**ABSTRACT**

The project is an online library management system designed to help in libraries’ workflow. It is written in PHP, stores data in a MySQL database, and is rendered with bootstrap CSS and font-awesome icons. It is a fully functional, responsive web app with the following features.

**REGISTRATION AND LOGINING IN**

All functions require that a user is logged in which subsequently requires that a user is registered. To register, one needs to navigate to the signup page which can be obtained by clicking on the “Not registered yet” link on the index page, which also serves as the login page, or directly through the “/signup.php” link. Registration requires the user’s full name, mobile number, email, and password. To prove that they are human, the user is called to read and input a randomly generated verification code. This data is then posted to the backend through Ajax calls. Understand, that the app has two types of users, an admin and a general user (student). Only general users can register this way upon which they are given a unique ID, to acquire admin privileges requires additional input from the system’s administrator. Once logged in, the user is accorded a session named “login” and redirected to their dashboard.

**ADMIN FEATURES**

The web app is dynamic and thus all content is moderated by the admin. From the admin dashboard, the admin can; add books and authors, sort books into categories, view registered students, issue books to students and record book sales.

**CATEGORIES**

For easier sorting, the books are placed into categories as dictated by the admin. To add a category, the admin navigates on the navbar, under the button, “categories,” which has a dropdown with two options, “Add Category” and “Manage Categories.” Under “Add Category,” the user is prompted to input the category’s name and state whether it is active or inactive. Under “Manage Categories,” the admin can view all the present categories in paginations of 10 entries. There the admin can edit the categories details or delete categories altogether.

**AUTHORS**

An admin can also add authors by clicking on the “Authors” button in the navbar, which also has a dropdown with two options, “Add Author” and “Manage Authors.” To add an author, the admin simply needs to input the author’s name. On the manage-authors page, the admin can view, edit and delete authors.

**BOOKS**

The admin can also add and manage books from the dashboard. To add a book, the admin needs to input its name, select a category which the book falls under (these categories are those added earlier by the admin,) select and author (similarly, these are the authors added earlier), input the book’s ISBN number and its price. Under “Manage Books,” the admin can view all recorded books in pagination form, with each page containing 10 entries. On this page, the admin can edit all values or delete a record.

**ISSUE BOOKS**

This is the main functionality of the system. The system was designed to help manage a library and thus calls for it to allow for books to be issued to registered students and track the whole book issuing workflow. To issue a book, the admin needs to navigate to the “Issue Books” dropdown and select “Issue New Book.” Then he will be prompted to input a valid student ID which will be queried against the database on the fly. Additionally, he has to input a valid ISBN number. Once issued, the admin can view and manage all book issues on the “Manage Issued Books” page. On this page, he can record once a book is returned by clicking on the “edit button.” Additionally, he can input a fine amount should the student have overstayed with the book.

**SALES**

The system also allows for purchases to be made by students. These sales are managed on the “Sales” page. On this page, the admin can view orders and change the status of the orders from “pending” to “released” and eventually, “delivered.”

**STUDENT FEATURES**

**DASHBOARD**

The dashboard shows the student a summary of their activities in the library. It shows the books issued, those that are yet to be returned and purchases made. It also allows for the student to edit their profile, that is, edit their name, email, password and phone number. On the “Issued Books” page, the student can view all the books issued to him.

**SALES**

The system also allows students to make purchases on books. To make a purchase, they have to navigate to the “books-on-sale” page. All available books are displayed on this page. Upon clicking on the “add to cart” button put against the book they want to purchase, they are then prompted to add the number of books that they want to purchase. The book is then added to the cart using JavaScript. The user can then either empty the cart or complete the order by clicking “Send Order.” Once they click that button, then the admin can be able to view the order in their dashboard and release it. The student can then track the progress of his order on the “Purchases” page.