ASSIGNMENT - III

Object Oriented Software Engineering
(SE - 301)

DELHI TECHNOLOGICAL UNIVERSITY
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Bachelor of Technology

(Software Engineering)

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2K19/SE/138

AIM: Identify classes and their relationships for maintaining student details in the library management system.

THEORY:

Maintain Student Details:

This entails the steps the administrator/DEO must follow in order to maintain student membership details. This includes adding, updating, deleting and viewing student information.

Classes involved here are:

1. BarcodeReader (Interface class)
2. Student (Member) (Entity class)
3. StudentInterface (Interface class)
4. Student Controller (Controller class)

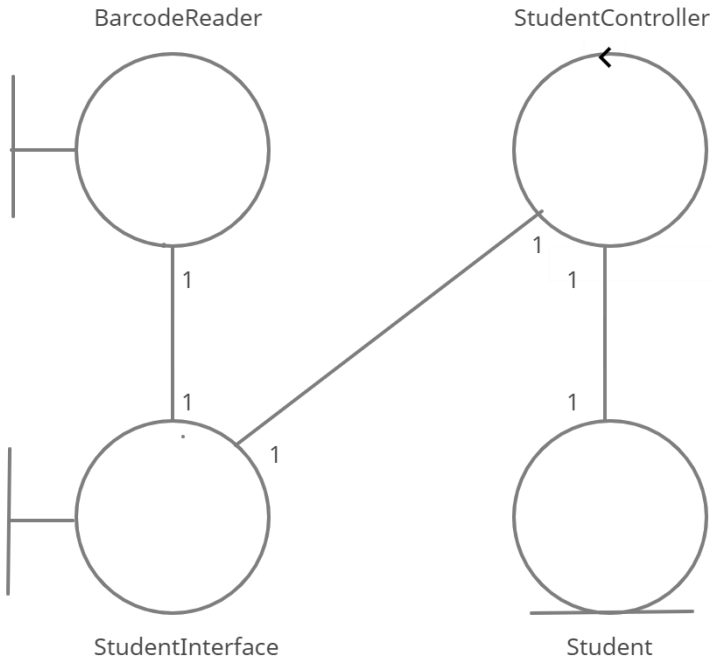
Basic Flow:

1. Student membership number is read through the bar code reader.
2. The system displays information about the student.
3. The StudentInterface class provides the interface between student and system.
4. The StudentController class controls this flow and finally the Student class is invoked.
5. All information regarding student is then displayed and can be updated.

Summary of Classes in 'MAINTAIN STUDENT DETAILS' Use Case:

Class Name	Class Type	Description
BarcodeReader	Interface	This class reads barcodes of books and members of the library.
Student	Entity	This class is used to represent the information of the student in the university library.
StudentInterface	Interface	This class provides a student interface to the actor of the system for maintenance and record keeping.
StudentController	Controller	This class manages and controls the operations in the 'maintain student details' use case for maintaining student details.

Relationships between classes in ‘MAINTAIN STUDENT DETAILS’ Use Case



Summary of Relationships among Classes for ‘MAINTAIN STUDENT DETAILS’ Use Case

Sending Class	Receiving Class	Relationship
BarcodeReader	StudentInterface	Bidirectional Association
StudentInterface	StudentController	Bidirectional Association
StudentController	Student	Bidirectional Association

CONCLUSION:

The relationships among various classes involved in MAINTAIN STUDENT DETAILS Use Case have been defined and their description is also mentioned.