

Japanese Restaurants in New York

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Introduction

This project explores New York to find answers to questions:

1. "Where in New York to go to eat delicious Japanese food?"
2. "Where in New York can an investor open a profitable Japanese restaurant?"



New York is the largest city in the United States. New York City is home to about 8.5 million people, which is more than 40% of the population of New York State and a slightly smaller percentage of the New York metropolitan area, which is

home to approximately 23.6 million people. The city is home to a large number of immigrants.

New York City demographics show that it is a large and ethnically diverse metropolis. More than 20,000 Japanese people live in New York. They were the ones who started opening Japanese restaurants in New York.

This project investigates where high-rated Japanese restaurants are located in New York. In which area an investor can open a restaurant with the least risk and competition.

Business Problem

This project use Data Science methodology and instruments such as Data Analysis and Visualization, aims to provide solutions to answer the business question: Where in the city of New York, should the investor open a Japanese Restaurant?

Target Audience of this project and some demographic facts

This project is especially useful for developers and investors looking to invest in a restaurant business and open a Japanese restaurant in New York City.

The idea of a healthy lifestyle has captured the minds of people. Japanese restaurants have become extremely popular as they offer healthy alternatives to common American eating habits.

Lockdown and the Covid-19 pandemic have increased the need for food delivered to your home. Japanese cuisine has many dishes that are ideal for these purposes:

- It is convenient to pack sushi and rolls.
- They do not lose their appearance after delivery.
- They do not require freezing or heating.

Data

To solve the problem, we need the following data:

- New York City data containing boroughs and boroughs.
- Coordinates of latitude and longitude of these areas.
- Data on venues, in particular, data on restaurants.

These data will be used for further analysis of the surroundings. They are necessary for building a map and obtaining data about the venue.

This project will require the use of many data science skills:

- open source dataset
- work with API (Foursquare)
- data cleansing
- data processing
- data visualization in charts and maps (Folium).

The project carried out exploratory data analysis, performed logical statistical testing, and used machine learning methods.

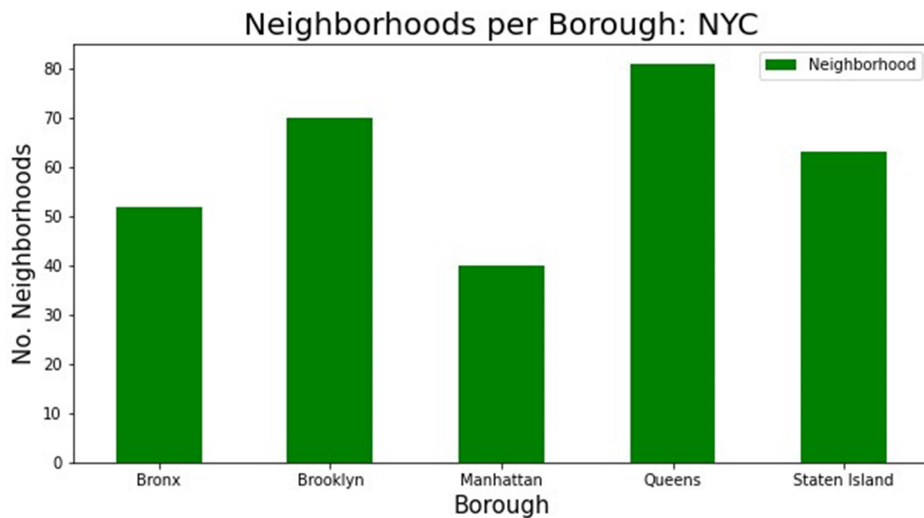
Methodology

- Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a dataframe.
- FourSquare be used to locate all venues and then filtered by Japanese restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.
- Data will be sorted based on rankings.
- Finally, the data be will be visually assessed using graphing from Python libraries.

