

DESIGN DOCUMENT

Technologies Used:

Front-end:

- 1) HTML with Bootstrap
- 2) Javascript and JQuery
- 3) Ajax

Back-end:

- 1) PHP
- 2) MySQL database

The whole development is done using WAMP server which has inbuilt Apache server and MySQL.

The dataflow and the DB schema diagram is as shown in the figures in the next page.

The home page is developed using HTML and bootstrap. Three clickable tabs for search, check fines and add new members is provided with easy movability between each feature. Using AJAX dynamic page change was achieved. Back end was developed using PHP which used would access the mysql database using mysqli api's.

The Data given is parsed using python to convert into sql commands for respective tables.

Features Added:

Search for book using either the ISBN, Title or Author name. Even a substring can be used to retrieve books.

Check out of available books and check In of books. The details like entering the borrower id during checkout, checking if its valid borrower id, checking if borrower has already checkout 3 books are provided during checkout. Checking fines either while check in or on any day can also be done.

Adding new member with all the details required. Using Javascript fields are checked for empty fields and error messages are shown to cut the time of backend calls. If the ssn is already present and error message from the backend will be shown.

Refresh date feature is given to increment date. With each increment of date corresponding changes are made in the database for calculating the fines.



