IT314 Software Engineering

Lab-7 Report
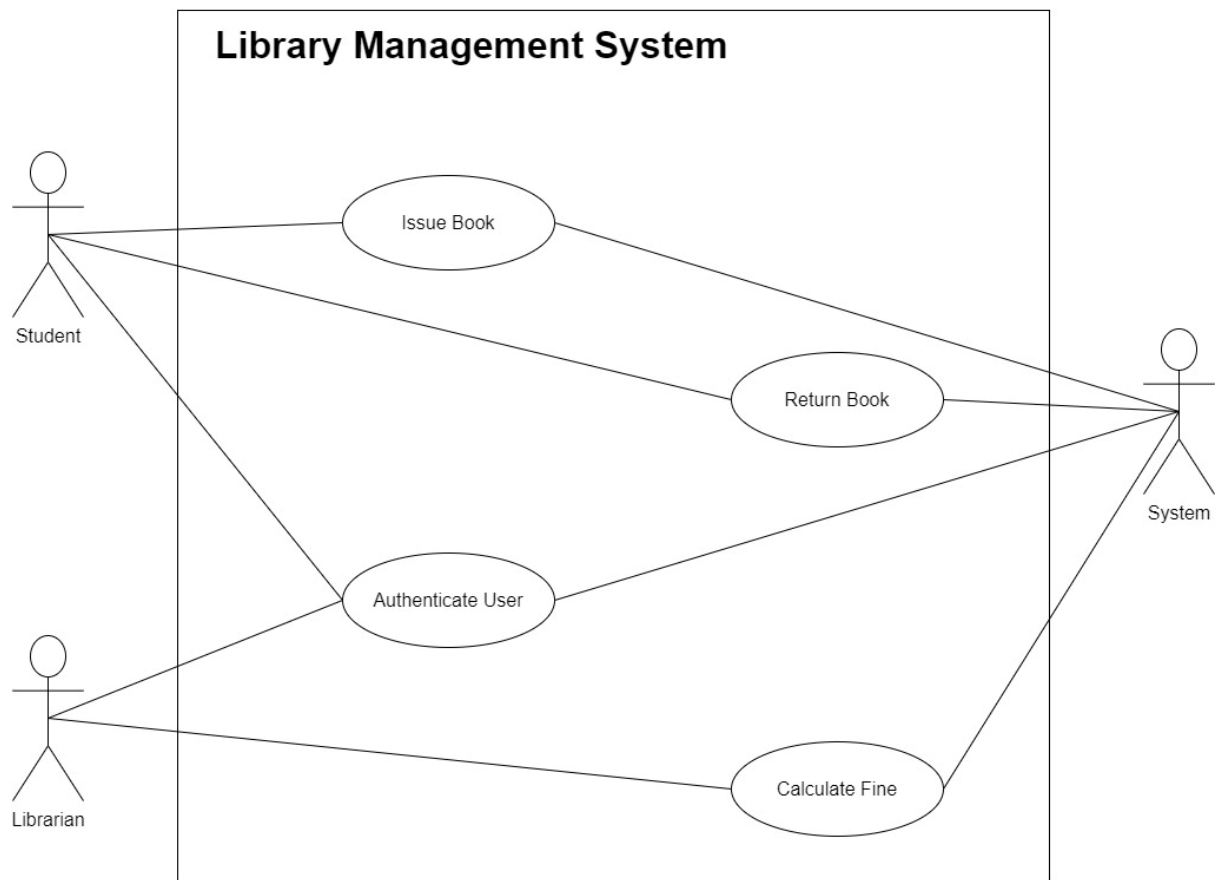
Domain Analysis Modelling and Sequence Diagrams

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1. Library Manangement System

1.1 Use Case Diagram

1.2 Use Case Documentation

Use case name : Issue Book

Description : Represents the process Issuing book

Primary Actors : Registered Students

Secondary Actors : Library, 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.

