Author

Ratheesh Soma Reddy 22dp1000040 22dp1000040@ds.study.iitm.ac.in

I am an IT professional working on embedded systems with passion for learning new concepts in the technical world.

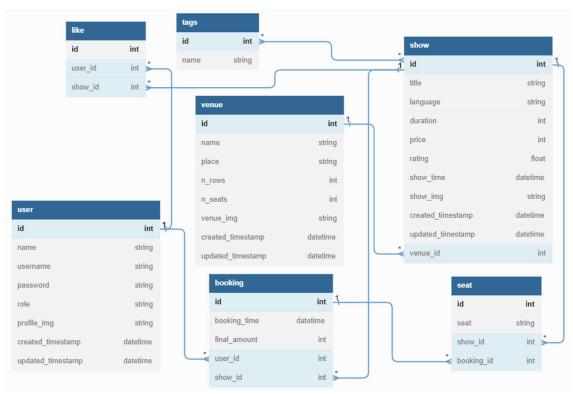
Description

A Multiuser Web app should be developed for managing online ticket booking using Flask micro web framework, SQLite DB in the backend and HTML, CSS as frontend. The Web app should have all the features of a commercial apps available in the market.

Technologies Used

- Flask web framework
- Jinja2 templating engine
- Bootstrap for HTML and CSS styling
- SQLite for data storage
- SQLAlchemy ORM mapper to manage data using python.
- Flask RESTful API API library form API endpoint implementation

DB Schema Design



API Design

Features:

- CRUD operations of User, Show and Venue Models.
- No authentication is implemented.

Endpoints:

API Class	Methods	Endpoint(s)
UserAPI	GET, POST, PUT, DELETE	/api/user/ <username>, /api/user</username>
ShowAPI	GET, POST, PUT, DELETE	/api/ <int:venue_id>/show/<int:show_id>, /api/<int:venue_id>/show</int:venue_id></int:show_id></int:venue_id>
VenueAPI	GET, POST, PUT, DELETE	/api/venue/ <int:venue_id>, /api/venue</int:venue_id>

Architecture and Features



Core Features

- User/Admin login is managed using flask login as it provides more fine-grained role management.
- Only one admin (hardcoded, and prepopulated) is supported.
- Admin login: username: admin password: admin
- Multiple users can book the tickets.
- CRUD for User, Show and Venue
- Basic stats in Admin dashboard
- Search based on show, venue, and tags.
- Tags are prepopulated for finer control.
- Confirmation on deletion on User, Venue or Show.
- Display shows only that are available for booking for user.
- Prevent booking when the show is houseful or show time is passed.

Recommended features.

- Implement API for User, Venue and Show with CRUD operations.
- Validation using inbuilt HTML input tags.

Extra Features

- User can select individual seats while booking tickets.
- Profile image is supported for User, Venue and Show
- User CRUD in API

Video

https://drive.google.com/file/d/1ZqN5cscLORcSJe8BRWvDKcrQarD-wQme/view?usp=share_link