LIBRARY MANAGEMENT SYSTEM

USER MANUAL

The Library Management System is a management software for monitoring and controlling the transactions in a typical library. The project is developed in JAVA, focusing on the main functions such as searching books, number of copies of a book in a particular branch, adding new members, issuing and returning books, etc.

The main screen has 5 options for the librarian to choose from, namely, Search, Issue, Returns, Borrower Management and Display Fines respectively. This project is developed from the librarian’s point of view and hence, gives the authority to the user to add borrower, issue/return book and update fines, if any.

Modules:

1. The Search windows has text fields for Book ID, Book Title and Author’s name where the user can enter any of the fields to look up for information on a particular book. The user doesn’t even have to enter the full details in the text field(s); entering partial details will still give the related results from which we can choose. The results is displayed using JTable giving the information for Book ID, Title, Author, Branch ID where the book is available, Total no. of copies of the book and the available no. of copies of the book.
2. Book Issue option gives 3 text fields for the user, Book ID, Branch ID and Borrower’s ID. If the borrower has not paid his fines and/or has borrowed 3 books already, the system will throw a suitable error depending on the nature of the error.
3. The Returns option is used to return previously issued book by the borrower. Here, the librarian can look up for the user by entering any of the fields either completely or partially and then select the correct borrower from the JTable. Using the unique loan id, we can update on the database.
4. Borrower Management is a classic functionality where the librarian can add new borrowers to the library system and a Borrower ID is generated automatically by the system. If any 2 users exist with the same first name, last name and address, the system doesn’t allow to add duplicate data.
5. Fines window gives the user to display all the unpaid fines as well as all the fines stored in the system. Along with this, we can also look up for a particular person’s fine history using his/her Borrower ID.
6. Each window has the provision to exit the system or to go back to the main system at any time

Software Requirements:

* Windows XP/Vista/7/8, x86/x64
* NetBeans IDE version 7 and above
* MySQL Server version 5 above
* Java SE Development Kit 6 above