

Web app for

Library Management

Maximum duration **3 weeks**

Recommended duration **2 weeks**

Technology stack

- React-Redux
- ES6, Thunks, GraphQL
- ExpressJS
- MySQL

Overview

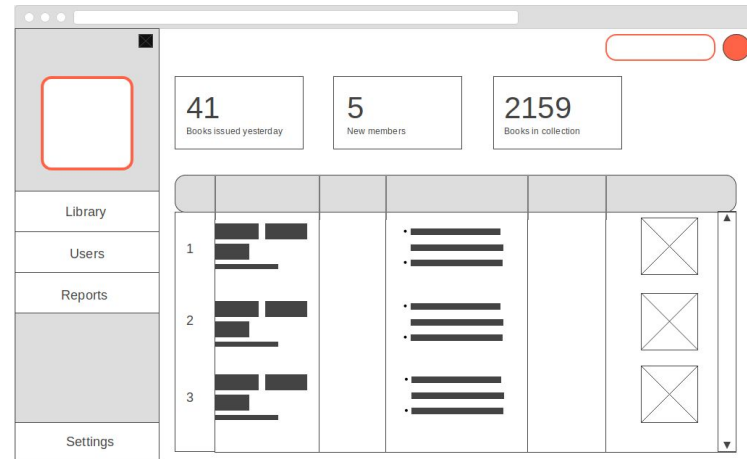
1. This is a library management application that has to be done using React JS on front end. Use of Thunks is a must. Redux **MUST** be used when needed.
2. There are three roles in the application: Admin, Librarian, User. Only the Librarian and Admin can use the web app.
3. GraphQL must be used to achieve the unique functionality of the application.

Use Cases

1. Admin can add a new library
2. Library contains details like location, type (government, funded, NGO, school, private), books (which are there in the library), attendance logs of the users (daily in and out time), users (library members)
3. Admin can add new members to libraries
4. Librarian can add new members to the library
5. Librarian can add new books to the library
6. Librarian can import CSV of books (containing *100000 records of books*) into the library (edited)
7. Librarian can CRUD attendance logs of the library members.

Key Notes

1. A library member can be a part of more than one library.
2. For example: A user named Adam can be a member in Sydney Municipal Library and also a member in Bortz Library.
3. A librarian can be a member in another library but can NOT be librarian of more than one library
4. Admin can't be a librarian or a user.



Report Generation

1. List all the library by location (city or state or country or pincode)
2. List all the libraries associated with a particular library member
3. Search a book to see how many libraries contains the same book. (Use ISBN as query)
4. List out by time of the attendance logs, what time do library members of different age groups tend to come. Say age group as 5 - 29, 30 - 50, 51 - 75, 75 and above
5. Display details of a individual user along with the books he took from libraries he is associated with
6. Display details of a book along with details of all the libraries that contain this book, and all the users who have issued this book