# Ticket Show V2 (BookEase): Documentation

#### Author

**AKRITI VISHWAS** 

21f1001471

21f1001471@ds.study.iitm.ac.in

I am a student of Diploma level in IITM BS Degree. Apart from the Online degree I have completed my Bachelor of Science (Hons) in Physics from University of Delhi.

This is my last term in diploma level and I have completed the Theory Course for MAD-2 in the previous term. My experience of doing this project was quite a learning experience and I learnt a lot by application of the concepts.

# Description

This is a multi user Application called BookEase - (Two Roles - Admin and User). The App is used for browsing shows, Booking Tickets. The Admin can manage Theaters and Shows. The application shows the users the list of shows and provides functionalities to book the shows of their choice.

## Technologies used

- I. For Authorization JWT Token Based with expiry time of 90 mins.
- II. Flask for APIs
- III. VueJs for User Interface
- IV. Jinja 2 templates for the Mails.
- V. Redis and celery for Batch Jobs
- VI. Flask- caching for caching.
- VII. Axios for HTTP request to backend
- VIII. Other Requirements are mentioned in requirements.txt

# DB Schema Design



The database has 8 Tables and the above schema shows the details about the database, the relationships and the constraints as well ( NN - Not Null)

### API Design

- 1. LOGIN, SIGNUP, PROFILE and other APIs
- 2. THEATRE MANAGEMENT APIS
- 3. SHOW MANAGEMENT APIS
- 4. BOOKING APIS
- 5. The detailed API design is in the YAML file in the PROJECT FOLDER.

#### Architecture and Features

The App is an application which uses Flask for backend and Vue-jS for Frontend. The following features are present in the application. The method to run the application is present in the README. md File in the project folder.

#### I. For Admin (Core)

- A. Creating New Theatres
- B. Adding Show to the Theaters
- C. Add a show to Multiple Theatres and Allocate Prices Accordingly
- D. THEATRE MANAGEMENT- Editing and Deleting the created Theatres
- E. SHOW MANAGEMENT-Editing and Deleting the Shows.
- F. Export the report about each Theater in CSV format.
- G. A dedicated Dashboard for the Admin for effective Management.

#### II. For Users (Core)

- A. Signing Up to the Application and Login Functionality.
- B. User Dashboard Displaying Shows and Theatres
- C. Option to select Theatres close to User Location
- D. Ability to book multiple tickets if the tickets are available for a show.
- E. Ability To Search Shows based on their Name, Rating, Tags, Genres etc.
- F. Monthly Entertainment Report sent to user Email And option to choose their format
- G. Tickets booked by users sent to their Mails.
- H. Detailed View of each Theatre and Show.
- I. Access to all Bookings made by User and abilities to rate the shows.

#### III. (Core) Scheduled Jobs and Batch Jobs

- A. Daily Email to Inactive users at fixed time.
- B. Monthly Detailed report for users with the shows they watched ,their comments and Upcoming shows.
- C. Admin- CSV reports about theatres Name, No. of tickets booked, Time, Date, Genre, comments, and the Revenue.

#### **Additional Features-**

- I. Dynamic Pricing to update ticket Prices for high demand
- II. Emails to the user at the end of the day to rate the show they watched
- III. Automatic Updation of ratings to set the rating to average of all users
- IV. Status of Booked tickets how fast the seats are getting booked.

#### Video

LINK TO VIDEO