Author

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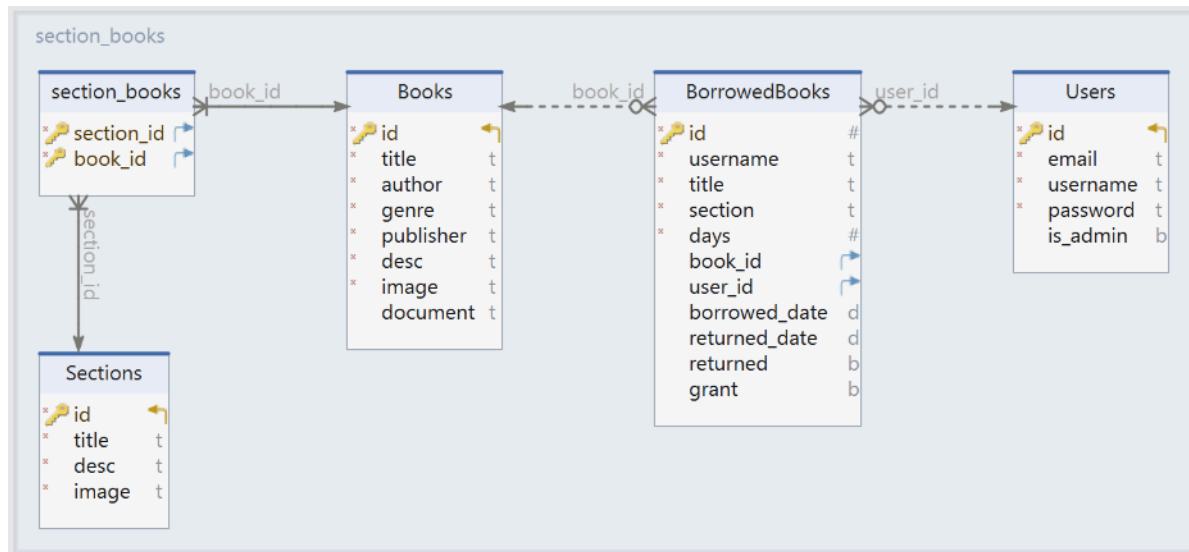21f1001435@ds.study.iitm.ac.in

Description

● Pycharm: As an IDE for coding

● Postman: API query tool

1. Flask

2. VueJs

3. Flask-Restful (For api services)

4. Flask-SQLAlchemy (For databases),

5. Flask-Mail (For Mailing)

6. Weasyprint(For PDF reports)

7. Plotly (Chart Visualization)

8. Redis (For message broker and caching)

9. Jinja2 (For Email Templating)

10. Flask-Caching (For performance and caching purposes)

11. Celery

DB Schema Design

I have split the databases into these tables for ease of access and manipulation of the data. I carefully designed the entire schema with the respective primary and foreign keys to be able to link everything properly.

Architecture and Features

The entire application is split into frontend and backend parts, where Vue.js is used for frontend and Flask is used for Backend.

Features Implemented:

- User management with signup, login and admin access
- Creating and managing Sections and Books
- Edit and delete sections and books
- Requesting books
- Grant and revoke books
- Cronjobs for users and admins and Async Jobs
- Caching with redis for performance
- Celery for export csv , monthly report and daily reminder

Video :
https://drive.google.com/file/d/1mbAMfxKrqqwwjmqy7hOqm0JaGBwJVE96/view?usp=sharing