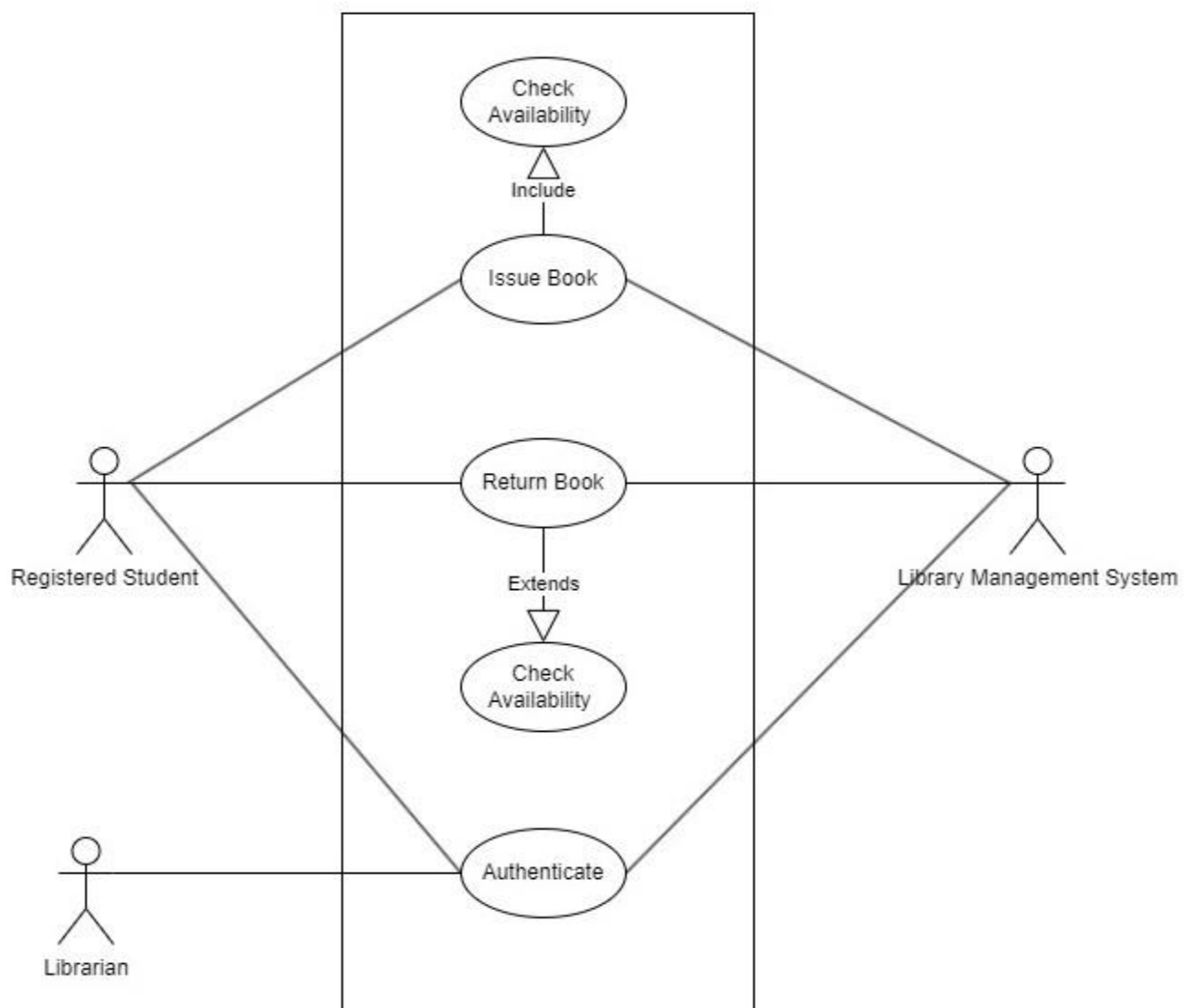# IT314 – SOFTWARE ENGINEERING

LAB 07 : DOMAIN ANALYSIS MODELING & SEQUENCE DIAGRAM

202101160 – Krupesh Parmar

- Que: 01 – Library Management System

1. Use - case Diagram

- ## **<u>Use - case Documentation</u>**

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.

