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Description

The project aims to develop a multi-user ticket booking platform where users can book show tickets for various movies. The system includes features for user signup and login, admin management, theatre and show management, booking show tickets, search for shows/theatres, backend jobs for export, reporting, and alerts, as well as caching for performance enhancement.

Technologies used

1. Flask for backend
2. VueJS for UI
3. SQLite for database
4. Redis for caching
5. Redis and Celery for batch jobs

DB Schema Design

1. Venue Table:
    a. venue_id (Primary Key, INTEGER UNIQUE)
    b. name (TEXT, NOT NULL)
    c. place (TEXT, NOT NULL)
    d. capacity (INTEGER, NOT NULL)

2. Show Table:
    a. show_id (Primary Key, INTEGER)
    b. name (TEXT, NOT NULL)
    c. rating (REAL, NOT NULL)
    d. tags (TEXT, NOT NULL)
    e. start (TEXT, NOT NULL)
    f. end (TEXT, NOT NULL)
    g. capacity (INTEGER, NOT NULL)
    h. venue_id (Foreign Key referencing Theatre Table)
    i. price (REAL, NOT NULL)
    j. timestamp (TEXT, NOT NULL)
    k. left (INTEGER, NOT NULL)

3. User Table:
    a. ID (Primary Key, INTEGER)
    b. username (TEXT, NOT NULL)
    c. email (TEXT, NOT NULL UNIQUE)
    d. password (TEXT, NOT NULL)
    e. active (INTEGER, NOT NULL)
    f. role_name (TEXT, NOT NULL)
    g. last_visited (TEXT)

4. Booking Table:
    a. booking_id (Primary Key, INTEGER)
    b. show_id (Foreign Key referencing Show Table, NOT NULL)
    c. venue_id (Foreign Key referencing Theatre Table, NOT NULL)
    d. user_id (Foreign Key referencing User Table, NOT NULL)
    e. num_tickets (INTEGER, NOT NULL)
    f. timestamp (TEXT)

Architecture and Features

The project is organised using the Flask framework for the backend, VueJS for the UI, and a Jinja2 template for rendering a monthly progress report in HTML. The controllers are structured within the Flask app, handling and routing. The VueJS components manage the user interface and interactions. The project utilises Redis for caching to improve performance and Redis with Celery for handling batch jobs like alerts and exports.

Video

https://drive.google.com/file/d/1eZukvfqcDbU5uM_jHUsSThOQww06puWR/view