

DESIGN DOCUMENT FOR LIBRARY MANAGEMENT SYSTEM

Design Design

- Technologies used- HTML,CSS,JAVASCRIPT (FRAMEWORK JQUERY),AJAX,PHP.

Reason - These technologies are widely used in the practical world for implementation of a project also I have taken a course in Web Programming Languages this semester in which I am learning these technologies.

1)Book Search-

In the book search module, a librarian can enter multiple keywords like(ISBN TITLE AUTHOR), (Assumption-Key word entered does not contain any special characters).The search will display a list of books with ISBN, BOOK TITLE, BOOK AUTHOR, AVAILABILITY. Depending on the availability of the book, a librarian can check out the book.

2)Check-Out-

Once found that the book is available the librarian can check out the book by clicking on the available key and the librarian will enter the card id of the user if the user hasn't checked out more than three books he/she is permitted to check out the book and there will be a data entry in the book_loans table or else message will be displayed that the user has reached the limit of checking out three books.

3)Add Borrower-

The librarian can add a borrower. The input fields are specified in the UI. i.e(SSN,Borrower,Address,Phone). If the SSN is same then the entry is rejected or else it is added to the database of the borrower.(Assumption- We were not given SSN but SSN was randomly generated using this website and was added to the table for validation that no two users can be same.website name: <http://mockaroo.com>)

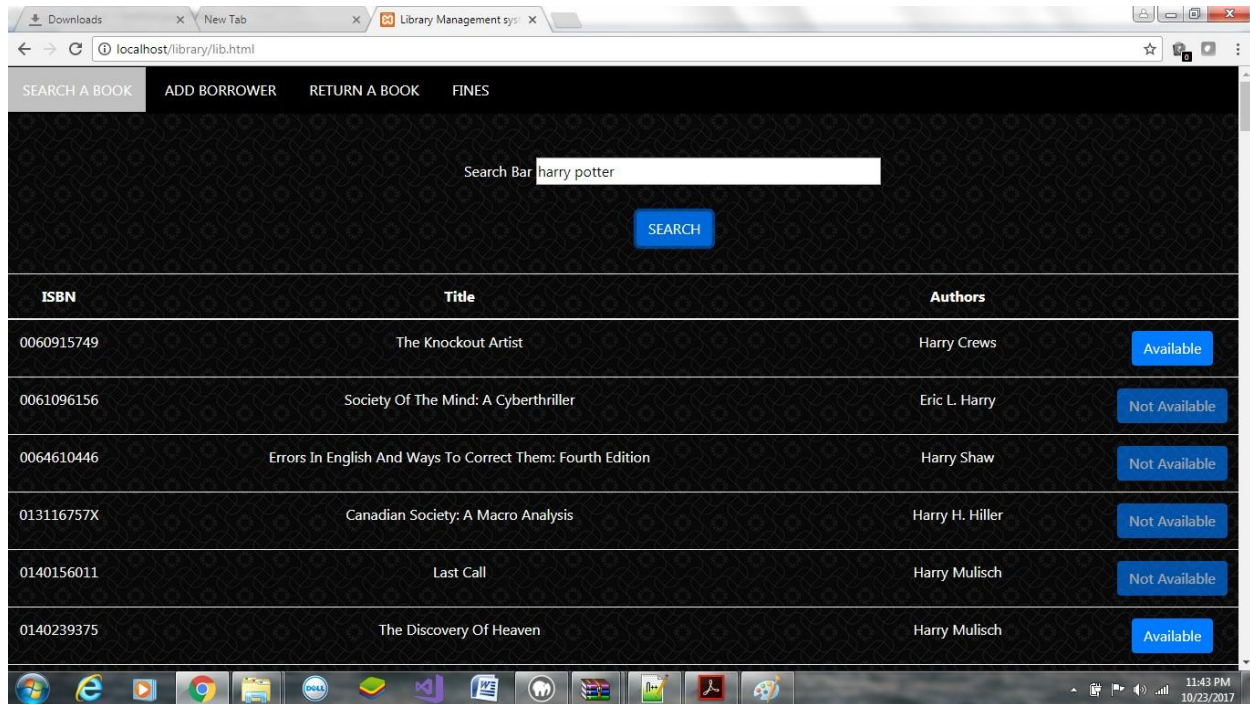
4) Returning a book-

In this module, the librarian can check whether the book is out by keyword Card id or ISBN or Borrower name for returning the book against the card id of the user the librarian can return by clicking on return button and the date_in will be changed to today's date in the book_loans table.

5)Fines-

The fines can be seen against the card id of the user and it can be paid and once the fine is paid the paid column that is a boolean value is changed to 1 and in the next search, it shows that the fine is paid.When the librarian clicks on the update button the fines are recalculated for the books that are out according to the current date and stored in the database.

