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27/09/2023

# IT314 Lab 7

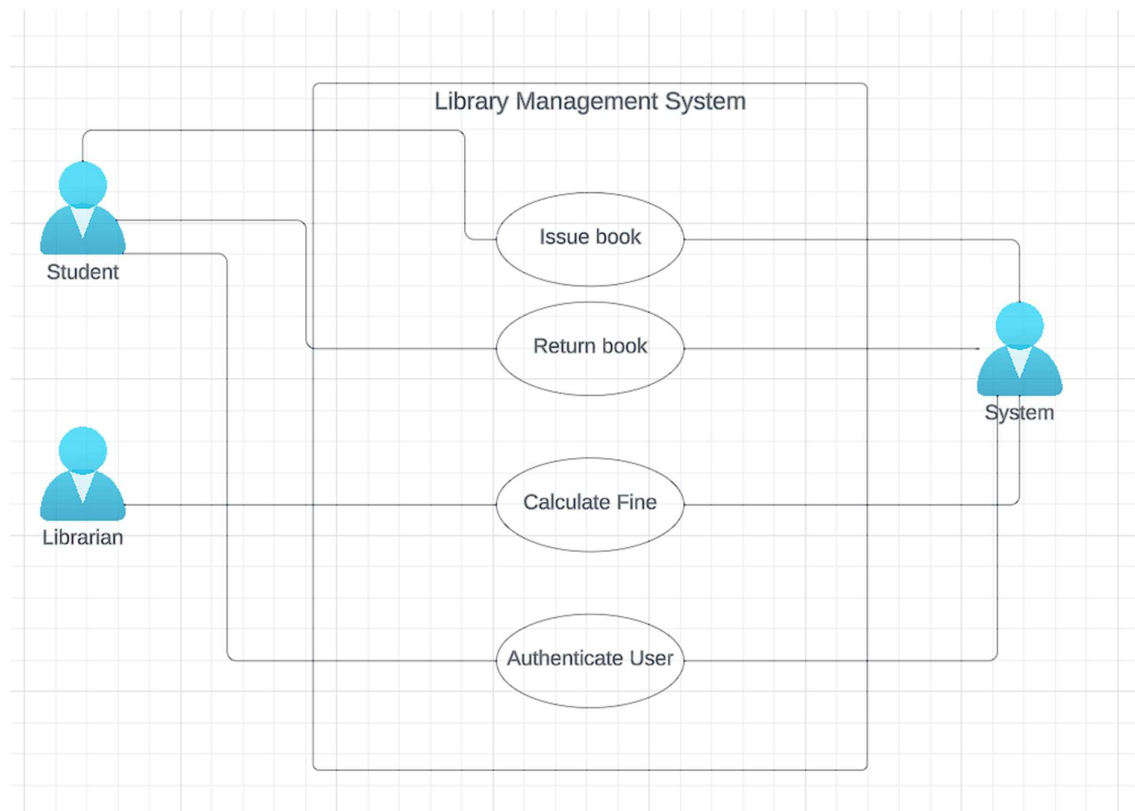
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Several thin, curved lines in shades of blue and grey originate from the bottom left corner and sweep upwards and to the right, creating a dynamic, abstract design element.

