

Food Industry in Manhattan



Background

► Manhattan



is the most densely populated of the five boroughs of New York City and would rank as the sixth-most populous in the U.S. It has many well-known districts and landmarks considered the capital of the world's culture and entertainment. For this reason, tourism is significant to this area.

Problem

The food industry was always one of the most crucial issues to attract tourists because it is an effective means to enter another culture. Traditional food and cuisine could be excellent to attract tourists and can be an integral part of the travel experience. For this reason, in this research project, I am trying to find the most populous foods in Manhattan. The results of this research will help those who are looking for a food business in this area.

Data

Data required in this project is mainly collecting from the Foursquare API.

<https://api.foursquare.com/v2/venues/explore>.

After getting the list of the foods and their locations, I got the coordinates of Manhattan by geocoding and created a folium map to visualize the data.

Methodology

First, we need to import all the tools we need including Pandas, Numpy, and Request. I imported folium for visualization that we need later as well after installing that. Mathplotlib is also imported at the end of the project to conclude the results in a bar chart.

In the next step, I applied my Client ID and Client Secret from FourSquare to get request for Manhattan.

The next step is to transform data into JSON, a standardized format to transfer data as text that can be sent over a network. It represents objects as value pairs, just like a Python dictionary

After transforming data to Jason, it is time to request geocode and then create a group, including recommended information.



After creating items of objects, food, and their attributes, including uid, name, and location, we build the data frame using pandas. In order to visualize what we have got from our data as a beautiful map, I got coordinates of Manhattan, and for this regard, I used folium

Now our data is ready, but it needs to be more organized. For this regard, I used groupby for "Type of Restaurant." And then removed unnecessary columns by drop and sorted the results from highest number to lowest. And plot the bar chart based on the dataset.



Conclusion

As I mentioned before, food has a significant impact on tourism attraction, and the results of this research show different cousins in Manhattan, one of the biggest tourism centers. From the results, we will find that the top five food in Manhattan is Italian cuisine, Bakery, Café, American and Mediterranean cuisine, respectively. Pizza and French cuisine come next. Therefore, it can be concluded that Italian foods are the most favorite food in Manhattan, and it can be considered as the most successful food industry in the region.