

Coursera Capstone
IBM Applied Data Science Capstone

Opening an Ethnical Japanese Restaurant in New York



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November 2020

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**

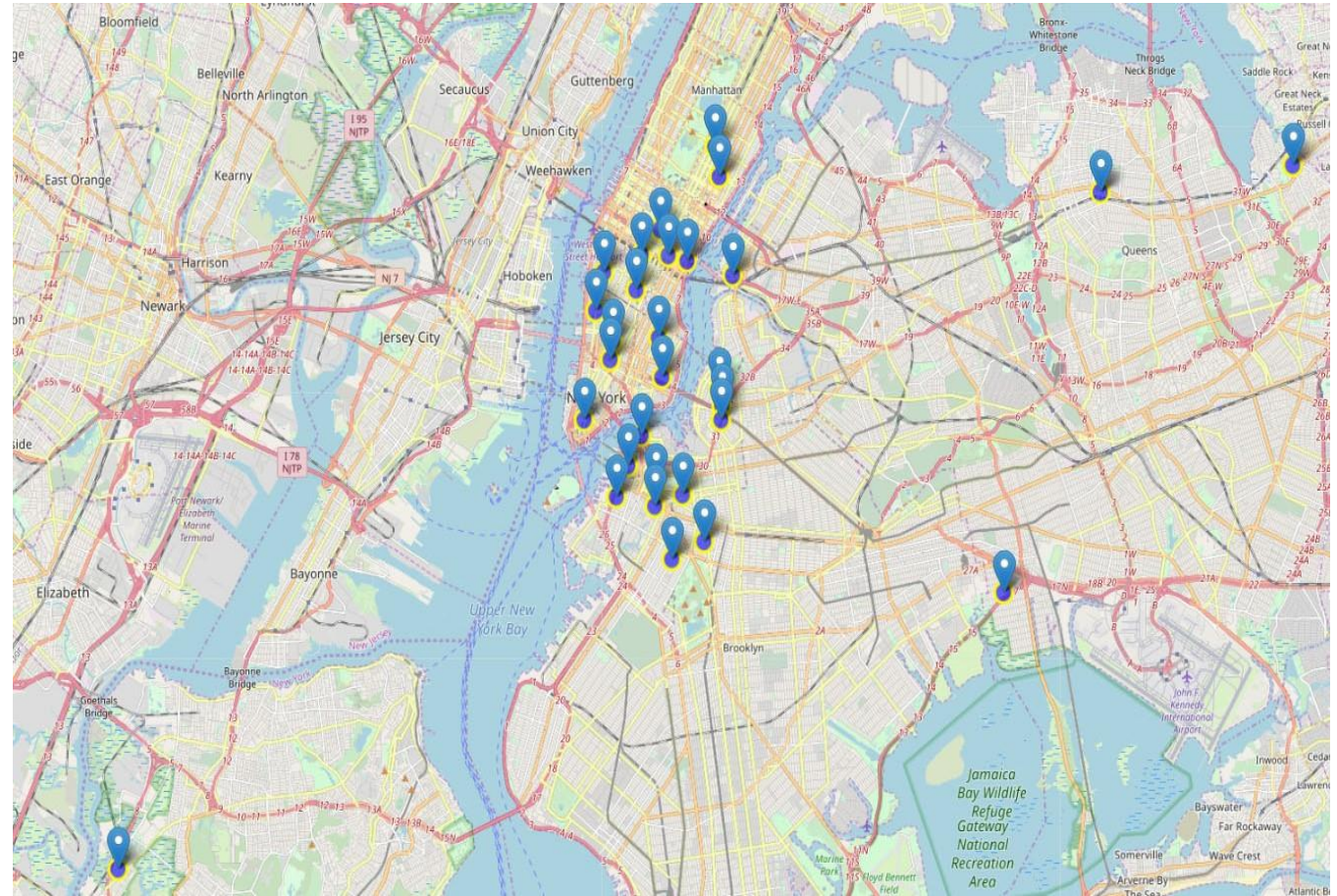
- Open source dataset of New York: https://cocl.us/new_york_dataset
- Geocoder package for latitude and longitude coordinates
- Foursquare API for venue data

Methodology

- Collect the data from https://cocl.us/new_york_dataset . Clean 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.