IT313 Lab-07

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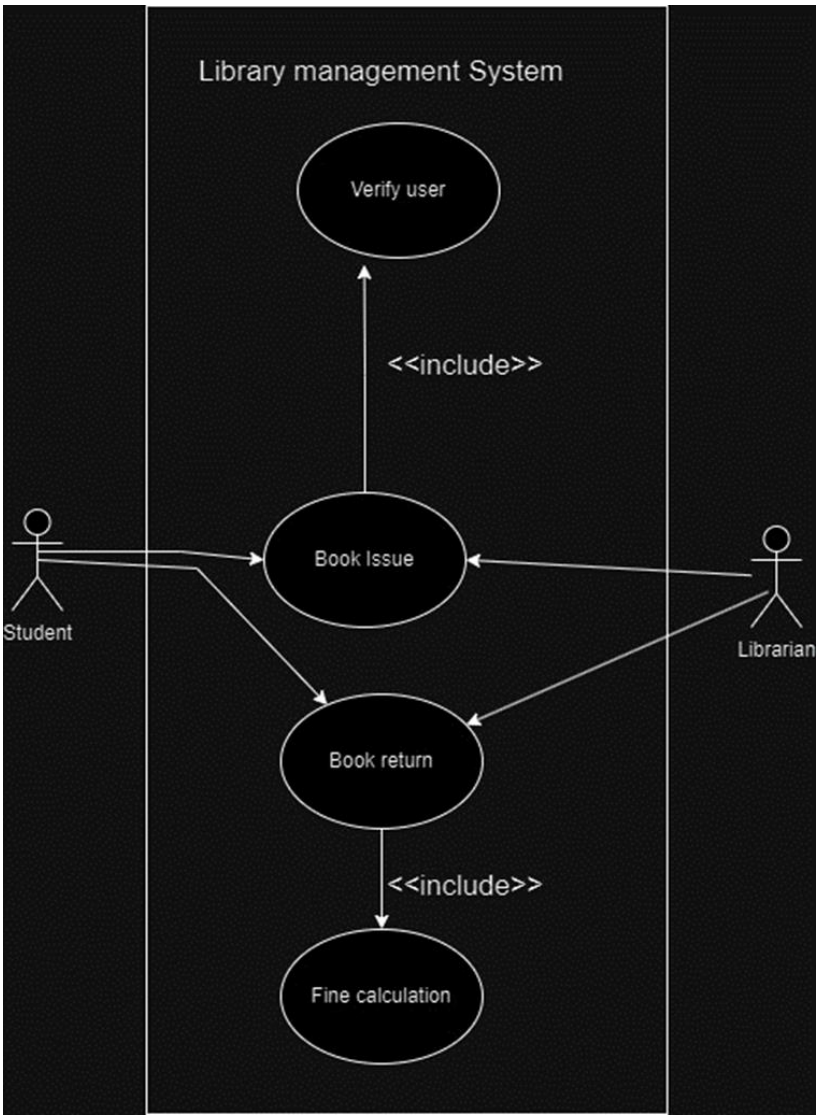
Group :- 1

Q-1)

1.1)

Use Case Diagram :-



Documentation :-

Use case name: Issue Book

Description: This use case represents the process of a registered student borrowing a book from the library for a specified period.

Primary Actor: Registered Student

Secondary Actor: Library (Library system)

Preconditions:

- The registered student must be logged in and authenticated by the librarian.

- The book being issued must be available in the library.
- The student’s account should be in good standing (no overdue books or fines).

Postconditions:
- 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.

