

Ticket Show (MAD – I Project)

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I am IITM BS student currently in the diploma level

Description

I have approached the given problem statement in the following 3 phases:

Phase 1 – Finalizing the necessary information required for the proper and smooth functioning of the webapp. Thereafter designing a suitable database structure to cater for the information storage.

Phase 2 – Creating the basic framework with the routes and functions implemented

Phase 3 – Styling and Aesthetics. Mainly focused on polishing the web pages to look cleaner and a little user friendly

Modules / Technologies Used

Flask – The entire web application is built on flask framework

Jinja Template – Webpages of the app follow templating through jinja templating

Sqlite3 – Database created is of sqlite3 structure

CSS– Basic styling.

Flask – SQLAlchemy – For creating the relational database used in the app

Session– For providing basic login and logout features in the app

matplotlib.pyplot for creating graphs.

Database Design

Tables used in the Database: User , show , venue , rate , admin , booking , joint

Many to Many Relationship - Used in the tables Shows and Venue since one movie can be shown in multiple venues and multiple movies can be shown in one venue. Joint table is used to join and complete the many to many relationship between them.

Architecture

The project folder consists of 3 parts:

Template folder : Template folder consists the html files

Instance folder : Database is generated and stored in the instance folder

api.py file : Routes for api and jsonified outputs.

Main.py : Controllers

Models.py : Models (Tables formed in this)

How to use the application : After extracting the zip folder, create a virtual environment in the same folder and run api.py.

Features

Core Features:

- Admin login and User login – Separate form for Admin and User login
- Venue Management – Venue management for admin with CRUD implementation
- Show Management – Show management for admin with CRUD implementation
- Booking show tickets – Ability for the user to book tickets .
- Search for shows/venues – Search-bar given with an ability to search for movies using movie name, tags , and venues using venue location or venue name.
- Rating for shows.
- Forms are created with suitable messages and fields to ease the data entering process
- Venues have the ability to notify the user in case of a houseful via an error message

Other Features:

Api : Url end points are defined for getting jsonified outputs for different request methods using Postman.

- Both success and error messages with suitable description are added using jinja.
- CSS is used for minor styling of the web application
- Login framework : A proper session based login framework has been used to create new accounts for user and login page is also formed.

Link to the Video:

<https://drive.google.com/file/d/1PZOo1enhhOaBlICYd95ti23EnXO2VSNG/view?usp=sharing>