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About Me :- I am an ambitious individual, with a strong intellect and a growth-oriented mindset. I truly believe in the concept of reinforcement learning, where I reinforce myself with every failure/success that I encounter. That coupled with the fact that I am open to new possibilities and ideas, adds value to any team/organization I work with.

Description

- A ticket booking application is to be done with the following core functionalities:- User signup and login, Mandatory Admin Login (using RBAC),Theatre and Show Management, Booking show tickets, Search for shows/theatres

- Backend jobs like, monthly reports and daily alerts to user, data exporting as pdf & csv
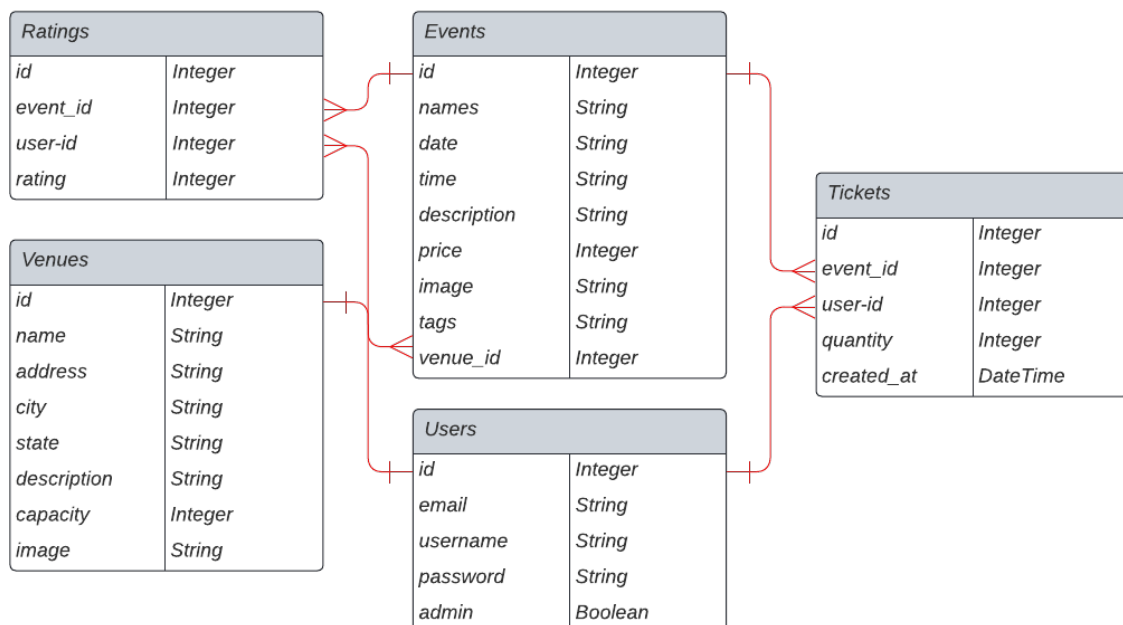
Technologies used

Frontend:
1. VueJs
2. Bootstrap-Vue
3. Pdfmake
4. Axios – to implement the backend API in the frontend

Backend:
1. Flask (server side scripting)
2. Flask-SQLAlchemy
3. Redis (caching)
4. SQLite (db)
5. Flask-Bcrypt

DB Schema Design

API Design: Ticket Booking Application

Implemented APIs:

1. User Management:
   - User signup, login with Flask-JWT-Extended (token-based) and admin login (RBAC).
2. Venue and Show Management:
   - CRUD operations for venues and events via Flask routes.
   - Fetching events by venue and event details by ID.
3. Ticket Booking:
   - Booking and deleting show tickets.
   - User's booked tickets retrieval.
   - Available tickets check.
4. Additional Backend Functionality:
   - Event ratings submission via /addrating.
   - Daily alerts to users for upcoming events.
   - User-specific monthly reports.

Architecture and Features

- MVC architecture with Flask controllers and models.
- Frontend interfaces built using HTML, Bootstrap-Vue, Vue.js.
- Vue.js for dynamic frontend, Flask for backend scripting.

Project Organization:

- Redis caching for efficient data retrieval.
- SQLite database for persistent storage.
- Flask-Bcrypt for secure user authentication.

Implemented Features:

- User management with signup, login, and admin access.
- Dynamic venue and event management.
- Efficient ticket booking, deletion, and retrieval.
- Availability check for event tickets.
- Event ratings for user feedback.
- Visual statistics with JavaScript charts.
- Scheduled tasks for alerts and user-centric monthly reports.

Conclusion: The application blends frontend and backend technologies seamlessly, ensuring user satisfaction. With Vue.js, Bootstrap-Vue, Flask, and Redis, it offers comprehensive features for show ticket booking, enriched by user engagement elements like ratings, alerts, and personalized reports. OpenAPI (Swagger) YAML file provides clear API documentation for ease of integration.

Video

https://drive.google.com/file/d/1ql24v5rfki0OJ7HNrNyc5Z9TUxvJNibW/view?usp=sharing