

EzLib

LIBRARY MANAGEMENT SYSTEM

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Introduction

We have created a **Library Management System** for a college to easily lend, return and maintain fines and books. We have used the following tech stack for making this project.

Frontend: HTML, CSS, BOOTSTRAP

- Backend: PHP

Database Server: MySQL

This app aim is to digitalize and maintain records of all the books and transactions in a library. So that the search and lending and managing books is easy for both Student and the Admin to ensure faster and more reliable management of the library.

Purpose

The purpose of the app is to ease the process of all the major transactions and maintenance that takes place in a library setting. Some examples of used cases for our app are as follows:

- Students can register if they are new and can then login and then use the app one their verification from the admin is completed.
- However, the admins can only be created by the database administrator.
- Borrowing, Reissuing, and returning of books for students has been digitalized so that they can request to borrow a book and just show it in the counter where the librarian can accept or reject his/her requests.
- Students can send recommendations to the admin for new books and the admin can act upon their requests.
- Students can edit their profile add profile picture and change password. The admin along with his own profile can edit some details of the students as well.
- Students can browse the pending amount and pay through the app. The admin can then verify the payment and can also see all previous payments and all pending amounts. The amounts are as follows:

Borrowing book: ₹10 per book.

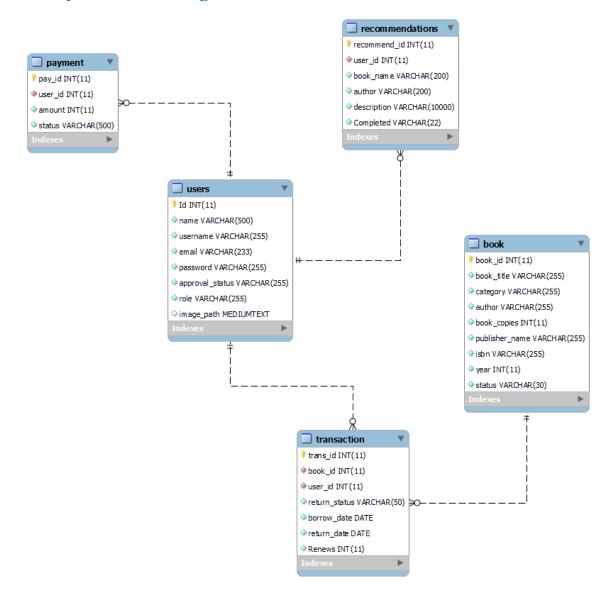
Late Fees: ₹2 per day.

Reissue: ₹5 every reissue.

Vision for future

The App currently depends a lot on the librarian and due to human factors confusion can be created and the process may slow down. So, integrating the admin with machines to automate borrowing and return. And adding real payment gateway can make this app more automated and reduce a considerable number of human factors to it.

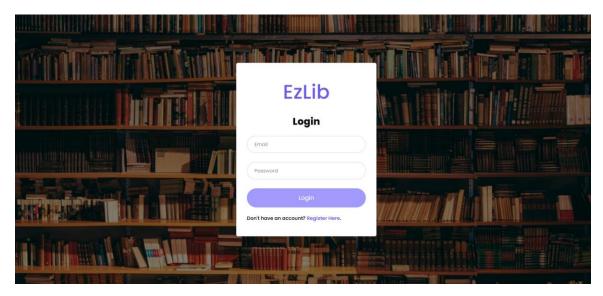
Entity-Relation Diagram



Description

LOGIN PAGE

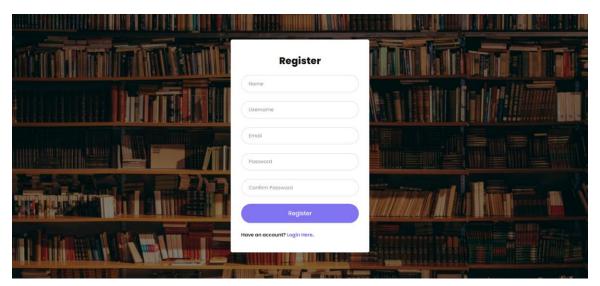
We put the username and password to login. In case the student has not registered previously they can register and send a request to the admin for registration.