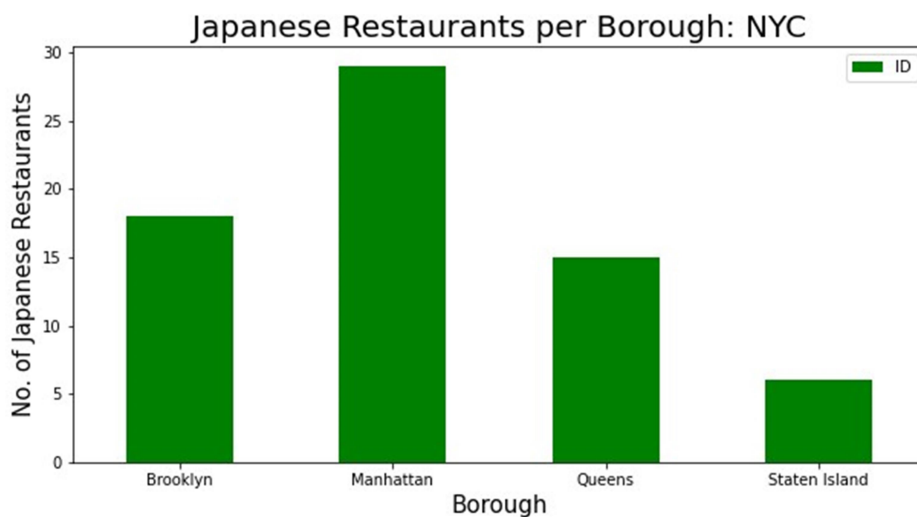
Results

The results of our analysis showed below:

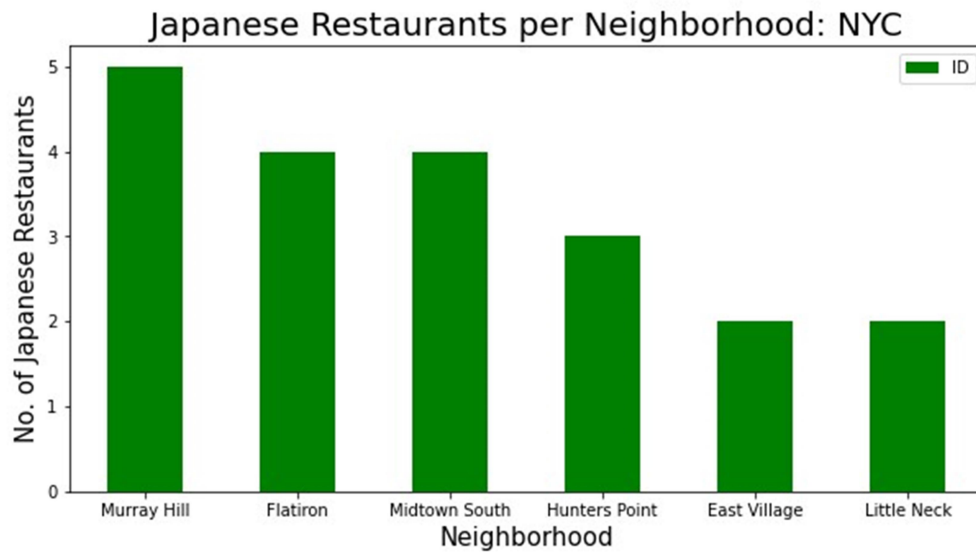
1. Queens has the highest number of Neighborhoods. Manhattan has the smallest number of Neighborhoods.



