DELHI TECHNOLOGICAL UNIVERSITY

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DEPARTMENT OF SOFTWARE ENGINEERING

Object Oriented Software Engineering

(SE - 301)

ASSIGNMENT - II

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2K19/SE/136

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

THEORY :

Maintain Book Details :

This entails the steps that the administrator/DEO must follow in order to maintain book details and add, update, delete and view book information. Classes involved here are :

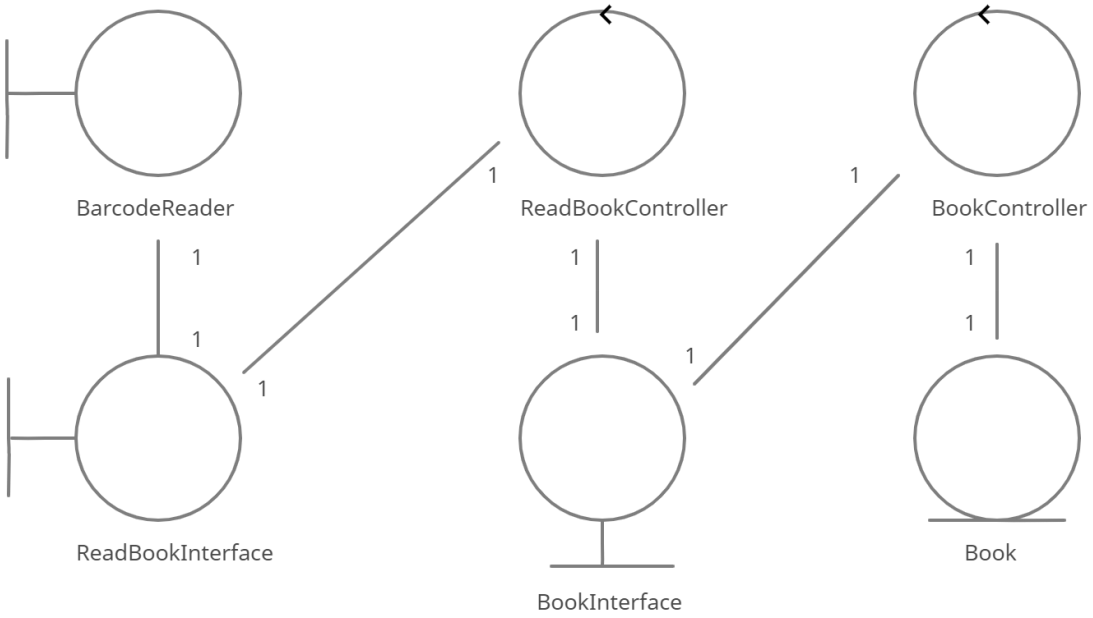
1. Book (Entity class)
2. Book Interface (Interface class)
3. Book Controller (Controller class)
4. BarcodeReader (Entity class)
5. ReadBookInterface (Interface class)
6. ReadBookController (Controller class)

Basic Flow :

1. Faculty/employee reads the book information through the bar codereader.
2. The system displays information about the current book.
3. The ReadBookController class controls this flow and invokes the BookInterface class.
4. The BookController controls this flow and finally the Book class is invoked.
5. All information regarding books are then displayed and can be updated

Class Name	Class Type	Description
BarcodeReader	Interface	This class reads barcodes of books and members ofthe library.
ReadBookInterface	Interface	This class provides a read book interface to theactor of the system for maintenance.
ReadBookController	Controller	This class manages and controls the operations inthe 'maintain book' use case for reading books.
Book	Entity	This class is used to represent the information ofthe books in the university library.
BookInterface	Interface	This class provides a book interface to the actor ofthe system for maintenance.
BookController	Controller	This class manages and controls the operations in the 'maintain book' use case for maintaining books.

Summary of classes in 'MAINTAIN BOOK' Use Case



Relationships between classes in 'MAINTAIN BOOK' Use Case

Summary of Relationships among Classes for 'MAINTAIN BOOKS' UseCase :

Sending Class	Receiving Class	Relationship
BarcodeReader	ReadBookInterface	Bidirectional Association
ReadBookInterface	ReadBookController	Bidirectional Association
ReadBookController	BookInterface	Bidirectional Association
BookInterface	BookController	Bidirectional Association
BookController	Book	Bidirectional Association

CONCLUSION :

The relationships among various classes involved in MAINTAIN BOOK Use Case has been defined and their description is also mentioned.