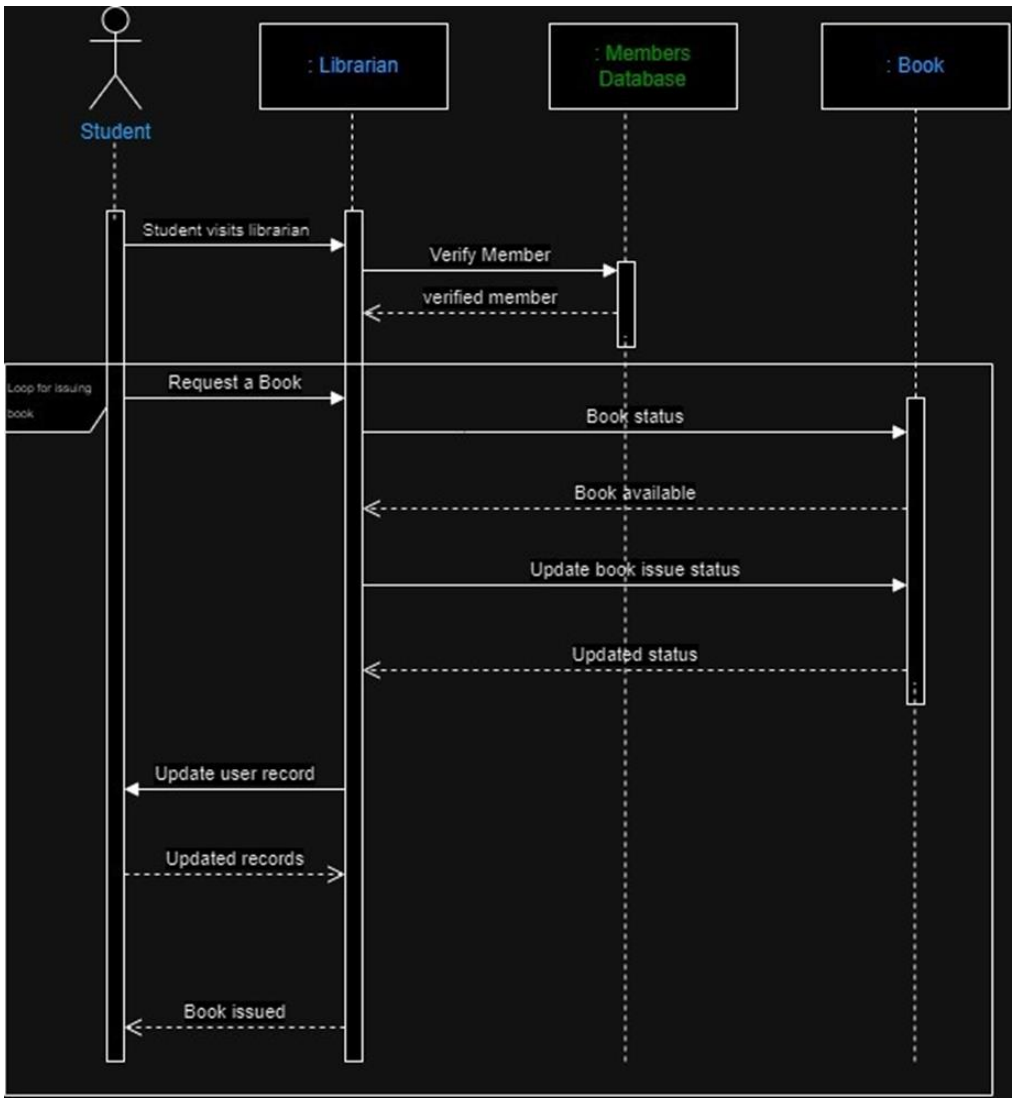
Mainflow:
1. The registered student requests to issue a book.
2. The system validates the student’s authentication status (using “Authenticate User” use case).
3. The system checks if the requested book is available.
4. If the book is available, the system marks it as issued to the student.
5. The system sets the due date for returning the book.
6. The system notifies the student about the successful issuance.

Alternate Flows:
1. If the book is not available, the system notifies the student that the book cannot be issued at the moment.

