Coursera Capstone

IBM Applied Data Science Capstone

Opening an Japanese Restaurant in New York

Business Problem

The objective of this Capstone project is to analyze and select the best locations in the city of New York to open a new Japanese restaurant. Using Data Science methodology and instruments such as Data Analysis and Visualization, this project aims to provide solutions to answer the business question: Where in the city of New York, should the investor open a Japanese Restaurant?

Data

- **Data required**
  - List of borough and neighborhoods of New York
  - Latitude and longitude coordinates of those neighborhoods
  - Venue data, particularly data related to restaurants

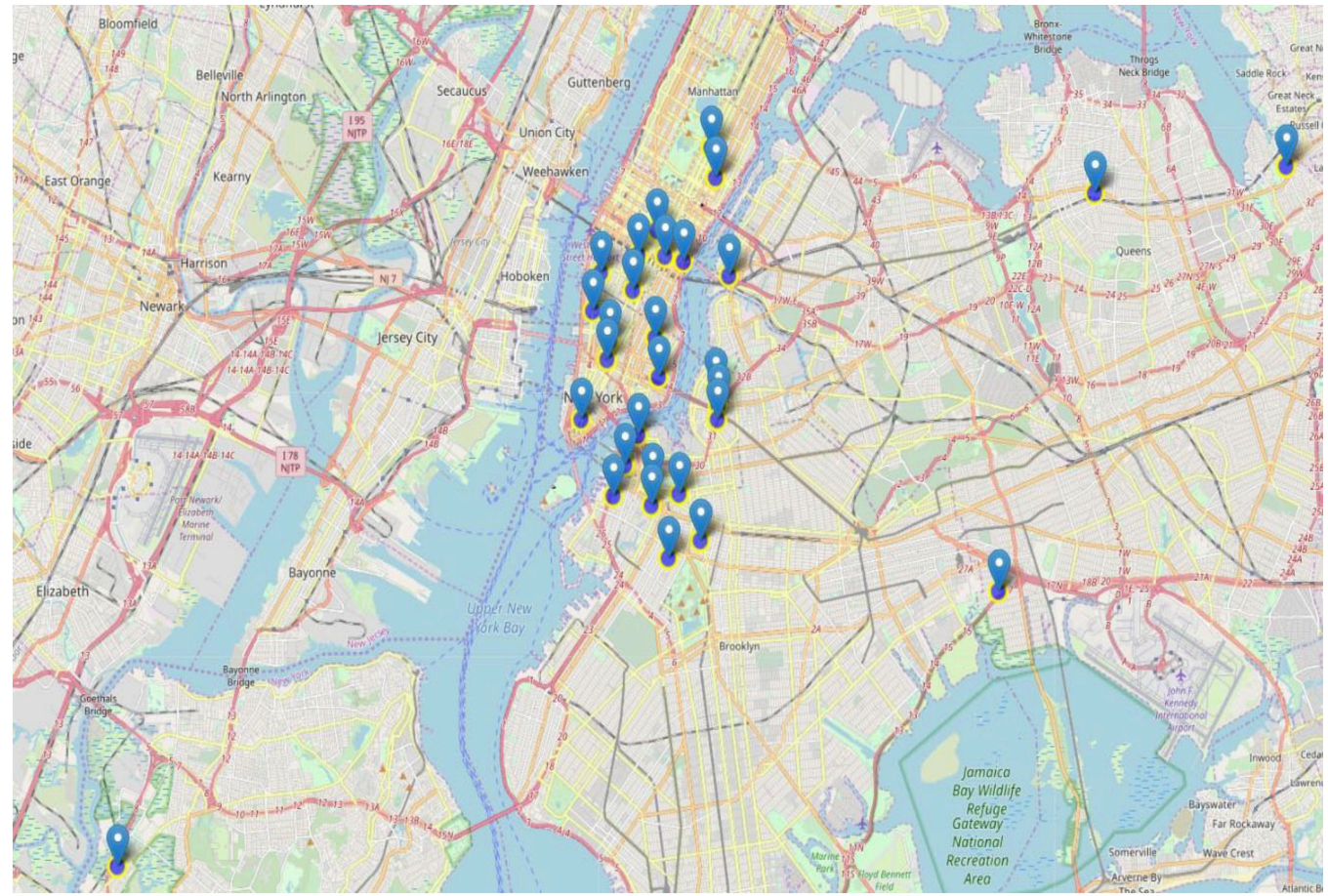
- **Sources of data**
  - Open source dataset of New York: https://cocl.us/new_york_dataset
  - Geocoder package for latitude and longitude coordinates
  - Foursquare API for venue data

Methodology

- Collect the data from https://cocl.us/new_york_dataset . Cleane and process the data into a dataframe.
- Using FourSquare, locate all venues and then filter by Japanese restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.
- Sort the data based on rankings.
- Visually assess the data be will be using graphing from Python libraries.

Results

- Manhattan has the highest number of Japanese restaurants comparing to the other boroughs.
- Manhattan has the highest average rating for Japanese Restaurants.
- Two neighborhoods with the highest average rating for Japanese Restaurants are Cobble Hill and North Side (both located in Brooklyn).



Discussion Section

- Based on the results of our analysis, Manhattan and Brooklyn are the best locations for Japanese cuisine in NYC.
- Brooklyn is a more promising place to open a new Japanese restaurant.
- Neighborhoods Cobble Hill or in North Side are the best place in Brooklyn to open a new Japanese restaurant.

Conclusion

- Answer to business question: Where in the city of New York, should the investor open a Japanese Restaurant?
- Best rated Japanese Restaurant in NYC is OOTOYA Restaurant in Manhattan.
- The findings of this project may be used in real life to better understand the advantages and disadvantages of different New York neighborhoods/boroughs in terms of opening a Japanese restaurant.

The End