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Description

The project is about building a web app called "Ticket Show" for booking show tickets. Users can sign up, log in, and search for shows and theaters. Admins can manage theaters and shows. This app also provide features like scheduled reminders and monthly entertainment reports.

Technologies used

The app is built using the Flask web framework for the backend. Key Flask extensions include Flask-JWT-Extended for user authentication, and Flask-SQLAlchemy for database management. VueJS is used for the frontend UI, along with Bootstrap for styling, vue-router for routing and Pinia for state management. Redis is employed for caching, Flask-Caching for caching, flask_mail for sending emails, flask_cors for enabling cross-origin resource sharing, requests for making http requests, and Redis along with Celery are utilized for handling batch jobs.
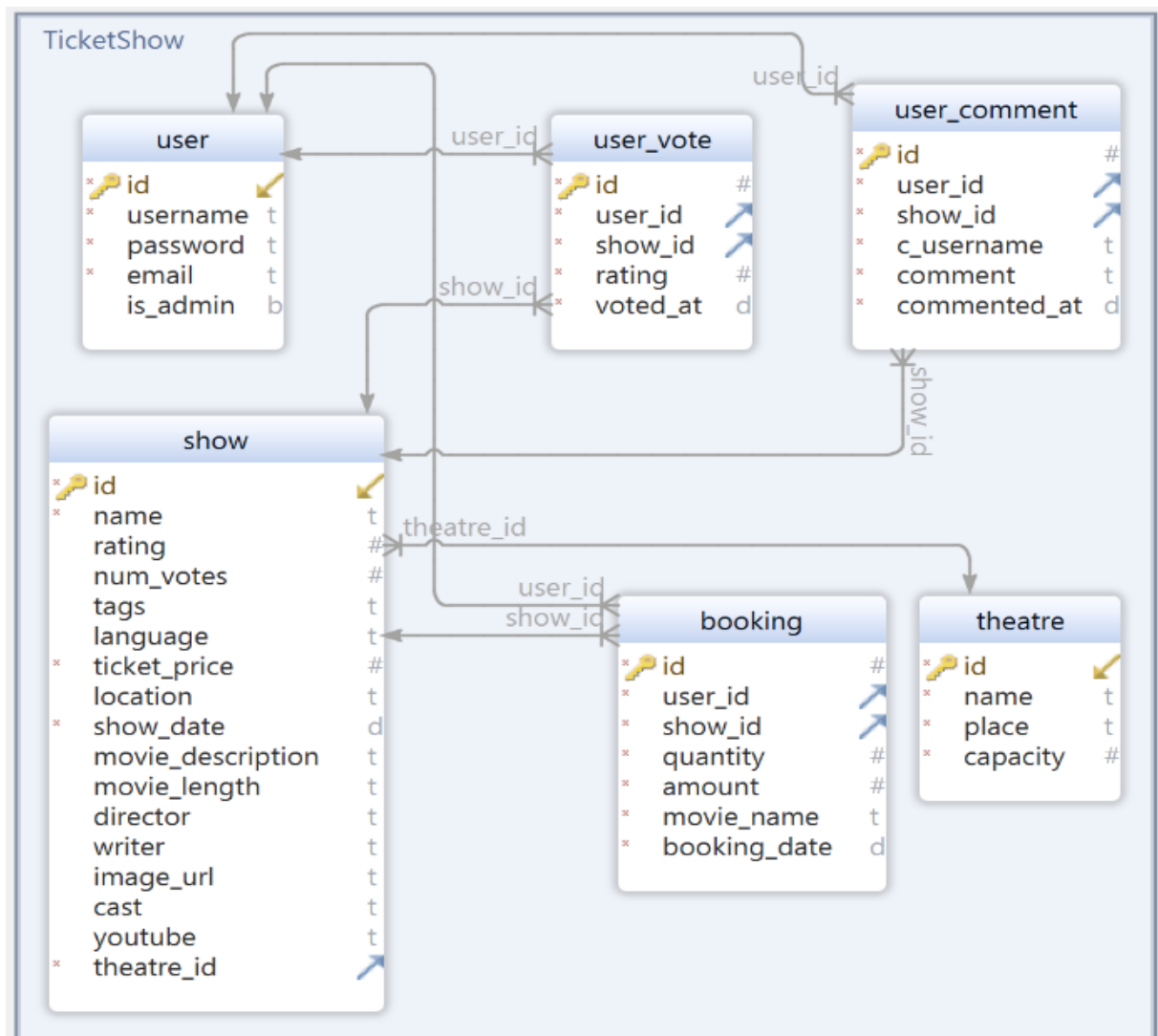
API Design

The API has been designed using Flask and its blueprints for modular organization. The app consists of several blueprints: theater_bp, show_bp, auth_bp and booking_bp which respectively handle theater management, show management, user authentication, and booking creation actions. In the auth_bp blueprint, the /signup and /login routes facilitate user registration and login functionalities. Within the theater_bp and show_bp blueprints, endpoints are established for theater and show management. The routes in these blueprints handle the CRUD operations on show and theater. The booking_bp blueprint manages bookings, offering routes for booking creation and retrieval.

Architecture and Features

The project follows a structured architecture with a clear separation of concerns. The Flask app is organized using blueprints. The controllers (views) for theaters, shows, bookings, and authentication are defined in separate modules, each with its respective API endpoints. Database models are defined in separate module called modules.py. Templates are handled using VueJS on the frontend. The application allows users to register, log in, search for theaters and shows, book tickets, and view their bookings. Admins can create, edit, and delete theaters and shows. Scheduled reminders are sent to users for engagement, and a monthly entertainment report is generated and sent via

email. The default features include user authentication, theater and show management, booking creation, and user-specific booking retrieval. Additional features scheduled reminders, and monthly entertainment reports. These features enhance user engagement and provide administrators with tools to manage theaters and shows effectively.

DB Schema Design

Video