

Library Management System

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Hello everyone my name is Tannu Kumari from Patna Bihar. I am pursuing BS Degree in data science and programming from IIT Madras currently I am in diploma level I am glad to be part one of the best institute and loved to learn thing with exciting challenges.

Description

This project involves creating a web application for a library management app with two types of roles: admin and general user. There is one admin, multiple user's admin can create section, books, approve and decline book request. users can view various books in different sections, search for them, add books to read via request and read books after book approval users can view their approved books, users can give rating to that approved book and also users can return books.

RBAC login is implemented using Flask-Security-Too. The technology stack includes Flask for the server, Vue CDN for the frontend, HTML, CSS, Bootstrap, and SQLite for the database. Redis, Celery, and Mailhog are used for webhook messages, email reminders, and caching. Admin can export CSV files for book details. Additionally, daily reminders are sent using webhooks, and monthly reminders are sent using Mailhog.

The 'application' folder contains all the Python files, such as 'resources.py' for APIs, 'views.py' for additional endpoints, 'models.py' for the model, and 'tasks.py' for Celery workers. For the view part, there is a 'static' folder containing all the .jsfiles. Other files include 'config.py' for configuration, 'upload_initial_data.py' for adding the admin during database initiation, and 'main.py' which is the main file to run the application.

Video Presentation

https://drive.google.com/file/d/1EANfe3zK9PBHa8uNZGTobs8dD2QmUkPn/view?usp=drive_link