

# Author

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Couple of lines about me : I am from TamilNadu,Namakkal town. My background is farming .Due to my family conditions I am unable to do my regular degree, But I came to know about IITM Online Degree in DataScience and Programming and I took this course on MAY 2022 and this is my third year in this course

## Description

This Project is about E-Library. There are two types of users, one is Librarian and other one is user.ALibrarian who can add,delete,update sections/ebooks, issue/revoke a book provided to a user and users who can register and login and request/return books.

## Technologies used

flask: Flask is a web framework which is used as backend server for this application

flask\_security\_too: flask\_security module is used to control user access to application

through proper login framework. In-built default Token based authentication mechanism is used to secure api calls.

flask\_SQLAlchemy: flask\_SQLAlchemy is a flask extension that uses SQLAlchemy to connect to the database server

flask\_restful: flask\_restful is extension of flask that helps to add support for APIs

flask\_bcrypt: Flask-Bcrypt is a flask extension that provides hashing functionality to our applications

Vue.js: is a frontend framework built on javascript. Vue.js is used for frontend UI design.

redis: redis is an in-memory key-value pair database. In this application, redis is used for caching, web service broker to host async jobs using celery.

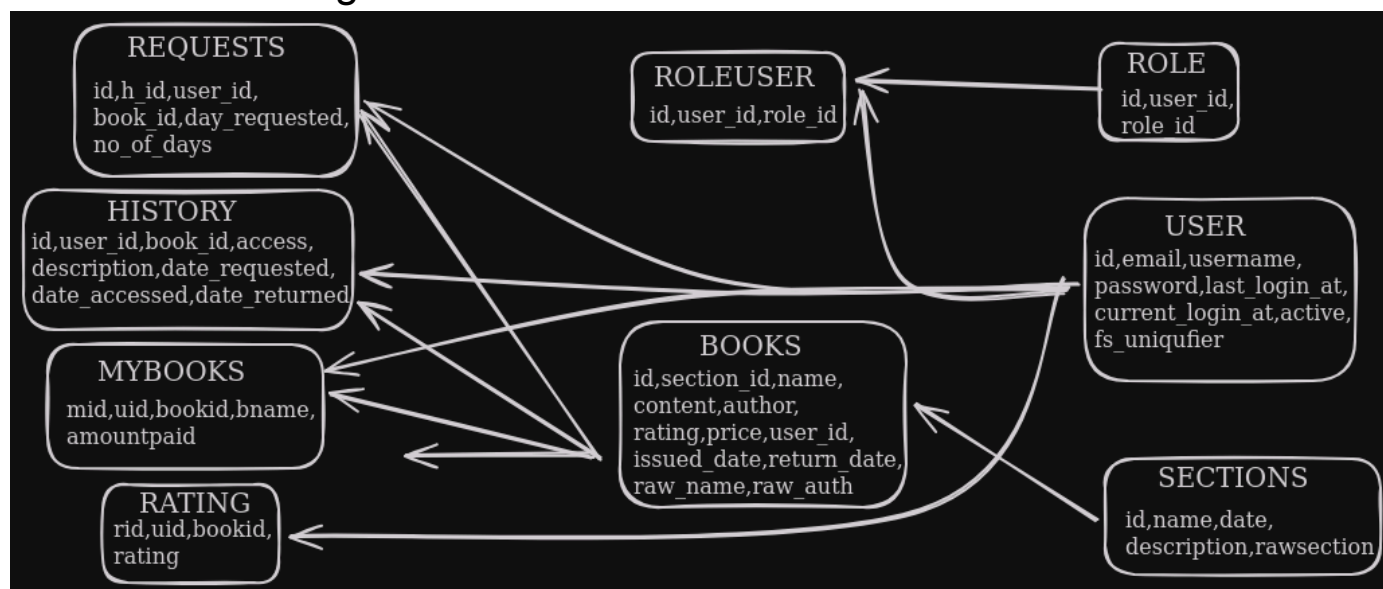
Celery: celery is used to handle user triggered async tasks, daily reminders, monthly

reminders, sending mails etc.

Flask\_caching: flask-caching module is used for caching purposes.

Weasyprint: Weasyprint library is used to generate pdf from html. This is used to generate monthly engagement reports.

## DB Schema Design



The reason behind the schema design is the most efficient way of my idea in making the Library Management app work better

## Architecture and Features

Main project files are located in the Code folder, Backend for apis and frontend for using those apis to show UI.

User roles in this project:

1. User : A User can see all the books uploaded by the librarian.
2. Librarian : A Librarian can upload books and add books to the author and sections.

## Conclusion

The project successfully achieves its primary goal of creating a e-book streaming application with distinct roles.

This project can be upgraded by adding some more features.

## Demonstration Video

G-Drive Link	<a href="https://drive.google.com/file/d/1PYnVPDLSAJFBWLtHZvJsh88XPXviO7B2/view?usp=sharing">https://drive.google.com/file/d/1PYnVPDLSAJFBWLtHZvJsh88XPXviO7B2/view?usp=sharing</a>
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