

Author

Name: Ritik Kumar Badiya

Roll no: 21f3001509

Email: 21f3001509@ds.study.iitm.ac.in

About me: I am diploma level student at IIT Madras online degree program. I am also pursuing my B.Tech in Computer Science and Engineering from Ujjain engineering college Ujjain.

Description

The project was to build a multiuser app for booking of tickets. The app should be complete in the sense of providing a good UI for performing CRUD on venue, show and movies by admin. App should also have APIs so that we can build other projects on top of it.

Technologies used

sqlalchemy, flask_restful, flask_sqlalchemy, flask_login, flask_cors, werkzeug.exceptions

sqlalchemy was used for doing operations related to database like session , commit , select, transactions.

flask_restful was used for handling and enabling api.

Flas_login was used to keep session records of users login logout etc.

DB Schema Design

Movie:

id	integer	AI,PK,NN	
name	strings	Unique, NN	
caption	string	NN	
rating	integer	NN	
tags	string	NN	Helps in searching
no_of_rating	integer	NN	to update with new rating

Venue:

id	Integer	AI,PK,NN	
name	String	Unique, NN	
caption	String	NN	
capacity	Integer	NN	
rating	Integer	NN	
address	String	NN	
City	String	NN	To make easy search
No_of_rating	Integer	NN	To update with new rating

User:

Id	integers	AI,PK,NN	
Name	string	NN	

Age	Integer	NN	
Gender	String(male,female)	NN	
Username	String	NN, Unique	
Password	String	NN	
auth	Integer(1,0)	NN	To keep track of if user is logged in or out

Venueshow: what movie are in which venues and vice-versa

Id	Integer	AI, PK, NN	
Movie_id	Integer	NN, FK(movie)	
Venue_id	Integer	NN, FK(venue)	
Price	Integer	NN	Dynamic according to theater
Remaining_capacity	Integer	NN	
Date	String	NN	
Start_time	String	NN	May run multiple show parallel
End_time	string	NN	

Booking: what movies tickets were book by user and for which venue

Id	Integer	AI, PK, NN	
User_id	Integer	NN, FK(user)	
Venue_show_id	Integer	NN, FK(venueshow)	
No_of_ticket	Integer	NN	
Rating	Integer	NN	
timestamp	string	NN	To keep record of event

API Design

WE have provided CRUD operation on movie , and venue and a show can be created , deleted and can we viewed only no option for updating it.

Architecture and Features

All my code is in single file **app.py** templates are in templates folder inside root directory, All the images are inside static/image folder. The app allow admin to create new venue , movie and show as linking between movie and venue. User can book new ticket, can visit pages venue wise or according to movies of his choice.

As an additional feature the app provide a temporary comparing table where user can see and compare price and availability of different options.

Video

<https://drive.google.com/file/d/1LbWYzdDhSmmDapjEC0ORQXEPz0NQH7FK/view?usp=sharing>