**Keywordio Task**

**Library Management System**

This task was built using Python Web framework Django. It has 2 separate apps namely ‘authentication’ and ‘lms’. This Library Management System allows the students to view all the books available in the library and Admin can perform operations like adding, updating, deleting any book.

**Authentication App**

This app is used for registering a Admin user and let Admin log in to the dashboard where all the books can be viewed and perform functions like update or delete. The admin login page could be accessed by visiting /auth/admin/login/ endpoint.

New Admin user could be registered on the Sign-Up page, providing the email and password.

On the Student page, click **‘Lms’** in the navbar to view the admin dashboard.

**API**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Endpoint | Request | Response | Parameters |  |  |
| /auth/admin/login/ | POST | Logs in the Admin user to the dashboard | Email id, Password |  |  |
| /auth/admin/register/ | POST | Creates a new Admin user into the table | Email id, password, confirm password |  |  |
| /auth/logout/ |  | Logs out the Admin user from the dashboard | - |  |  |

**LMS App**

For Students, all the books can be viewed by just hitting ‘/’ route after the localhost IP. Students will be shown with all the books added by Admin user with details like the name and author of the book and status of availability with indicating (Yes/No) if the quantity of the book is greater than 0.

Once the Admin is logged in, it will be redirected to ‘show\_books/’, where the books added by Admin can be viewed in the form of table. The admin will be able to add a new book by clicking on the ‘Add Book’ button at the top of the page.

Adding a new book requires the book name, author, quantity available.

The books table has option for deleting and updating a particular book entry, letting the admin update the name, author or quantity.

For form, bootstrap model has been used for smooth operation of the system.

**API**

|  |  |  |
| --- | --- | --- |
| **Endpoint** | **Request** | **Response** |
| add\_book/ | POST | Adds a new book entry into Database table |
| show\_books/ | GET | Retrieves all the book entry from the database |
| update\_book/<id>/ | POST | Update the book details |
| delete\_book/<id>/ | POST | Deletes a book entry |
| / | GET | Display all the books to student |