SEARCH A BOOK

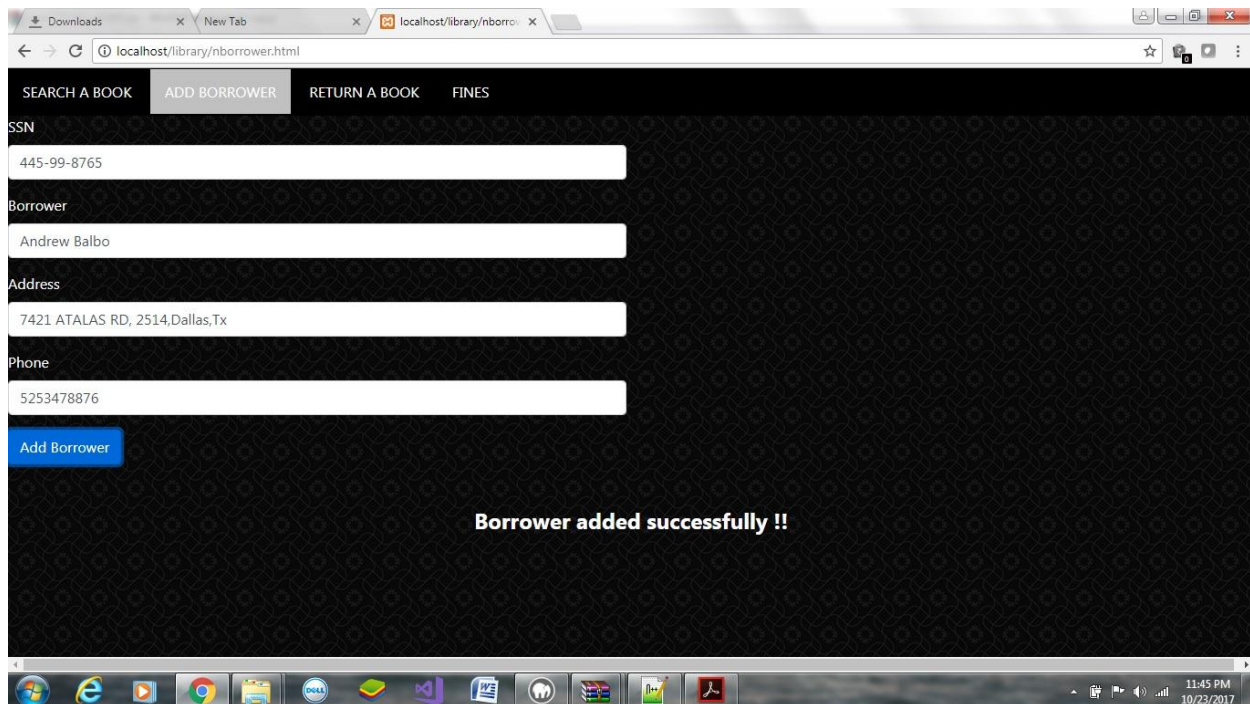


SEARCH A BOOK ADD BORROWER RETURN A BOOK FINES

Search Bar

ISBN	Title	Authors	
0060915749	The Knockout Artist	Harry Crews	<input type="button" value="Available"/>
0061096156	Society Of The Mind: A Cyberthriller	Eric L. Harry	<input type="button" value="Not Available"/>
0064610446	Errors In English And Ways To Correct Them: Fourth Edition	Harry Shaw	<input type="button" value="Not Available"/>
013116757X	Canadian Society: A Macro Analysis	Harry H. Hiller	<input type="button" value="Not Available"/>
0140156011	Last Call	Harry Mulisch	<input type="button" value="Not Available"/>
0140239375	The Discovery Of Heaven	Harry Mulisch	<input type="button" value="Available"/>

ADD BORROWER



SEARCH A BOOK ADD BORROWER RETURN A BOOK FINES

SSN

Borrower

Address

Phone

Borrower added successfully !!

Return A book

The screenshot shows a web browser window with the address bar displaying `localhost/library/return.html`. The application has a navigation bar with four tabs: "SEARCH A BOOK", "ADD BORROWER", "RETURN A BOOK" (which is active), and "FINES". Below the navigation bar, there is a search input field containing the value "334" and a blue "Get Books" button. The main content area displays a table with the following data:

Card ID	ISBN	Title	Check IN
334	0061096156	Society Of The Mind: A Cyberthriller	Return
334	0064610446	Errors In English And Ways To Correct Them: Fourth Edition	Return
334	013116757X	Canadian Society: A Macro Analysis	Return

The Windows taskbar at the bottom shows the system clock as 11:45 PM on 10/23/2017.

Fines

The screenshot shows the same web browser window, but the "FINES" tab is now active in the navigation bar. The address bar displays `localhost/library/pay.html`. The search input field still contains "334". Below the search field, there are two blue buttons: "Get Fines" and "Update Fines". The main content area displays a table with the following data:

Loan_ID	ISBN	Card_ID	Fine_Amount	Paid
12	0064610446	334	4.25	Pay
13	013116757X	334	3.75	Pay

Below the table, the text "Balance due = \$8.00" is displayed. The Windows taskbar at the bottom shows the system clock as 11:46 PM on 10/23/2017.