PROJECT REPORT ON MAD-1 PROJECT TICKET BOOKING PLATFORM

Roll Number

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INTRODUCTION

This project's aim is to create a TICKET BOOKING PLATFORM using FLASK framework in PYTHON. This project uses several flask packages like FLASK LOGIN, FLASK BOOTSTRAP, FLASK RESTFUL ETC and other packages for core functions. This application is used by user to book different shows in the available venues. This application uses FLASK RESTFUL to create APIS for CRUD operations of Shows and Venues for the Admin.

PACKAGES USED AND FUNCTIONS

Flask -Flask is used as the Framework for application development.

Flask-WTF-It is used for creating forms for the Admin and Users in HTML

Flask-Login-It is used for authenticating login for Admin and Users.

Flask-RESTful-It is used for creating APIs for the CRUD operation on Shows and Venues.

Flask-Bootstrap-It is used for frontend styling for the forms and other details.

Flask-SQLAlchemy-It is used for accessing the Database.

Werkzeug-It is used for securing password by hashing.

Matplotlib-used to plot the graph for shows summary.

Flask functions are created to render the templates and to implement APIs.

APIs

Two APIs are created for creating ,updating,deleting and obtaining the shows and venues.

1.SHOWAPI()-It is used for creating ,updating, deleting and obtaining the shows.

2.VENUEAPI()-It is used for creating ,updating, deleting and obtaining the Venues.

DATABASE

The application uses SQLAlchemy ORM to interact with a SQLite database. The database schema consists of the following tables

1.user: stores user information.

2.admin:stores Admin information

3.venue: stores venue information.

4.show: stores show information.

5.show_venue: stores the relationship between shows and venues.

6.booking:stores booking information of users and shows they booked.

Bootstrap

The application uses the Bootstrap CSS Framework for frontend styling. The Bootstrap library is included in the HTML templates using the bootstrap.html file. The templates for the application are defined in the templates folder.

TEMPLATES

index.html-Front page of the Application.

register.html,login.html,dashboard.html-Registering,Login and dashboard of the User.

admin_login.html,admin_dashboard.html-Login and dashboard of the Admin.

new_show.html,new_venue.html-creating shows and venues.

updateshow.html,update_venue.html- updating shows and venues.

Found.html-Displaying search results.

Bookforms.html,Bookings.html-Booking shows and Display the booking of the user.

Summary.html-used to display summary of bookings of shows.

CONCLUSION

This project has developed a Flask application with several Flask extensions, including Flask-WTF, Flask-Login, and Flask-RESTful. The application allows users to manage venues, shows, and tickets. The application provides a RESTful API for programmatic access to the resources. The application also provides forms and validators for input validation and uses Flask-Login for user authentication. The application uses SQLAlchemy ORM to interact with a SQLite database and the Bootstrap CSS Framework for frontend styling.

VIDEO LINK -