## Question 1

### Use case diagram :



#### Documentation for 'Issue book' use case:

**Name:** Issue book

**Description:** This use case represents the process of issuing a book from the library by the registered student.

**Primary Actor:** Registered student

**Secondary Actor:** Librarian and Library system

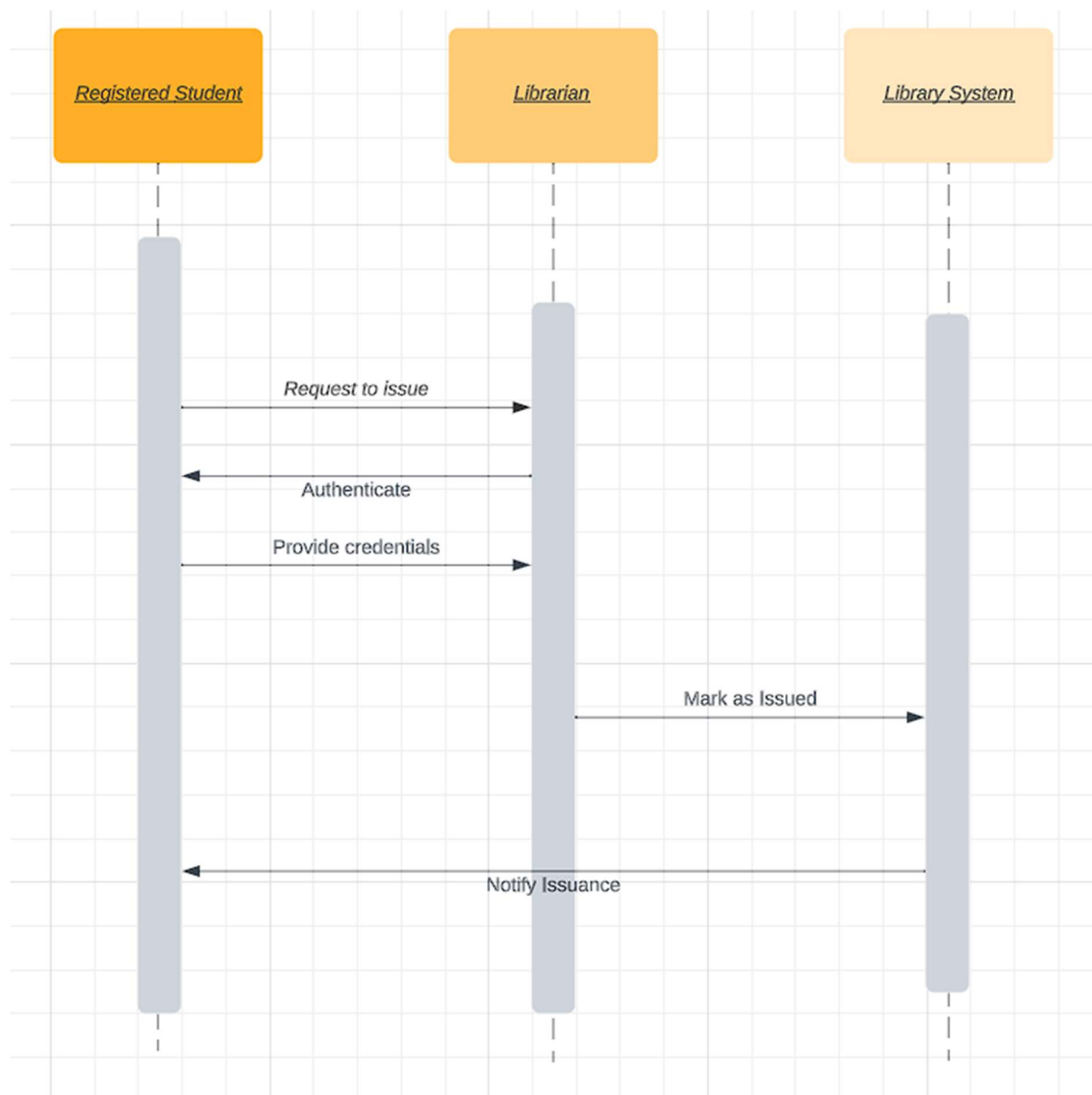
**Preconditions:** The registered student must be logged in and authenticated by the librarian. The book should be available for the issue.

**Postconditions:** The book is marked as issued to the student. The due date for returning the book is set. The registered student is notified about successful issuance.

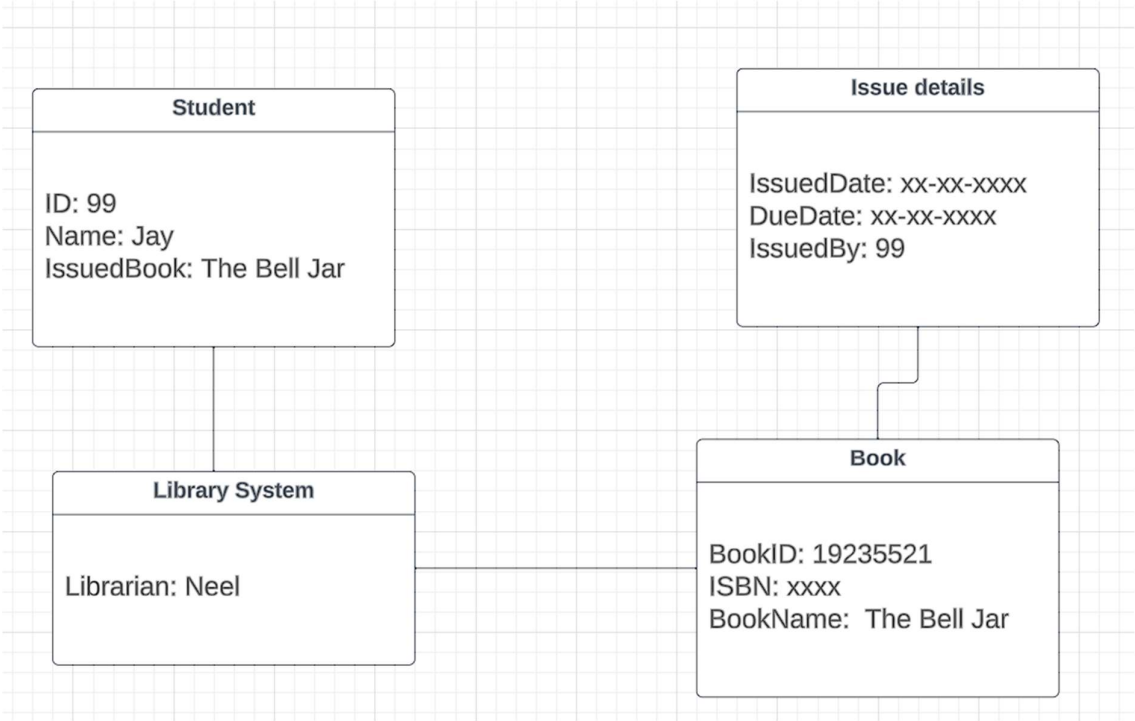
**Main Flow:** The registered student requests to issue a book. The system validates the student's authentication. The system checks if the book is available for issue. If the book is available, then the book is marked as issued to the student. The system sets the due date for returning the book. The system notifies the student and librarian about the issuance.

**Alternate Flow:** If the user is not authenticated, the system notifies the librarian. If the book is not available, the student cannot issue the book.

### Sequence diagram :



Analysis Object diagram :



# Question 2

