USER GUIDE

**NEW JERSEY INSTITUTE OF TECHNOLOGY || CS 631 || DATABASE MANAGEMENT SYSTEM || SPRING 2019**

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* **Introduction**

City Library Management Application is the menu driven application for library user and workers to manage the books, documents and journals to make it easier for the librarian and the reader. This makes easier for the admin and user to manage the library function from one application. They can perform all essential functions from this app.

This software has following menu’s:

1. Main Menu
2. Reader Function Menu
3. Administrative Function Menu

To run the Application, we used Eclipse IDE (version: 4.11.0) and MYSQL Workbench (6.3.10).

**To run application:**

Run src/main/resources/db/create.sql

Run src/main/resources/db/data.sql

Run MainWindow.java

**Functions the software support:**

Reader functions (ask for card number, and then show sub-menu).

Administrative Functions (ask for ID and password, and then show submenu).

Search a document by ID, title, or publisher name.

Document checkout. Document return. Document reserve.

Compute fine for a document copy borrowed by a reader based on the current date.

Print the list of documents reserved by a reader and their status.

Print the document id and document titles of documents published by a publisher.

Add a document copy. Search document copy and check its status.

Add new reader. Print branch information (name and location).

Print top 10 most frequent borrowers in a branch and the number of books each has borrowed.

Print top 10 most borrowed books in a branch.

Print the 10 most popular books of the year.

Find the average fine paid per reader.

Quit.

* **For Administrator**

To enter into the admin sub- menu, you need to add the ID and Password in the Main menu function and then login.

The admin is allowed to

1. Add a document copy in which we can insert either book, journal and Proceeding. All the details are mandatory to add. But ID should be unique or for repeated or already stored value error will be displayed. To exit the current window press X in the top right corner.
2. Search document copy and check its status by following three options DOCID, Copy No and Library ID. For the given query status of that book will be showed like reserved or borrowed or available. To exit the current window press X in the top right corner.
3. To add new reader librarian is supposed to add the ID, Type of reader, her/her name and address. To exit the current window press X in the top right corner.
4. List of all branch and its information of location is displayed under the Branch information tab. To exit the current window press X in the top right corner.
5. In print top 10 most frequent borrowers in a branch, list of top 10 readers is displayed with their name, library ID, Branch name and Number of books. To exit the current window press X in the top right corner.
6. In print top 10 most borrowed books in a branch, list of top 10 borrowed books is displayed with DOCID, LIBID, BRANCHNAME and NO. of BORROWS. To exit the current window press X in the top right corner.
7. In print the 10 most popular books of the year, list of top 10 popular books of the current year is displayed with DOCID. To exit the current window press X in the top right corner.
8. Shown the average fine paid per reader. To exit the current window press X in the top right corner.
9. To Quit click the cross button in the right upper side.

* **For User**

To enter into the user sub- menu, you need to add the reader card number in the Main menu function and then login.

1. The user is allowed to Search a document by ID, title, or publisher name. After search query in any one tab the reader can get the following data about the searched query i.e. Document ID, Title, Publisher Date, Publisher ID, Publisher Name, Copy Number, Library ID, Position, Library Name and Library Address.

In the same window user can checkout and reserve the document by selecting the document he/she want to check out or reserve. To exit the current window press X in the top right corner.

1. User can also check his/her status by going into the reader profile. Where reader can check their profile through borrowed books and reserved books. It prints the list of documents reserved by a reader and their status. To exit the current window press X in the top right corner.
2. In Document return the details of the borrowed book will be displayed. To exit the current window press X in the top right corner.
3. Compute fine for a document copy borrowed by a reader based on the current date. This will be displayed under the borrowed book tab and the fine will be calculated there. To exit the current window press X in the top right corner.
4. Print the document id and document titles of documents published by a publisher. This can be done under the publisher search tab. To exit the current window press X in the top right corner.
5. To Quit click the cross button in the right upper side.