Project Report: Show Booking App

Submitted to: *Indian Institute of Technology Madras*

In partial fulfilment of the requirements for the Bachelor's Degree in Data Science

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Introduction: The Show Booking App is a web-based application that allows users to book tickets for various shows. The app has been developed using Flask, Jinja, and SQLite. The purpose of the application is to provide an easy and user-friendly way for people to book tickets for their favourite shows.

Features: The Show Booking App has the following features:

Show listings - Users can view a list of all the shows that are available for booking.

Venue listings - Users can view a list of all the venues where the shows are being held.

Booking - Users can book tickets for their favourite shows.

Admin panel - Admin users can manage shows and venues, as well as create new shows and venues. Authentication - Admin users are required to log in with a username and password.

Technical Details: The app has been developed using Flask, Jinja, and SQLite. The Flask web framework has been used to create the web application. The Jinja templating engine has been used to create the HTML templates for the app. The SQLite database has been used to store the data for the app. The app consists of several routes that handle different functionalities of the app. The routes are defined in the app.py file. The HTML templates for the app are located in the templates folder, and the static files (such as CSS files) are located in the static folder.

Challenges: One of the main challenges faced during the development of the app was managing the database. Since the app relies heavily on the database, it was important to ensure that the database schema was designed properly and that the queries were optimised for performance. Another challenge was implementing the admin panel. Since the admin panel has different functionalities than the rest of the app, it was important to ensure that the routes and templates for the admin panel were separated from the rest of the app.

Future Improvements: Some possible improvements for the app include:

Implementing a payment gateway for booking tickets.

Adding a feature to allow users to view their booking history.

Enhancing the user interface to make it more interactive and user-friendly.

Conclusion: The Show Booking App is a simple yet effective web application that allows users to book tickets for their favourite shows. The app has been developed using Flask, Jinja, and SQLite, and includes features such as show and venue listings, booking, and an admin panel. With some improvements and enhancements, the app has the potential to become a popular tool for booking tickets for various shows.

Video link: https://youtu.be/lwWTHfmmTcd