Smart Travel Companion: A City-Specific Travel Recommendation System Using API and Cloud- Based Web Technologies

Abstract

The City-Based Travel Tip Generator is a web application designed to provide users with personalized travel advice based on the city they plan to visit. By combining real-time weather data with predefined city-specific travel tips, the application delivers practical suggestions that enhance the travel experience. The core idea is to input a city name and receive relevant travel tips—such as weather-related recommendations (e.g., "Pack an umbrella for London") or location-based suggestions (e.g., "Visit the Eiffel Tower in Paris"). The system architecture consists of both frontend and backend components. The frontend is built using HTML, CSS, JavaScript, and styled with Bootstrap to ensure a responsive and user friendly interface. Users interact with a simple form to input the city name. The backend is implemented using Flask (Python), which serves as the application's API layer. It fetches current weather data via the OpenWeatherMap API and applies a rule-based logic system to generate appropriate tips. Additionally, for certain cities, static travel suggestions are maintained in a local data file to ensure the app provides helpful advice even when API data is limited. This project demonstrates integration of third-party APIs, development of RESTful endpoints, and creation of dynamic frontend content—all essential aspects of modern web development. Its lightweight logic, modularity, and extensibility make it an ideal candidate for educational and practical applications.

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