**USER MANUAL**

In the Library management web application all the functionalities can be accessed on a single page. The word ‘User’ here is a reference to the librarian.

On the main page, there are four options for the user to perform different functions.

1. Search for books
2. Add a borrower
3. Check in a book
4. Refresh Fines

**Search Book:**

When the user clicks the search button below the ‘Search a book’ message, a single text field appears to input the search criteria. User can enter a keyword relating to what he/she wants to search. The result appears based on the criteria entered. The keyword can be either of the following:

1. Book ISBN
2. Book Title
3. Book Author.

A table of the search results will be displayed. Each book will be having a checkout button associated. The user can click on that button to check-out the book.

Only the customers who have issued less than 3 books currently, can check-out further books. On clicking the check-out button, a pop up appears to enter the Card ID of the customer. The librarian can enter a valid Card ID of the customer and the book will be issued to that customer. If the user already has 3 books, then an appropriate error message will be displayed saying the user cannot check out more books.

**Check-In:**

When a customer wants to return a book, the librarian can click on the ‘Check In’ button. On clicking this button, a text field appears where the user can enter either of the following criteria:

1. Borrower Name
2. Card ID
3. Book ISBN

The user can now click on the ‘Search Book Loans’ button. If there are any book loans for that user/book the details will appear. Now the user can check-in a book by clicking on the check-in button that appears for each loaned book.

**Add a borrower:**

The user can click on the ‘Add borrower’ button to add a new customer/borrower to the system. The following details must be provided to add a borrower:

1. First name
2. Last Name
3. Address
4. SSN
5. Phone number
6. City
7. State

If the borrower does not already exist, a new borrower will be added, and his card id will be displayed. An appropriate error message will be displayed if the borrower cannot be added.

**Fines:**

The user can click on the ‘Refresh Fines’ button to refresh/update the fines. A new button ‘Display Fines’ will appear. On clicking this button, the user can view the fine details for every customer.

If the customer wants to pay the fines, the user can now click on the ‘Pay Fines’ button associated with that user once the user pays the fine.