

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:

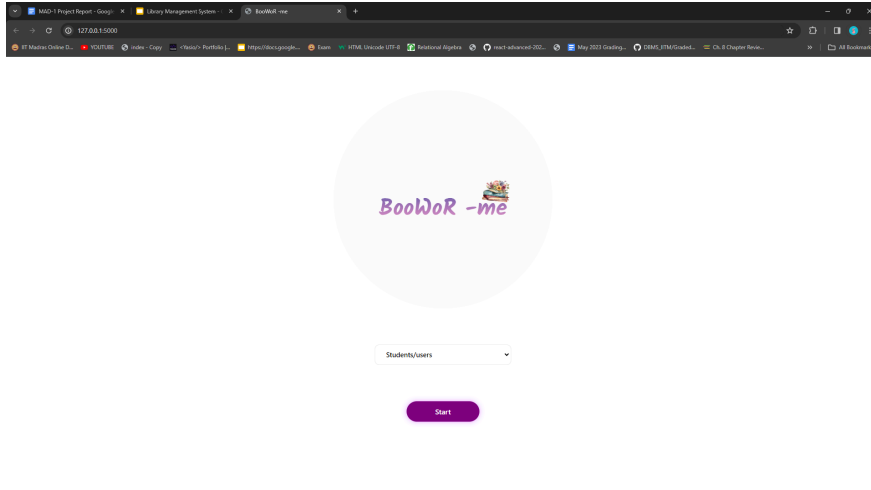
- blinker==1.7.0
- click==8.1.7
- colorama==0.4.6
- Flask==3.0.2
- itsdangerous==2.1.2
- Jinja2==3.1.3
- MarkupSafe==2.1.5
- Werkzeug==3.0.1

Main Python file:

- app.py

Base URL:

<http://127.0.0.1:5000>



Controller Python file:

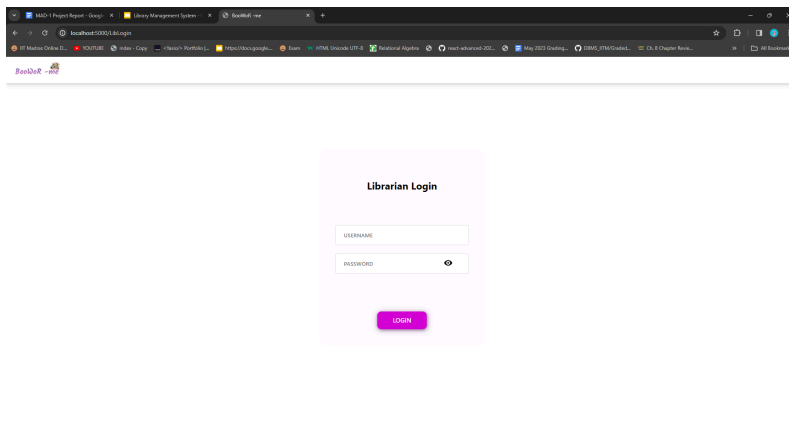
- ./application/controllers.py
- This file for routes and controllers of application

Database name:

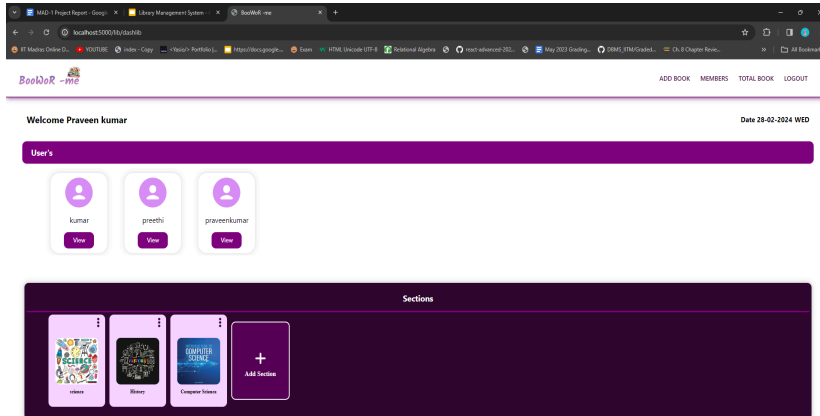
- Libdata.db

Librarian username and password:

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



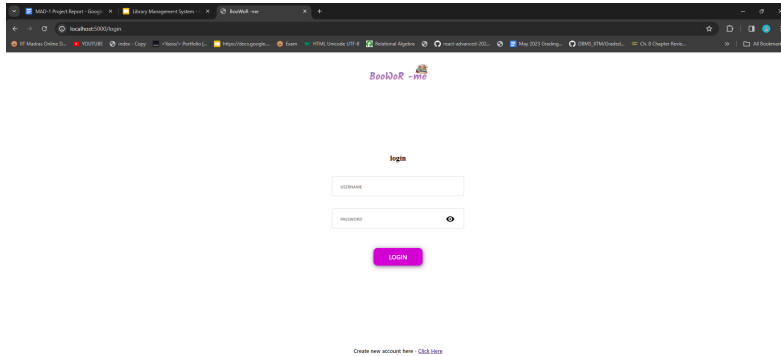
Librarian dashboard design:



- 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

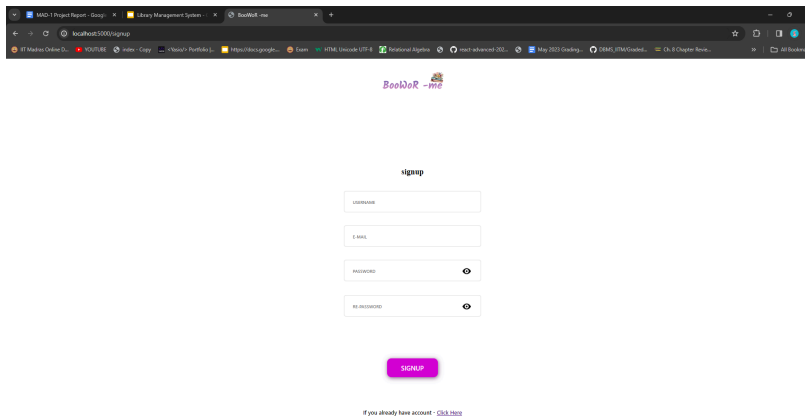
Users username and password design:

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



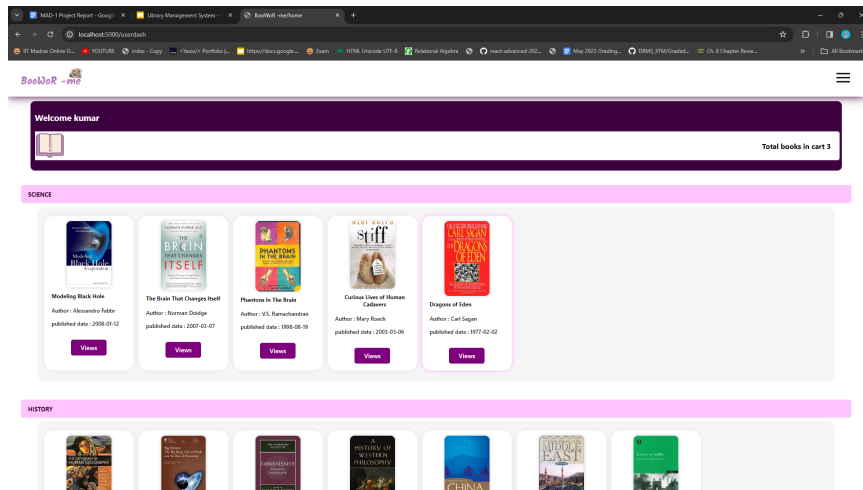
The screenshot shows a web browser window with the address bar displaying 'localhost:3000/login'. The page has a dark header with the text 'BooBoR -ME' and a small profile icon. Below the header, the word 'login' is centered. There are two input fields: 'USERNAME' and 'PASSWORD'. The 'PASSWORD' field has a toggle icon on the right. Below the fields is a red 'LOGIN' button. At the bottom, there is a link that says 'Create new account here - Click here'.

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



The screenshot shows a web browser window with the address bar displaying 'localhost:3000/signup'. The page has a dark header with the text 'BooBoR -ME' and a small profile icon. Below the header, the word 'signup' is centered. There are four input fields: 'USERNAME', 'EMAIL', 'PASSWORD', and 'RE-PASSWORD'. The 'PASSWORD' and 'RE-PASSWORD' fields have toggle icons on the right. Below the fields is a red 'SIGNUP' button. At the bottom, there is a link that says 'If you already have account - Click here'.

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