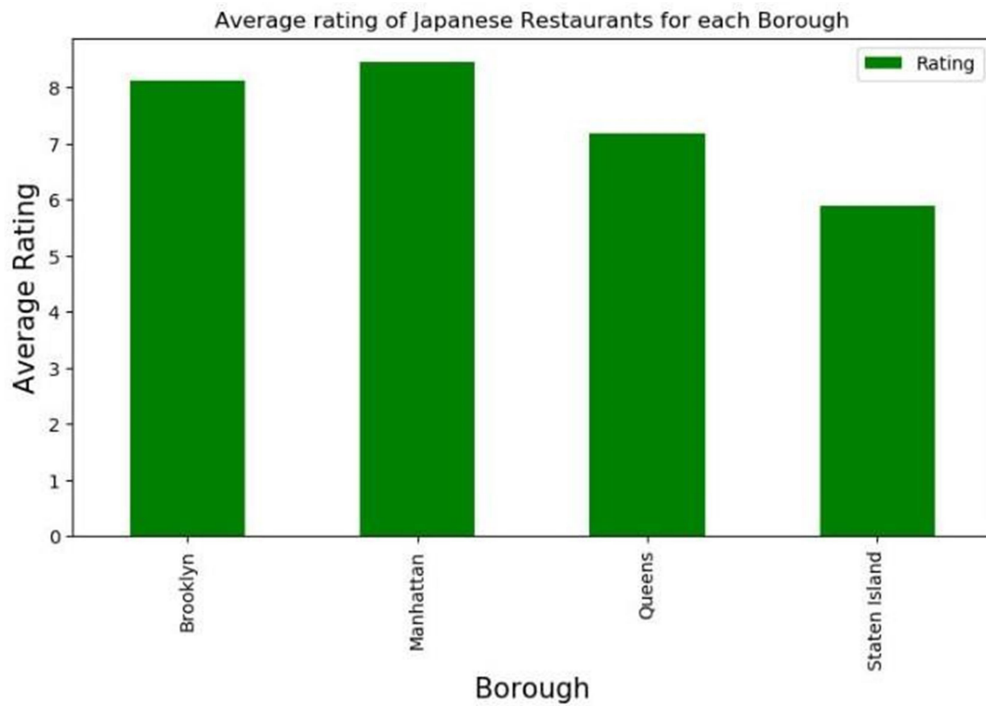
2. Manhattan has the largest number of Japanese restaurants. There are 29 Japanese restaurants in Manhattan. Perhaps this is due to the fact that a large number of Japanese live in Manhattan.



3. The Murray Hill area has the largest number of Japanese restaurants in Manhattan. There are 5 Japanese Restaurants in the area.



3. Manhattan has the highest average rating for Japanese Restaurants. Brooklyn goes right behind the Manhattan with the average rating of its Japanese restaurants only a little lower than Manhattan.



4. Two neighborhoods with the highest average rating for Japanese Restaurants are Cobble Hill and North Side (both located in Brooklyn).

	Neighborhood	Average Rating
9	Cobble Hill	9.100000
36	North Side	9.100000
15	Flatiron	8.975000
12	East Village	8.950000
25	Hunters Point	8.933333
16	Fort Greene	8.900000
1	Boerum Hill	8.800000
10	Downtown	8.800000
33	Midtown South	8.800000
6	Chelsea	8.750000

Top Ten neighborhoods with Japanese Restaurants with the best averagerating

Discussion Section

Based on the analysis, I would say that Manhattan and Brooklyn are highly

competitive places. It already has the largest number of Japanese restaurants in New York. These restaurants are highly rated. It's hard to compete with them. These restaurants are founded by ethnic Japanese people. They are very well versed in their national cuisine. Fans of Japanese cuisine will go to a restaurant to have a Japanese chef. Therefore, you cannot open a Japanese restaurant there, especially if you are a simple Russian guy.

Lockdown problems during the pandemic have increased the need for home-delivered products. Japanese cuisine has many dishes that are perfect for this purpose. These are sushi and rolls and more. This makes Japanese cuisine especially popular.

