**Assignment 5 : Library Database System (Admin) (Due: July.1st)**

This is an extension of the library database system we have worked in the previous assignments. Implement a Library Database Management system – Admin console using Oracle JDBC. Name your program as "LibraryAdminDb.java".

The implementation is better explained using a screen capture of a sample run of the program given below. The user input is shown in bold. The MENU keeps on repeating until the user selects the choice 4 (Exit). At each step, where needed, comments are appropriately provided in the script file between /\*..... \*/. However, such comments are provided for your understanding and should not appear in the file that you submit.

We will use the library database schema available at [library.sql](http://www.mscs.mu.edu/~praveen/Teaching/Su18/Db/Assignments/library.sql) (click to open the file). Use the borrower\_seq object to generate unique sequence card no values for new borrowers. See the library.sql file.

**Submission:** Zip all your files and submit electronically using http://d2l.mu.edu. Also, submit sample execution screen shots/test case reports of running your program. Name the main program as LibraryAdminDb.java.

%java LibraryAdminDb

Enter your database username : **<place holder for database user name>**

Enter your database password : <**database password>**

Welcome to the Library Database Management System (Admin)

MENU

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(1) Enter a new Borrower

(2) Check-out a Book for a Borrower

(3) Check-in a Book for a Borrower

(4) Exit

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Please make your choice : **1**

Please enter Borrower Name  (firstname lastname) : **John Smith**

Please enter Borrower Address : **678 Wisconsin Ave, Milwaukee, WI**

Please enter Phone number (xxx-xxx-xxxx) : **123-789-7845**

Borrower Record inserted successfully. The borrower’s card no is : 12003

MENU

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(1) Enter a new Borrower

(2) Check-out a Book for a Borrower

(3) Check-in a Book for a Borrower

(4) Exit

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Please make your choice: **2**

Borrowers along with their card numbers are:

Davolio (1)

Fuller (2)

John Smith (12003)

Leverling (3)

Please enter the borrower card no: **1**

Please enter the book id:  **1035**

Please enter the branch id: **6380**

Successfully checked out the book - But Is It User Friendly? (1035) for Davolio(1). The book is due by : November, 26th, 2016.

/\* When inserting the row into book\_loans table, the date out should be defaulted to current date and time, and the due date should be one month from the date out. The date in and rating columns should be null. Also, meaningful error messages need to be displayed if any referential or primary constraints are violated. \*/

MENU

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(1) Enter a new Borrower

(2) Check-out a Book for a Borrower

(3) Check-in a Book for a Borrower

(4) Exit

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Please make your choice: **3**

Borrowers along with their card numbers are:

Davolio (1)

Fuller (2)

John Smith (12003)

Leverling (3)

Please enter the borrower card no: **1**

Please enter the book id:  **1035**

Please enter the branch id: **6380**

Successfully checked in the book - But Is It User Friendly? (1035) for Davolio(1). The book has been returned by the due date. There is no late charge.

/\* The datein column for the matching row in the book\_loans table should be updated to the current date. Also, if the book is overdue, charge a late fee of 30cents for each late day after the due date.  Meaningful error messages need to be displayed if any referential or primary constraints are violated. \*/

MENU

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(1) Enter a new Borrower

(2) Check-out a Book for a Borrower

(3) Check-in a Book for a Borrower

(4) Exit

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Please make your choice: **4**

%exit