

Spring 2017 CSc 15 chapter 8 lab

Part 1

In this lab we will be creating a class called `LibraryBook` encapsulating the concept of a book in a class. This class will have the instance variables such as `title`, `author`, `id`, `dateBorrowed`, and `dateReturned`.

This class also has a list of the methods such as constructor, accessor, mutator, `toString` and `equals` method. Refer to the provided shell for the description of each of the methods.

Part 2:

Create a class called `LibraryDriver` that is the client of the class `LibraryBook` that we just created. This program is going to create an array of `LibraryBook`. This array will be filled by reading from a file which contains the information for each book.

You must create a notepad file that contains the information for all the book. Information needed are:

Title
Author
Id

Therefore the information for each book will take 3 lines and that is how you need to create the file. After the array is populated, we will display the list of the books at the library. User will choose to check in or check out a book. A book is being checked out, the date instance variable must be updated.

If the user choose a book that is not available, then a message must be outputted on the screen.

If a book is returned then that book must become available again.

The user will be asked if he/she has any other transaction.

Refer to the provided shell for more details.

Your program must generate the exact same output.

Sample output

```
-----WECOME TO THE LIBRARY AT CSUS-----
```

```
Enter 1 to check out a book.
```

```
Enter 2 to return a book.
```

```
Enter your choice--> 1
```

```
LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO
```

```
-----  
ID           Title           Author  
-----
```

1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Avaible
2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Avaible
3. 56789435, The The Hobbit , J. R. R. Tolkien , Avaible

4. 67894355, The The Da Vinci Code , Dan Brown, Avaible
 5. 98674532, The Pride and Prejudice , Jane Austen , Avaible
 6. 34245346, The To Kill a Mockingbird , Harper Lee , Avaible
 7. 89564756, The The Catcher in the Rye , J. D. Salinger , Avaible
-

Choose one of the avaible books,

Enter the number associated with the book: 1

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

You have checked out:

12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling

You must return the book by : Sat Apr 29 10:11:00 PDT 2017

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Another transaction y/n? y

Enter 1 to check out a book.

Enter 2 to return a book.

Enter your choice--> 2

LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO

ID	Title	Author
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1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Not Avaible
 2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Avaible
 3. 56789435, The The Hobbit , J. R. R. Tolkien , Avaible
 4. 67894355, The The Da Vinci Code , Dan Brown, Avaible
 5. 98674532, The Pride and Prejudice , Jane Austen , Avaible
 6. 34245346, The To Kill a Mockingbird , Harper Lee , Avaible
 7. 89564756, The The Catcher in the Rye , J. D. Salinger , Avaible
-

Enter the id of the book : 12356789

Your book has been returned to the library. Thanks

Another transaction y/n? y

Enter 1 to check out a book.

Enter 2 to return a book.

Enter your choice--> 1

LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO

ID	Title	Author
----	-------	--------

1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Avaible
2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Avaible
3. 56789435, The The Hobbit , J. R. R. Tolkien , Avaible
4. 67894355, The The Da Vinci Code , Dan Brown, Avaible
5. 98674532, The Pride and Prejudice , Jane Austen , Avaible
6. 34245346, The To Kill a Mockingbird , Harper Lee , Avaible
7. 89564756, The The Catcher in the Rye , J. D. Salinger , Avaible

Choose one of the avaible books,

Enter the number assosiated with the book: 1

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

You have checked out:

12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling

You must return the book by : Sat Apr 29 10:11:17 PDT 2017

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Another transaction y/n? y

Enter 1 to check out a book.

Enter 2 to return a book.

Enter your choice--> 1

LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO

ID	Title	Author
----	-------	--------

1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Not Avaible
2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Avaible
3. 56789435, The The Hobbit , J. R. R. Tolkien , Avaible
4. 67894355, The The Da Vinci Code , Dan Brown, Avaible
5. 98674532, The Pride and Prejudice , Jane Austen , Avaible
6. 34245346, The To Kill a Mockingbird , Harper Lee , Avaible
7. 89564756, The The Catcher in the Rye , J. D. Salinger , Avaible

Choose one of the avaible books,

Enter the number assosiated with the book: 1

The selected book is not avaible until : Sat Apr 29 10:11:17 PDT 2017

Choose another book: 2

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

You have checked out:

34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling

You must return the book by : Sat Apr 29 10:11:28 PDT 2017

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Another transaction y/n? y

Enter 1 to check out a book.

Enter 2 to return a book.

Enter your choice--> 1

LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO

ID	Title	Author
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1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Not Available
2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Not Available
3. 56789435, The The Hobbit , J. R. R. Tolkien , Available
4. 67894355, The The Da Vinci Code , Dan Brown, Available
5. 98674532, The Pride and Prejudice , Jane Austen , Available
6. 34245346, The To Kill a Mockingbird , Harper Lee , Available
7. 89564756, The The Catcher in the Rye , J. D. Salinger , Available

Choose one of the available books,

Enter the number associated with the book: 1

The selected book is not available until : Sat Apr 29 10:11:17 PDT 2017

Choose another book: 5

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
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You have checked out:

98674532, The Pride and Prejudice , Jane Austen

You must return the book by : Sat Apr 29 10:11:37 PDT 2017

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

Another transaction y/n? y

Enter 1 to check out a book.

Enter 2 to return a book.

Enter your choice--> 2

LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO

ID	Title	Author
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1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Not Available
2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Not Available
3. 56789435, The The Hobbit , J. R. R. Tolkien , Available
4. 67894355, The The Da Vinci Code , Dan Brown, Available
5. 98674532, The Pride and Prejudice , Jane Austen , Not Available
6. 34245346, The To Kill a Mockingbird , Harper Lee , Available
7. 89564756, The The Catcher in the Rye , J. D. Salinger , Available

Enter the id of the book : 6666666
you entered the wrong ID.

Another transaction y/n? y
Enter 1 to check out a book.
Enter 2 to return a book.
Enter your choice--> 2

LIBRARY OF CALIFORNIA STATE UNIVERSITY< SACRAMENTO

ID	Title	Author
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1. 12356789, The Harry Potter and the Sorcerer's Stone , J. K. Rowling , Not Available
2. 34567890, The Harry Potter and the Chamber of Secrets , J. K. Rowling, Not Available
3. 56789435, The The Hobbit , J. R. R. Tolkien , Available
4. 67894355, The The Da Vinci Code , Dan Brown, Available
5. 98674532, The Pride and Prejudice , Jane Austen , Not Available
6. 34245346, The To Kill a Mockingbird , Harper Lee , Available
7. 89564756, The The Catcher in the Rye , J. D. Salinger , Available

Enter the id of the book : 12356789
Your book has been returned to the library. Thanks

Another transaction y/n? y
Enter 1 to check out a book.
Enter 2 to return a book.
Enter your choice--> 2

