**LIBRARY MANAGEMENT SYSTEM**

**USER MANUAL**

The Library Management System allows the users (students) to borrow and return books from different branches. Returns and Appraisals are done using a unique card number that is assigned to every student when he or she registers in the system.

**Registering the new borrowers**: New students register by giving their details such as name, email, address and phone number. The card number is generated and assigned to each of them.

**Searching books**: The user can enter book id, parts of title, and / or parts of author name. Once the checkbox is checked the corresponding books and their details will be displayed.

**Check out of books:** From the list of books displayed, a book can be chosen for check out. A maximum of three books can be checked out by a particular student depending on the number of copies present at a particular branch. That is, a student cannot check out a book if the number of copies at a particular branch is zero. Only if the card number is registered the student can borrow the book. If not, the student has to register and then check out books. The date of check out is noted and Due date is also calculated. The student should return the book by the Due date.

**Check in:** The user enters his or her card number and the list of books purchased by him or her is displayed. A fine amount is also displayed if the books were not returned on time. While returning the books the user has to pay the fine.

**Technical Dependencies**

1.       MySql server must be installed on the system.

2.       The server should be started and should be up and running for the web application to work well.

3.       Apache Tomcat Server is used in this project to host the web application successfully.

4.       Mysql connector JAR is necessary to connect the web application to the MySql server

5.        JAVA jars are required to run the java code successfully.

6.       The NetBeans IDE is used in this project to have an environment to coordinate the front end and the back end. ( that is to link the JSP pages with mySql)

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**Dallas City Library**

This system was done in NetBeans IDE version 8. Web Pages were created using JSP and linked to the sql database using scriplets.

Javascript is used for form validation ( In the form validation of register page)

Different tags were used to accomplish different functionalities. Some of them are listed below.

The search module was implemented using checkboxes to get multiple options from the user.

Navigation in JSP is done using forms and hyperlinks.

Loading csv files into database ( tables) is done as follows :

LOAD DATA LOCAL INFILE 'C:/Users/Nanda/csv files/book\_loans.csv'

INTO TABLE book\_loans

FIELDS TERMINATED BY ' '

LINES TERMINATED BY '\n'

(loan\_id, book\_id, branch\_id, card\_no, Date\_out, Due\_date, Date\_in);