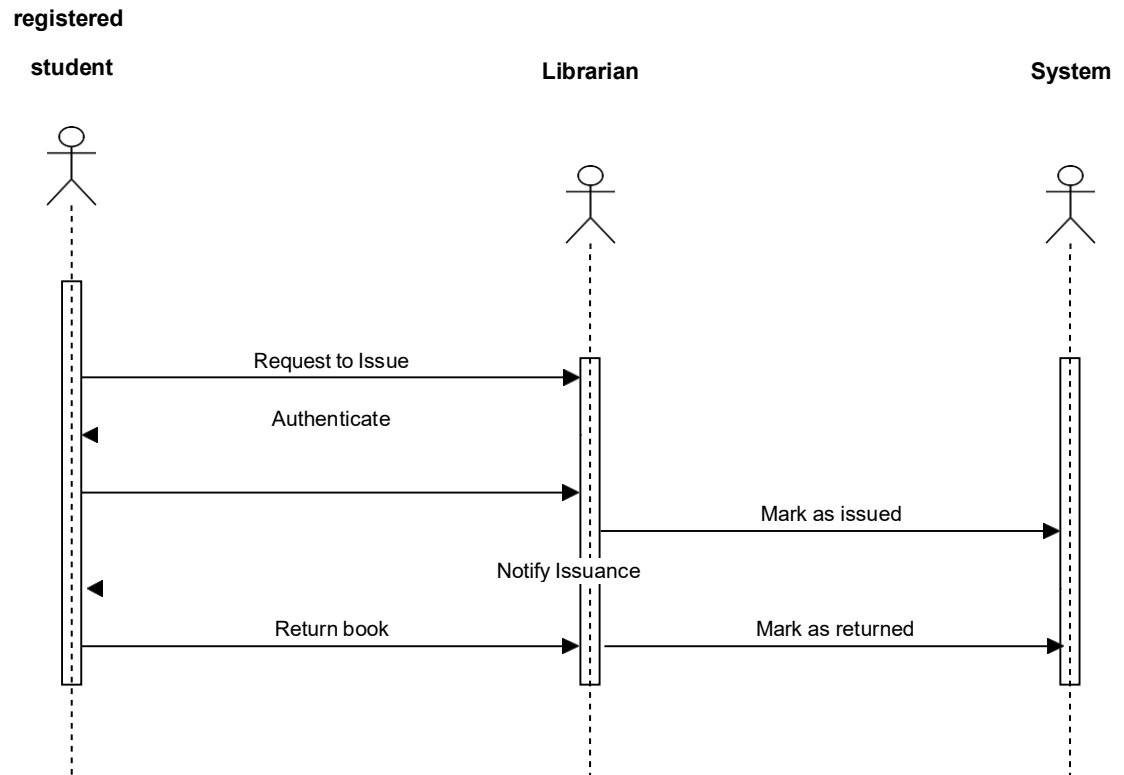• The student is notified of the successful issuance.

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.

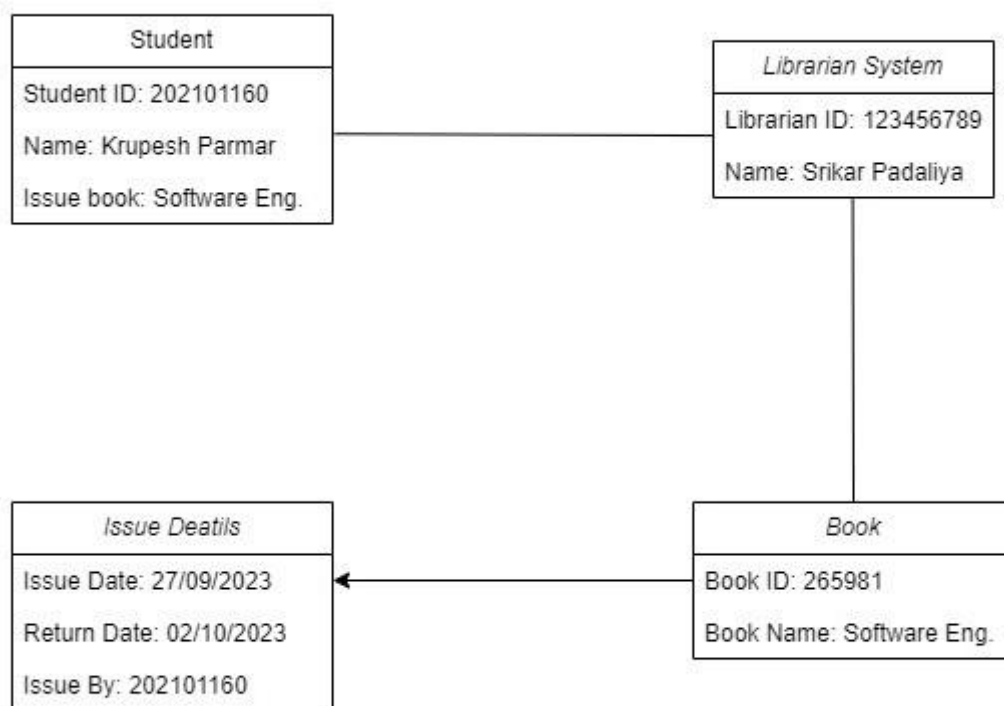• The system notifies the student and the librarian about the successful issuance.

Alternate flow:

• 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

- ## Que: 02 –Examination Management Process

:Instructor P   :Student P   :TA P   :Staff P

setExam(dt,material)

prepare(exam)

makeCopies(exam)

*handOut(exam)   writeAnswers(exam)

[Time Up?]

*handIn(exam)

*mark(paper,pers,marks)

*inform(mark)

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