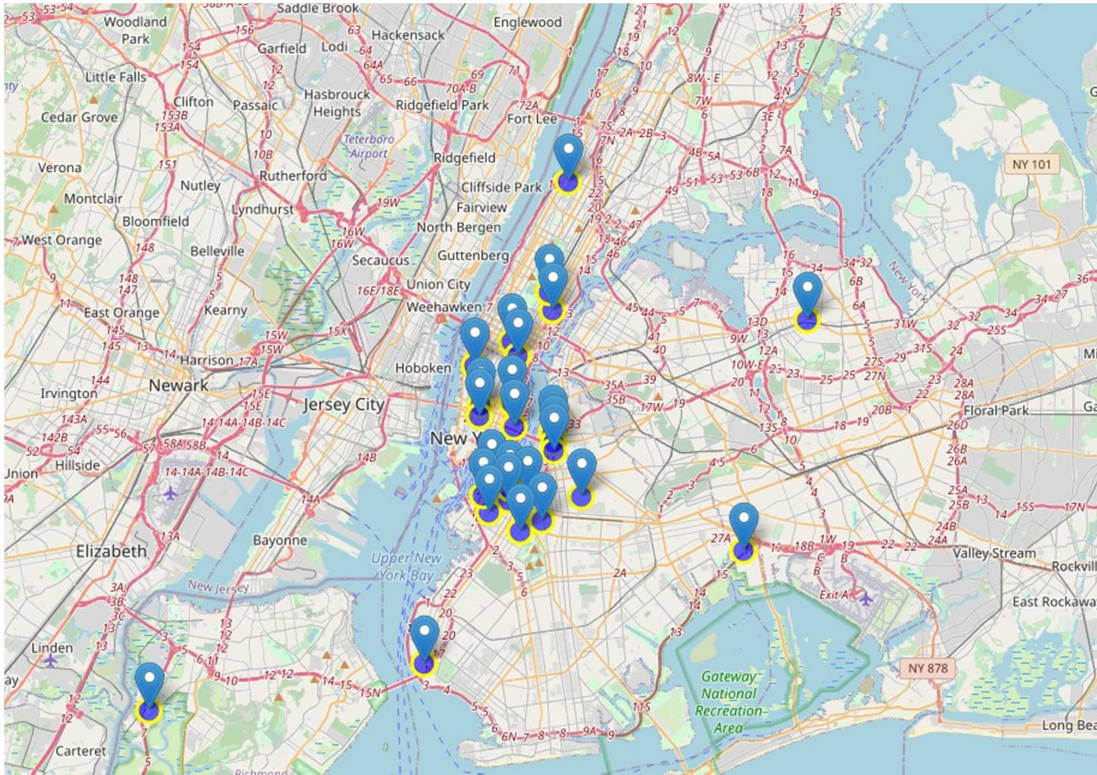


I think for maximum success I would open a Japanese restaurant in Queens. There are a lot of people and few Japanese restaurants. The restaurant should have a home delivery department and a good website for taking orders online.

In Brooklyn, you need to look for a good chef, as there are several restaurants with an average rating in excess of 8.0 on a scale of 1.0 to 10.0. I would recommend look for a chef a Japanese Restaurant either in Cobble Hill or in North Side, because both of these neighborhoods have the highest rating for Japanese

restaurants.

Also, keep in mind that property prices in Queens are much lower than in Brooklyn and Manhattan.



Limitations and suggestions for future researches

All of the above analysis depends on the accuracy of the Foursquares data. In addition, this project used a free account for the Foursquare API, which has a limit on the number of API calls and results returned. For better results, future research work and more comprehensive

The analysis may consider using a paid account to work around these restrictions, as well as incorporating data from other external databases.

Conclusions

In the project we have gone through the process of identifying the business problem, specifying the data required, extracting and preparing the data, performing data analysis, and lastly providing recommendations to the

investors/developers.

During the project, we applied different data science methods and instruments to get the answer to our main question: “Where in the City of New York, should the investor open a Japanese Restaurant?”

The findings of this project will help the relevant investor better understand the advantages and disadvantages of different New York neighborhoods/boroughs in terms of opening a Japanese restaurant.