Library Management System

Modern Application Development - I

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Video Presentation of my Project Link:

- **https://drive.google.com/file/d/1CYOu5PtnjRVzl3mzdZk8N3Jyeirii3NA/view?usp=sharing**

Frameworks to be used:

- Flask for application code
- Jinja2 templates + Bootstrap for HTML generation and styling
- SQLite for data storage
- All demos should be possible on your local machine using any local IDE and should not require setting up new servers for database and frontend management
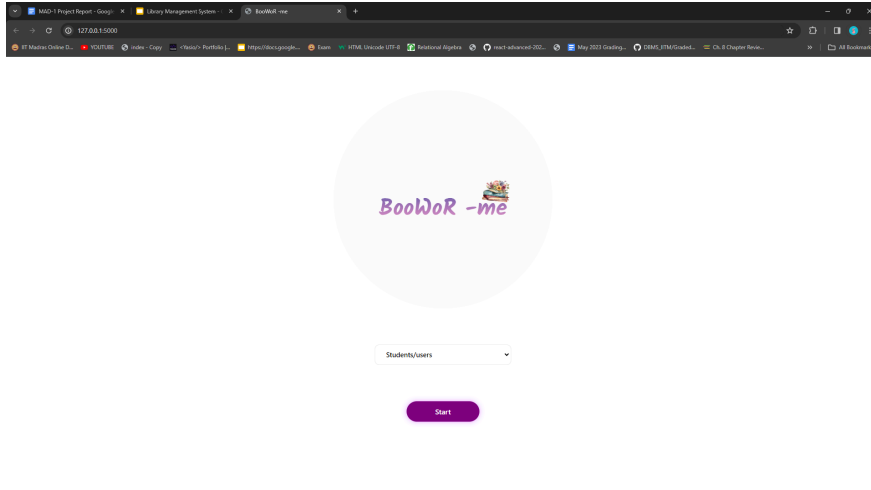
Module Requirements:

- blinker==1.7.0
- click==8.1.7
- colorama==0.4.6
- Flask==3.0.2
- itsdangerous==2.1.2
- Jinja2==3.1.3
- MarkupSafe==2.1.5
- Werkzeug==3.0.1

Main Python file:

- app.py

Base URL:

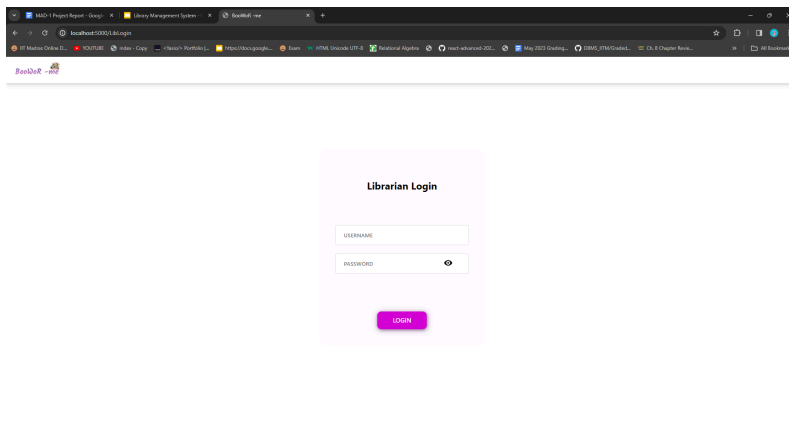http://127.0.0.1:5000

Controller Python file:

- ./application/controllers.py
- This file for routes and controllers of application
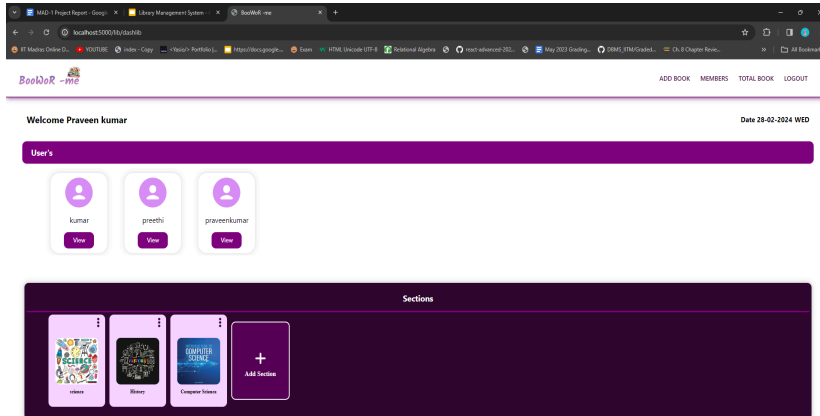
Database name:

- Libdata.db

Librarian username and password:

- Username : " Admin "
- Password : " admin123Rs "
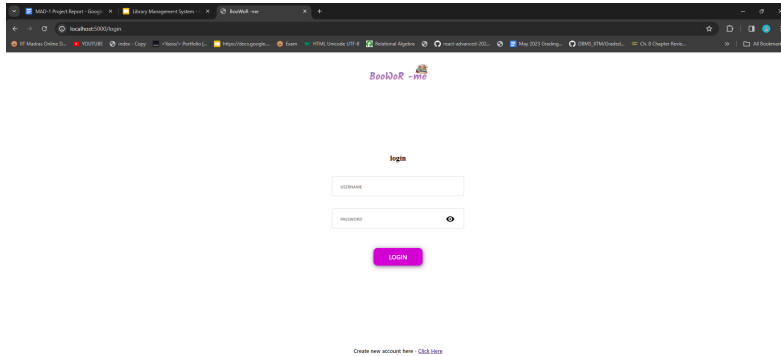- Admin Login page

Librarian dashboard design:

- Issue one or multiple e-book(s) to a user
- Revoke access for one or multiple e-book(s) from a user
  - Storage should handle multiple languages - usually UTF-8 encoding is sufficient for this
- Edit an existing section/e-book
  - Change content, author name, no. of pages/volume etc.
- Remove an existing section/e-book
- Assign a book to a particular section
- A librarian can monitor current status of each e-book and the user it is issued to
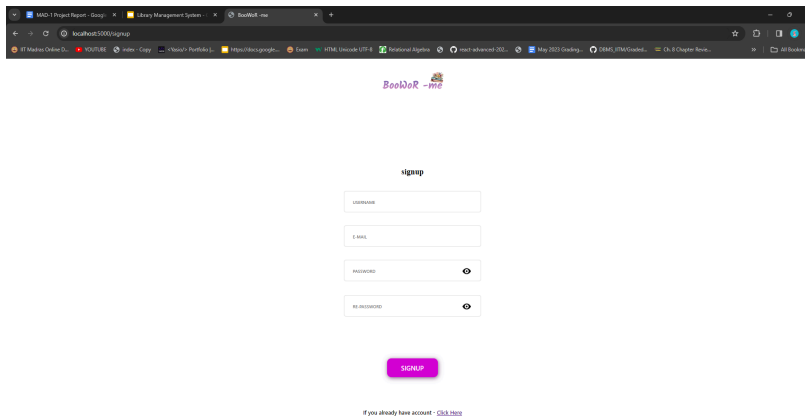- Available e-books in the Library

Users username and password design:

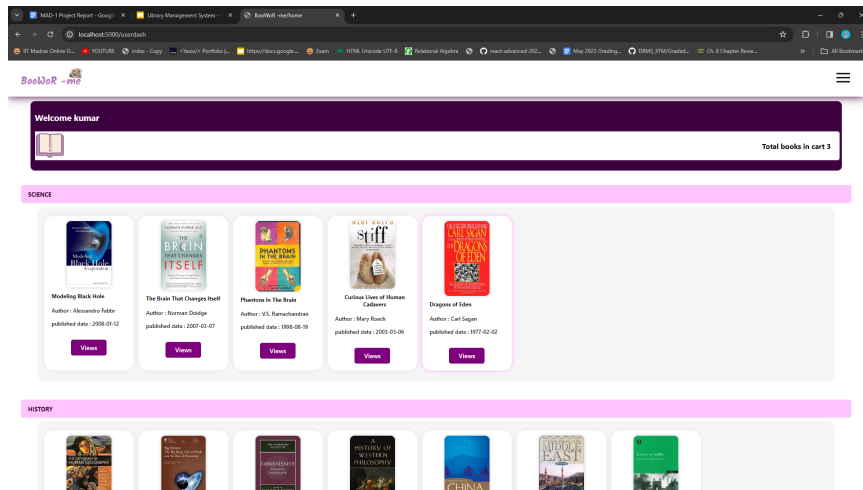- Eg (username : " kumar ", password : " kumaR223 ")

- Signup new account
    - Details should submit (username, email id, password, re enter-password)

User dashboard design:

- Login/Register
- View all the existing Sections/ebooks
- Request/Return Books (content)
- A user can request for a maximum of 5 e-books
- A user can access a book for a specific period of time (say N hours/days/weeks).
  - For e.g. if N = 7 days, the user can return a book before 7 days. If he/she fails to do so, the access for that will be automatically revoked after 7 days.
- User can give feedback for an ebook

DataBase tables:

- STATUSBOOK_TABEL
  - Storing user book order details and status
- SECTIONTYPE:
  - Section table
- REVIEW
  - User feedback
- PAYMENT
  - Payments details of users
- STUDENT
  - Table for storing user details
- BOOKSTORE
  - Table for storing book details