

CS 202: IT Workshop I

Assignment III

Consider a Library Management System and implement the following in Java. The variable/method names indicate their usual meanings. The methods (issue, return, etc.) will be invoked for one object at a time and this will be identified by the book ID which is passed as a parameter or can also be taken from user.

Book
<ul style="list-style-type: none">- bookId: int- bookTitle: String- yearOfPublication: int- authorName: String- publisherName: String- numberOfAvailableCopies: int- totalCopies: int
<pre><<constructor>> Book () <<constructor>> Book (totalCopies: int) + setDetails () + setDetails (id: int, title: String, year: int, author: String, publisher: String, count: int) + getDetails (id: int) + issue (id: int) + return (id: int)</pre>

a) Create an array of objects (at least 5) for the Book class and set the details for each book object.

b) Design a menu-driven interface for the user. User will choose an option from 1. Set Details, 2. Get Details, 3. Issue, 4. Return, 5. Exit etc. Based on the option entered by the user, appropriate operation should be performed by calling appropriate method of the class. [Hint: getDetails(int) shall be used to display the details of the object identified by bookId]

c) You can assume additional instance variables, additional methods, static fields, etc. if needed / to make the application more realistic.