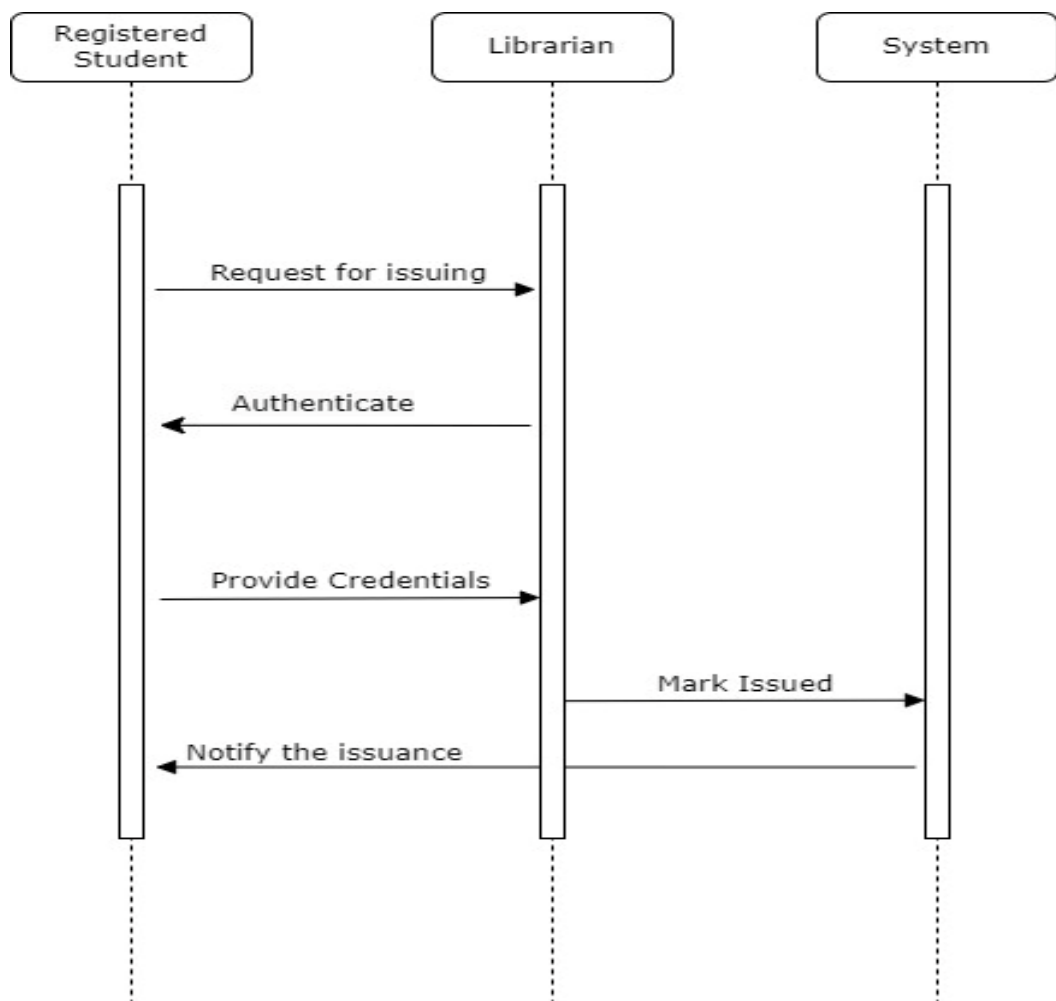• The student is notified of the successful issuance.

Main flow:
   • The registered student requests to issue a book.
   • 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.
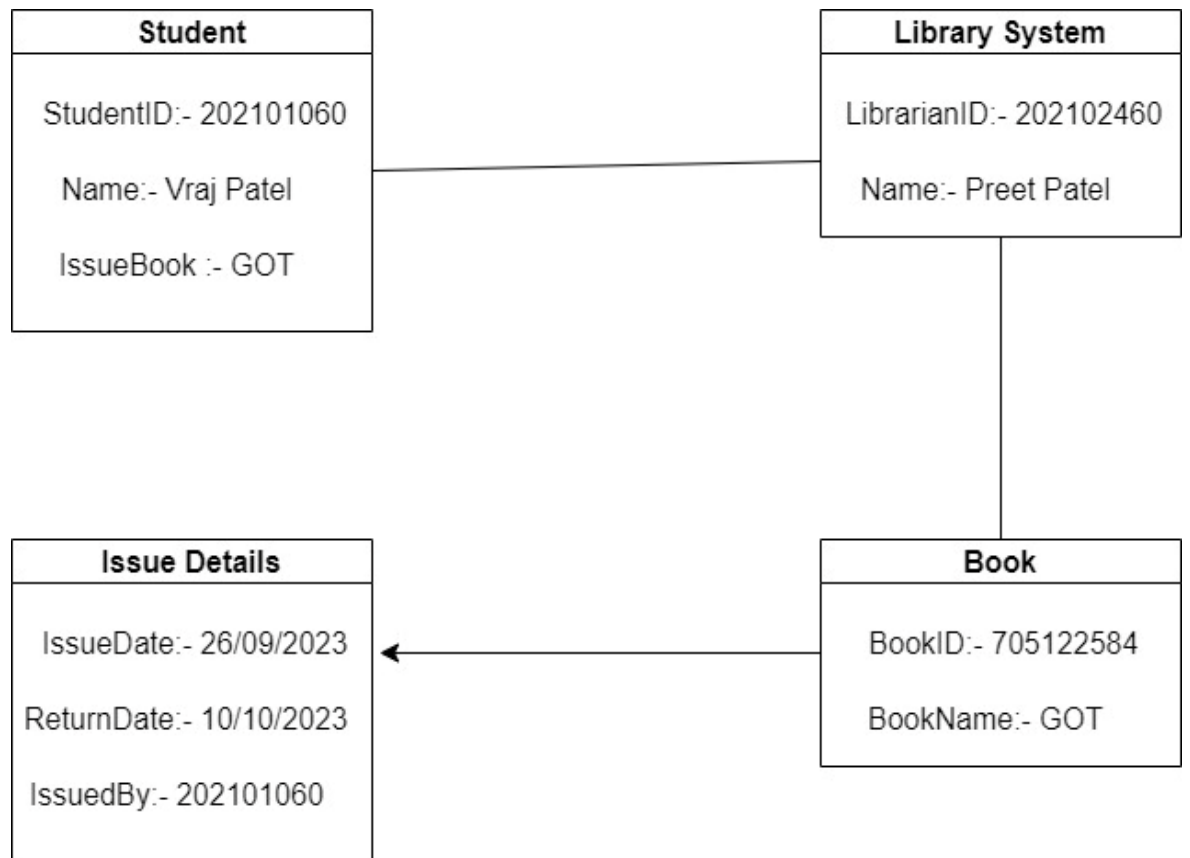   • The system notifies the student and the librarian about the successful issuance.

Alternate 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 libraria.

1.3 Sequence Diagram

1.4 Analysis Object Diagram

2. Examination Management Process