Group #24

Final Project - Technical Write Up

Our goal behind our program is to allow users to find Restaurants based on their choice of location, cuisine, and budget.

Inputs:

1. Users Response to back-end Question (yes or no) to begin program
2. User’s Location
3. City ID to Match User’s Location
4. Cuisine ID to Match User’s Choice of Cuisine
5. User’s Price Range
6. No - to end program and display Map

Outputs:

1. City ID(s) for possible location matches to given location from User
2. Cuisine ID(s) based on available cuisines in city
3. Restaurant options based on City, Choice of Cuisine and Price Range
4. Map with markers of given restaurants, displaying restaurant name and rating

Algorithm:

1. Built Function for Map - to display Restaurants as Markers on Map based on User’s Input
   1. Inclusion of Necessary Imports for our program (JSON,Requests, Folium)
   2. For usage of API and Open Street Maps
2. Ask user if hungry and to respond yes or no to begin the program
   1. To avoid possible errors, we included an if statement to detect possible yes responses such as anything that starts with “y” and avoiding issues with if it is capital or lowercase.
3. Ask user for their City
4. Based on their input, match user’s city to the given cities in the Zomato API and return with City IDs.
   1. Being that we display world-wide results, only United States would have a city and state code so cities are matched with ID(s) to be concrete and solid
   2. Include necessary exceptions for JSON/Web API errors
5. Have user Enter City ID that matches their City
6. Print out Cuisines and IDs within Given City
   1. Made use of for loop within a range to give us a large amount of cuisines within API
7. Have user enter the matching Cuisine ID
8. Ask user to enter their price range
   1. It accepts ‘$’ in prior just in case user decides to enter a $
   2. API gives price per 2 people, we recalculated it for it to price per 1 person.
9. Print Out Restaurant Choices from user’s inputs with Rating and Address
10. Ask user to Enter “No” to Display Map with restaurants plotted on map , markers include restaurant name and rating
    1. We ask user to enter “no” to trigger the code to exit the program so it can call the map function which is outside of the loop.