1.2 :-

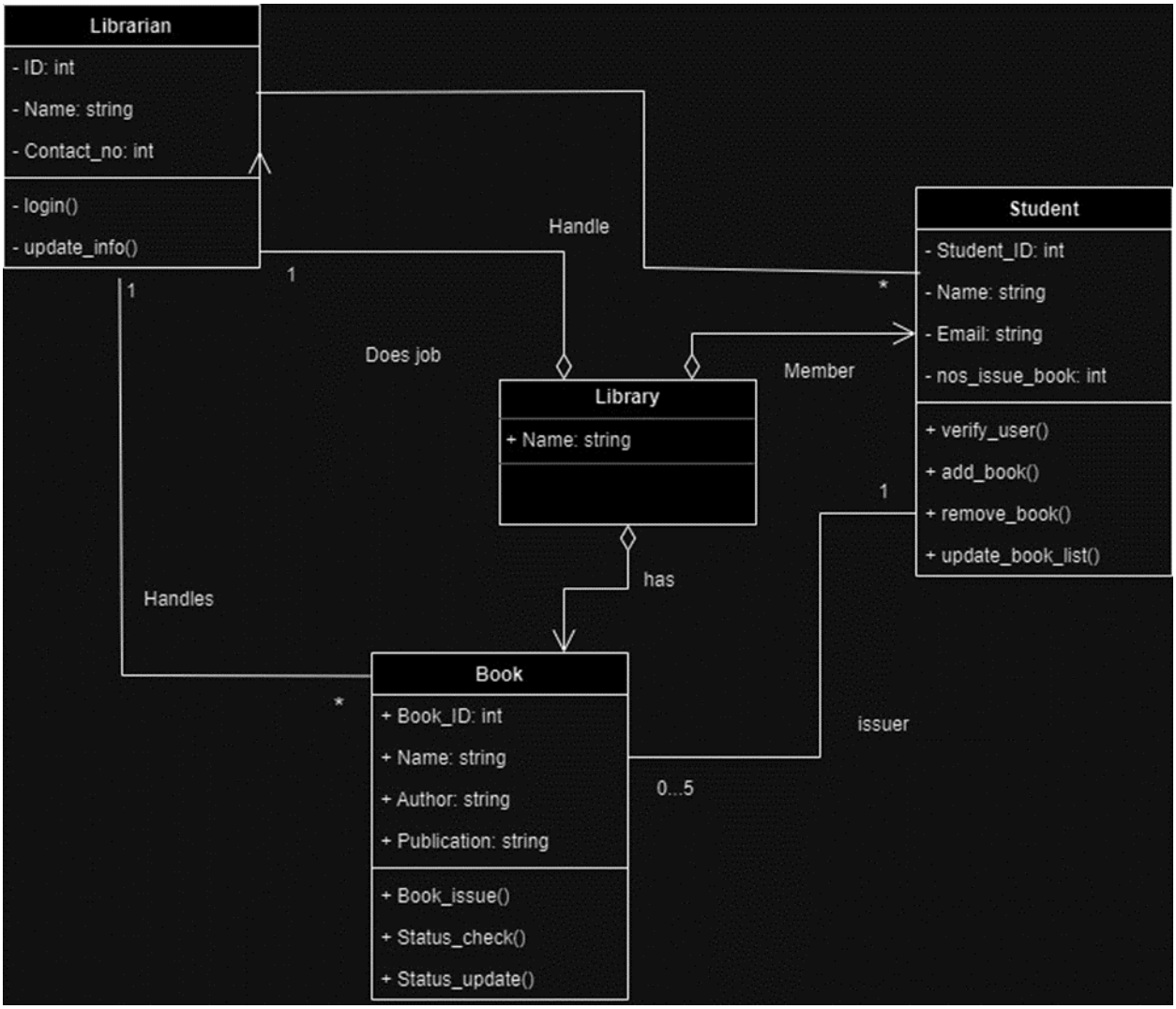
Objects:
- Registered Student
- Library System
- Book
- Librarian

Sequence Diagram for “issueBook”:



