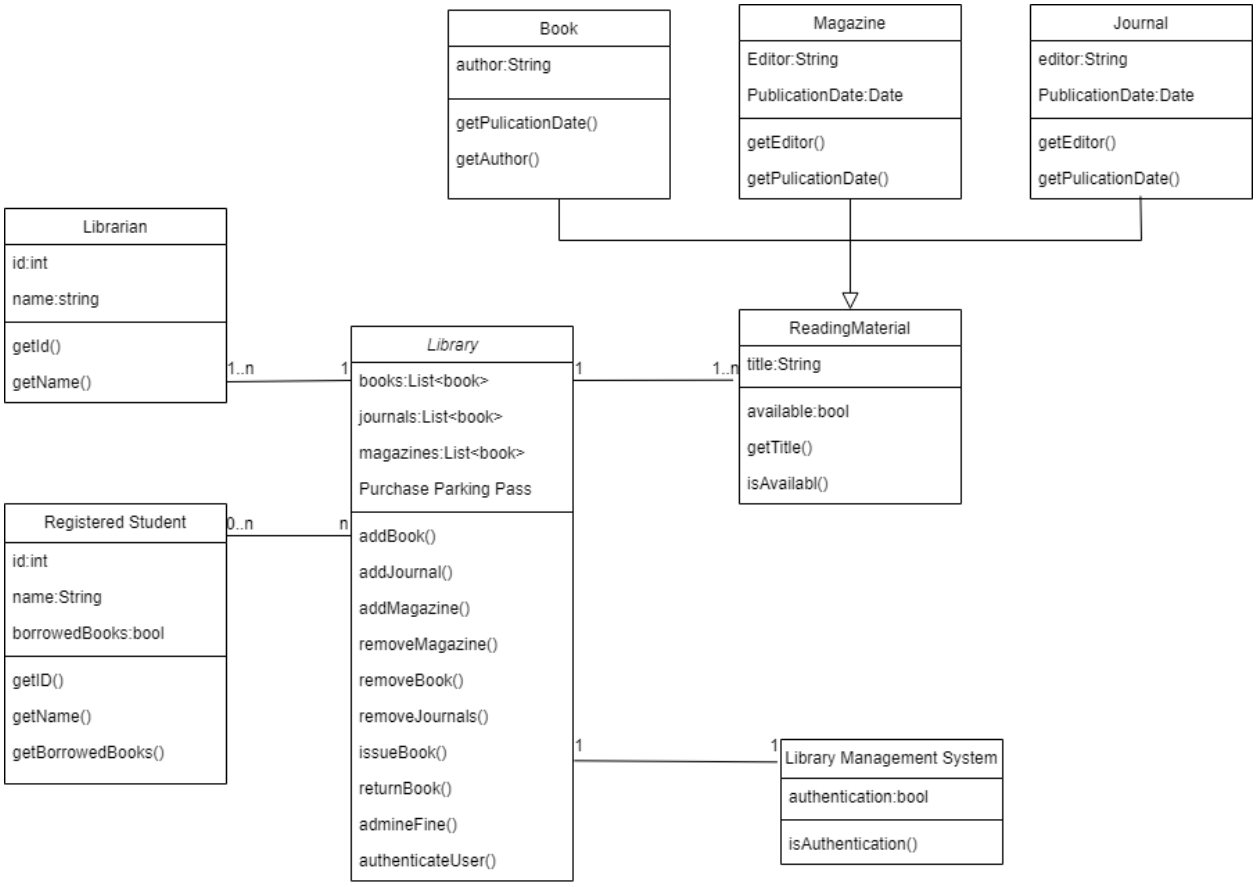
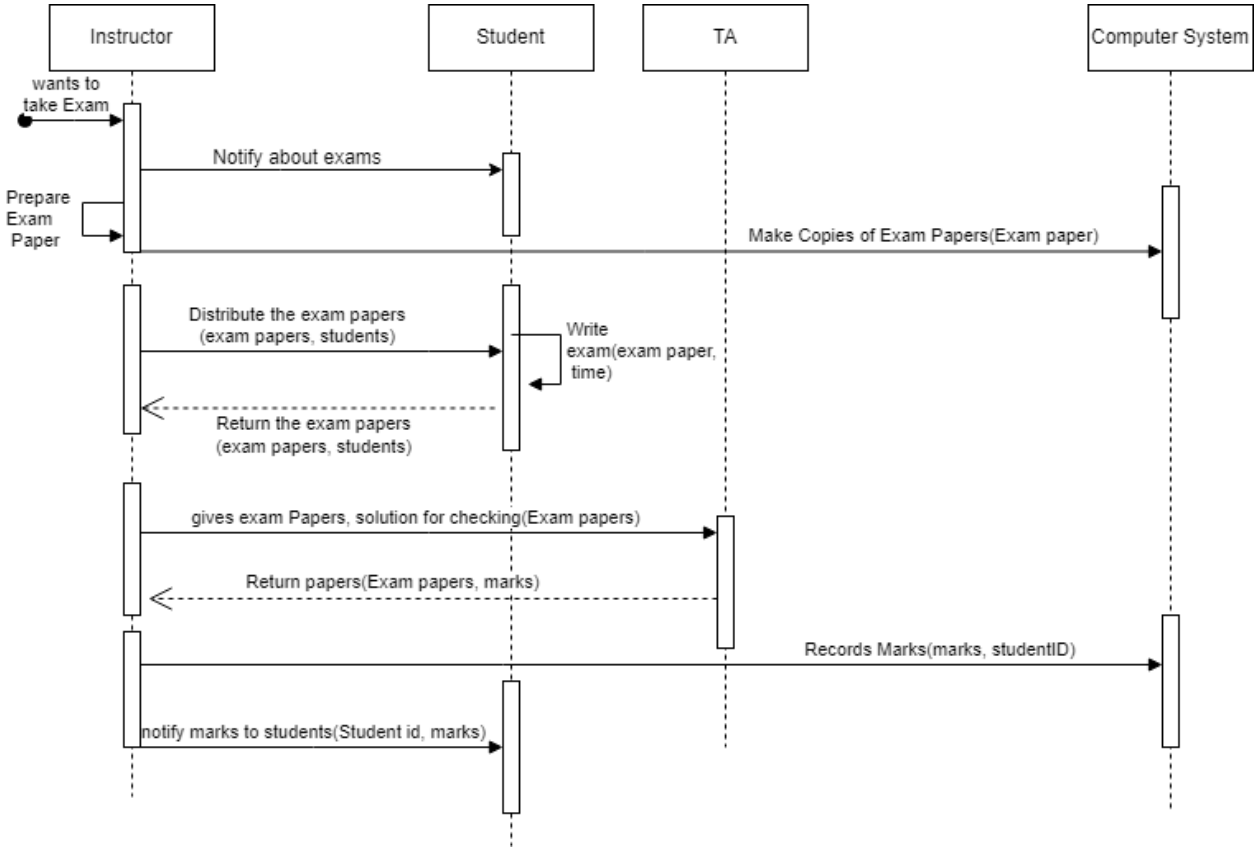
Alternate Flow:

- If the book is not available, the system notifies the student that the book cannot be issued at the moment.
- The book is already reserved by another student.

Sequence Diagram:



Class Diagram:



2. Exam System