METAPHOR PROJECT SUBMISSION

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Link to Project Github:
https://github.com/bassirishabh/MetaphorProject

Project Name: Travelix - Metaphor Powered Travel Recommendation System

1. Brief Explanation of Project:

The project aims to create a command-line-based travel recommendation system using the Metaphor API. This system assists users in discovering travel destinations and places based on their preferences and input. Here's a breakdown:

Command-Line Interface: The project is designed to run in a command-line interface (CLI), making it accessible and user-friendly for users who prefer text-based interactions.

Metaphor API Integration: It utilizes the Metaphor API, a powerful tool for natural language understanding and recommendation generation. The API processes user queries and returns relevant travel recommendations.

User Profiles: The system supports user profiles, allowing registered users to store their preferences and query history. This feature enhances the user experience by providing personalized recommendations.

Guest Mode: Even users who don't want to create profiles can use the system. They can input their travel preferences directly and receive recommendations without any registration.

History Tracking: The system keeps track of users' previous queries and the corresponding results. This feature enables users to revisit their past travel ideas and destinations.

Exit Option: At any point during interaction, users can choose to exit the program gracefully.

2. How you Built it:

The project is built in Python and uses the Metaphor API for natural language understanding and recommendation generation. Here's a more detailed breakdown of how it's constructed:

Metaphor API Integration: The core of the project is the integration of the Metaphor API. It leverages this API to interpret user input, understand travel preferences, and generate relevant travel recommendations.

User Profiles and Data Management: User profiles are implemented using a dictionary in memory. When a registered user logs in, their profile is fetched or created. User preferences and history are stored and updated within these profiles.

User Interaction Loop: The program runs within a loop, constantly waiting for user input. Users can perform actions such as asking for recommendations, creating or updating profiles, and exiting the system.

Multi-step Interactions: Enhancements include multi-step interactions. For example, users can input a travel city and then select a category like Nightlife, Beaches, Hotels, or Parks. This allows for more specific and tailored recommendations.

Similar Places Feature: Another addition is the ability for users to input a place or hotel URL to find similar places. This feature enhances the recommendation system by allowing users to explore alternatives to their chosen destinations.

Error Handling: The code includes error handling to gracefully handle unexpected user inputs and API responses.

3. Challenges/Feedback on the API:

While the Metaphor API offers powerful capabilities for natural language understanding and recommendation generation, there were some challenges and feedback:

User Experience: The project is command-line-based, which may not provide the most user-friendly interface. Building a graphical user interface (GUI) could improve the overall user experience.

Data Persistence: User profiles and history are stored in memory. In a production environment, it would be advisable to use a database for secure data persistence.

API Integration Complexity: Integrating the Metaphor API and managing user data added complexity to the project. Error handling and data synchronization between the API and user profiles required careful attention.

4. Why you’re interested in Metaphor :)

I'm genuinely excited about the prospect of joining Metaphor as a software engineer because I've been deeply impressed by the company's innovative approach to solving complex technical challenges. Metaphor's emphasis on pushing the boundaries of technology aligns perfectly with my career goals. My experiences in machine learning, software

development, and research make me eager to contribute to the groundbreaking work being done here. I believe Metaphor is the ideal environment for me to continue growing as a software engineer and to make a meaningful impact.