1.3 :-

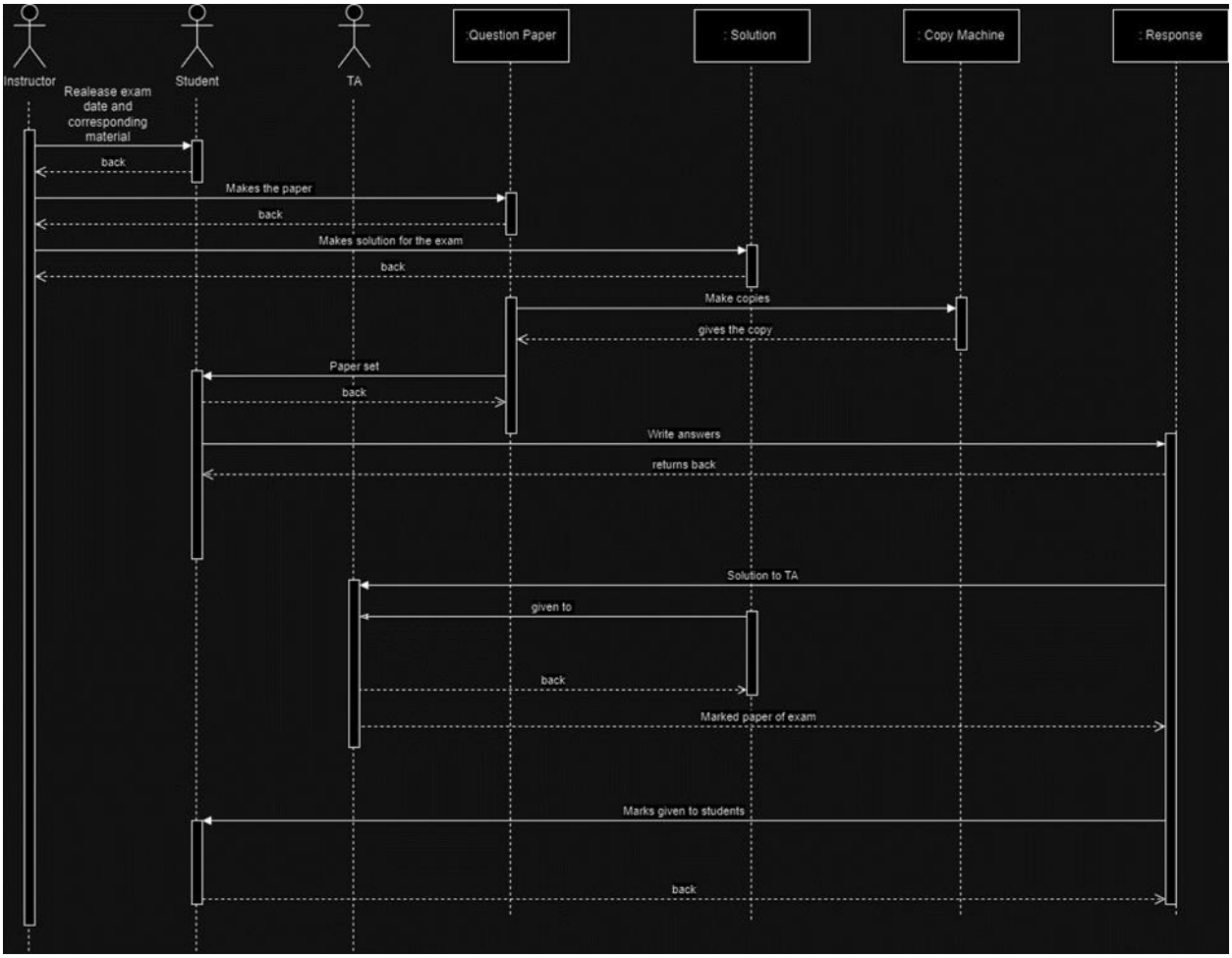
Analysis Object Diagram for “issueBook” use case:



Q-2 :-

Create a flowchart to depict this process. Make care to show when each actor is involved in the procedure. Also, display the operation that is performed during each interaction, as well as what its arguments are**.**

Sequence Diagram :-


Instructor
Student
TA
:Question Paper
: Solution
: Copy Machine
: Response
Realease exam date and corresponding material
back
Makes the paper
back
Makes solution for the exam
back
Make copies
gives the copy
Paper set
back
Write answers
returns back
Solution to TA
given to
back
Marked paper of exam
Marks given to students
back