We can click on Register here to register

REGISTRATION PAGE

In case the student has not registered previously they can register and send a request to the admin for registration.



TYPES OF USERS

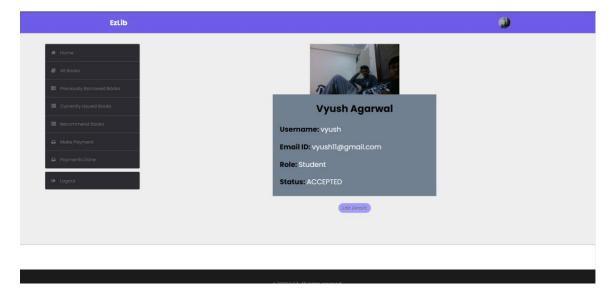
There are two types of users:

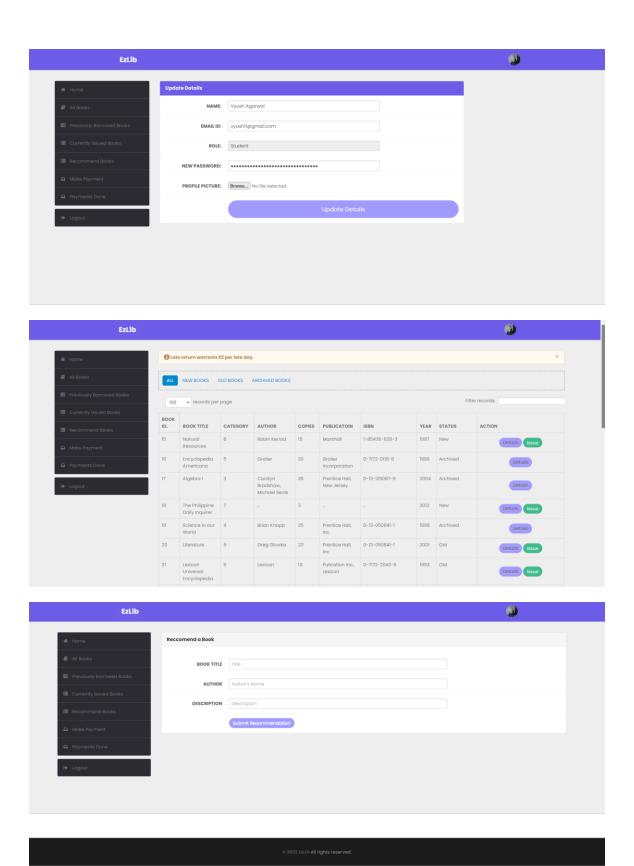
- i. **Students:** These users are clients at a library who would want to borrow or return books. They also must pay money for the books used. They also can send recommendations of books to the admin. They can register from the login page.
- **ii. Admin:** The admins are basically the Librarians to maintain the library. They can edit student details, book details, add books, view recommended books, verify users and payment, and see dues and all transactions. They have to be added by the data base administrator.

STUDENTS USE CASES

The home screen contains all the pages where the students can move to.

- i. Edit details: User can update password, name, profile picture, etc.
- ii. All Books: View all the books and request for issue if available.
- **iii. Previously Borrowed Books:** Books which have previously been borrowed but returned now.
- iv. Currently Issued Books: Books which have been requested or which have not been returned till now.
- v. Recommend Books: Recommend books that the student wants to the librarian.
- vi. Make Payment: Check the outstanding balance and pay for it.
- vii. Payments Done: Check all the previous transactions that have taken place.





ADMIN USE CASES

The home screen contains all the pages where the admins can move to.

- i. Edit details: User can update password, name, profile picture, etc.
- ii. All users: View all students and access to edit few details.
- iii. All Books: View all the books view and edit their details.
- iv. Add Books: Add new books to the library.
- v. Book Requests: View all students issue return and past completed requests.
- **vi. Currently Issued Books:** Books which have been requested or which have not been returned till now.
- **vii. Recommended Books:** View all the new books that the students would like to have in the library.
- **viii. Payments done:** View all the payments that have been initiated or completed in the past.
 - ix. Payments Done: Check the outstanding balance of all students.

