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Documentation

Our final project for INST326 is a travel guide in DC meant for UMD students who are taking the Green Line Metro. We use the Google Maps API platform to gather data on place attributes like distance and activity type. Using this data and the user preferences, our code formulates a guide specific to each user with their top 5 places to visit.

Our youtube video with a live demo: [INST326 Travel Guide](#)

Running our Code:

- To run our code from the command line, first start by making sure the API key .txt file is in the same folder as user_preference.py and [MetroPlacesFinder.py](#). Also make sure the API key is in a separate file and correctly named “google_api_key.txt” or our code won’t be able to open the file.
- After this begin with the “python3 user_preference.py” arguments and press enter
- The code should prompt you for your name, and you can enter your name.
- Then the code will introduce you to the project and ask for which metro stop you would like to get off at. Type in one stop exactly as printed by the list of places in the terminal.
- After this it will ask which activity type you prefer, enter in one activity type.
- Then it will ask about maximum walking distance, enter an integer.
- The code will then output the location coordinates of the stop in longitude and latitude.
- The code will then output the top 5 recommendations, formatted in a list with name, activity type, and distance from stop.

An example of a code output that worked is:

Name: Isabel
Metro Stop: Archives
Activity Type: Food
Maximum Distance: 5

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● isabelsaffell@Isabels-MacBook-Pro-5 INST326 % python3 user_preference.py
Hello, what is your name?
Isabel
Hello Isabel! Welcome to the Green Line Metro Trip Guide!

Based on your preferences, you will be provided with the top 5 places to travel to.

These are the Green Line Metro stop options, from College Park to D.C. :

Anacostia, Archives, Columbia Heights, Congress Heights, Fort Totten, Gallery PI-Chinatown
, Georgia Ave-Petworth, LEnfant Plaza, Mt Vernon, Shaw-Howard U, U Street, Waterfront

Which metro stop would you like to get off at? Please enter name precisely with '-' if necessary.
Archives
Isabel, now that you have selected Archives, please select what activity types you like.

These are the following activity types: Food, Museums and Monuments, Sporty, Social, Nature

Please enter the activity type you prefer.
Food
What is the maximum distance you want to walk in miles?
5
Location Coordinates: {'lat': 38.8938998, 'lng': -77.0222241}

Top 5 recommendations for you are:
- Pizzeria Paradiso Dupont Circle, Restaurant, 2.1 miles
- Duccini's Pizza, Restaurant, 2.4 miles
- Sbarro, Meal_Delivery, 1.0 miles
- Station 4, Meal_Delivery, 1.3 miles
- We, The Pizza, Meal_Delivery, 1.4 miles
○ isabelsaffell@Isabels-MacBook-Pro-5 INST326 % 

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How to Interpret:

- The top 5 recommendations are listed based on the activity type and maximum distance entered by the user.
- In this example, because the user entered “Archives”, “Food” and “5” the program recommended 5 food places to visit within a 5 mile radius of the Archives metro stop.