LIBRARY MANAGEMENT APP

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Description

The project is created based on a library management app. The app using proper login handles with flask security creates a new librarian and user. A librarian is an admin who can create sections(book genre) and assign books to it. A user can request for the book and return the book and can give feedback on the book . Users can also read the issued book.

Functionalities used in the app

- ➔ Flask framework is used to handle the logic of the backend and to handle Restful_API endpoints to successfully run CRUD operations.
- ➔ SQLite is used to create the database and manage all the cores of the application.
- ➔ Bootstrap is used to style and render the page beautifully.
- ➔ Vue.js framework is used to handle the frontend part of the code and form the view logic of the app.
- ➔ Celery and Redis are used to do the backend hidden jobs for the application such as exporting the details, alerting users,by sending mails and generating reports.
- ➔ Flask Security is used to authenticate and authorize particular tasks to the user and admin.
- ➔ Axios is used to get the http requests to handle the error and to build an SPA.
- ➔ SQL-Alchemy to create the relational mapping and interact with the database..
- ➔ Javascript , Python, html/css.

Database Schema Design

1) User (user_id, username, email, password, active, fs_uniquifier, roles(relationship))
2) Role (role_id, name)
3) Roles_users (user_id, role_id)

4) Section (user_id, sec_id, sec_name, description, books(relationship))- to keep books

5) Book (user_id, sec_id, book_id, title, author, description, price, request(relationship),)- books assigned to sections

6) Request (req_id, book_id, title, user_id, request_date, expiry_date)- books requested by users

7) Feedback (feed_id, user_id, book_id, title, feedback)- feedback for books

Architecture of the app

All the files maintained particularly to serve the neatness of the library management app.

Video link:

librarymanagement.mp4