

# The Battle of the Neighborhoods - Week 2

## Introduction & Business Problem :¶

### Background

New York City (NYC) is considered as one of the most populous city in the United States. The City comprises of five Boroughs with an estimate population of 8 million people distributed over the areas. New York is known as the City that is populated by people of various ethnic groups. One of them is Thai. Thai food is one of the cultural heritages that spread across the Globe. With the density of population and high level of business activities in New York, NYC is one of the cities that have high potential for a Thai food restaurant.

#### Problem description

Although New York seems to be a great destination for open a new Thai food restaurant(High density of population, High average income, and high level of business activities in any field), but the competition is also high that any entrepreneur need to plan thoroughly before investing. Thus, some decision making tools are needed.

### Data description

The data about number and location of Thai food restaurants in each Boroughs of NYC will be collected via Foursquare platform. The data science's tools will be utilized to gain insights as follow:

1. How many Thai restaurants in each Borough
2. How dense of Thai restaurants in each Borough

The insights will be use for estimating the opportunity and risk of opening a new Thai food restaurant for entrepreneur that is considering to enter the industry.

### Methodology

The precise locations of Thai restaurants were collected via Foursquare Platform. Various python tools were used to visualize the data; such as, Folium. The location of Thai restaurants within five kilometer range from the center of the boroughs were collected and showed on the map using Folium library. The data from each Borough were presented separately.

### Result

The numbers of Thai restaurants in each Borough within five kilometer from the center were as follows(The name lists of restaurant will be presented in the reference section):

Manhattan: 50

The Bronx: 6

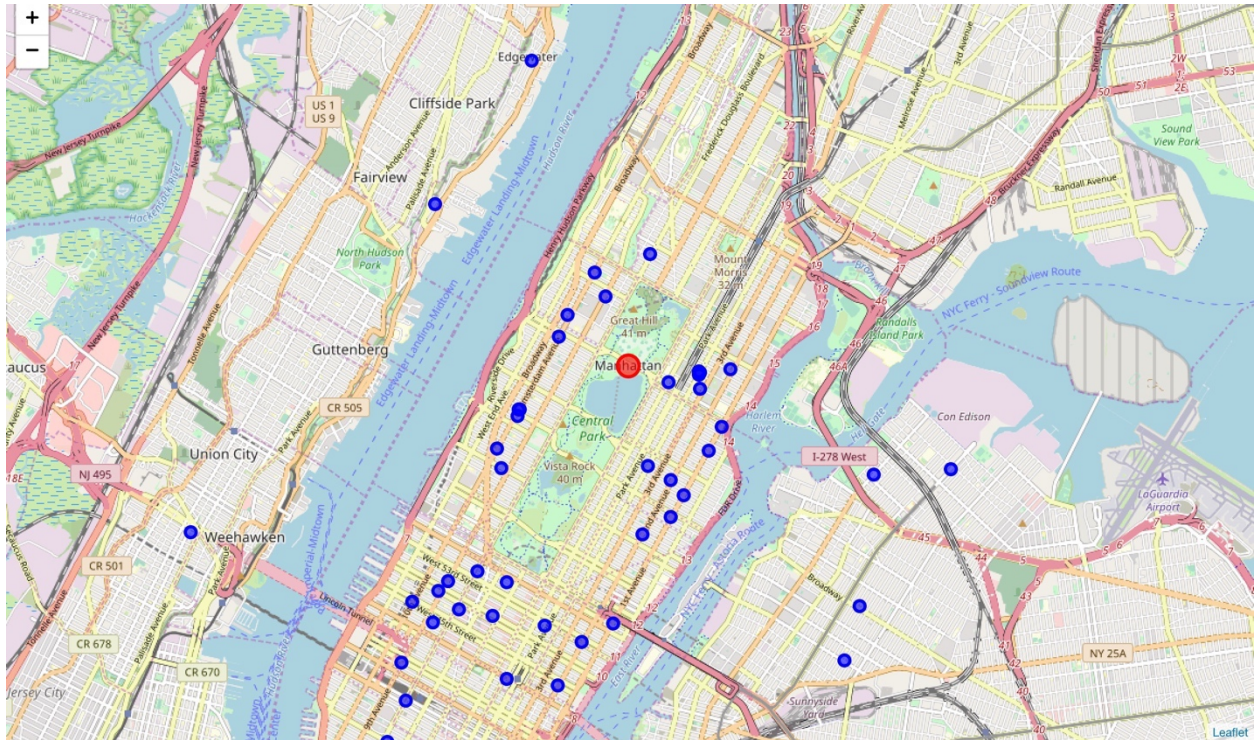
Brooklyn: 50

Queens: 6

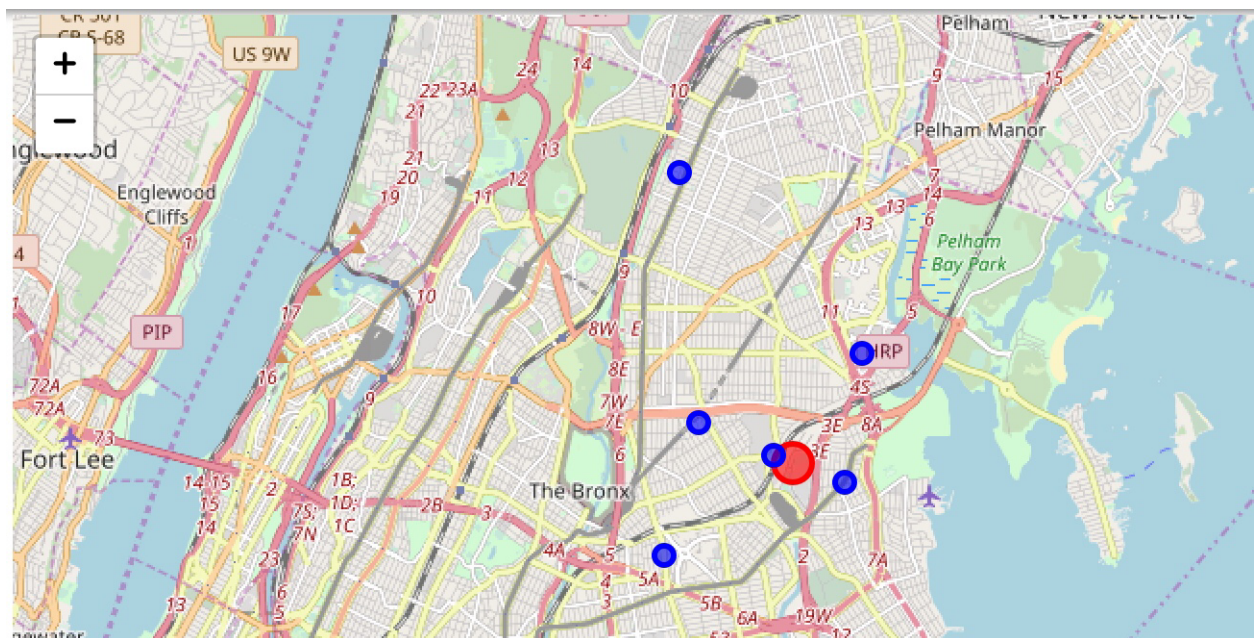
Staten Island: 4

The location of the restaurants were showed as blue dots on the map

## Manhattan

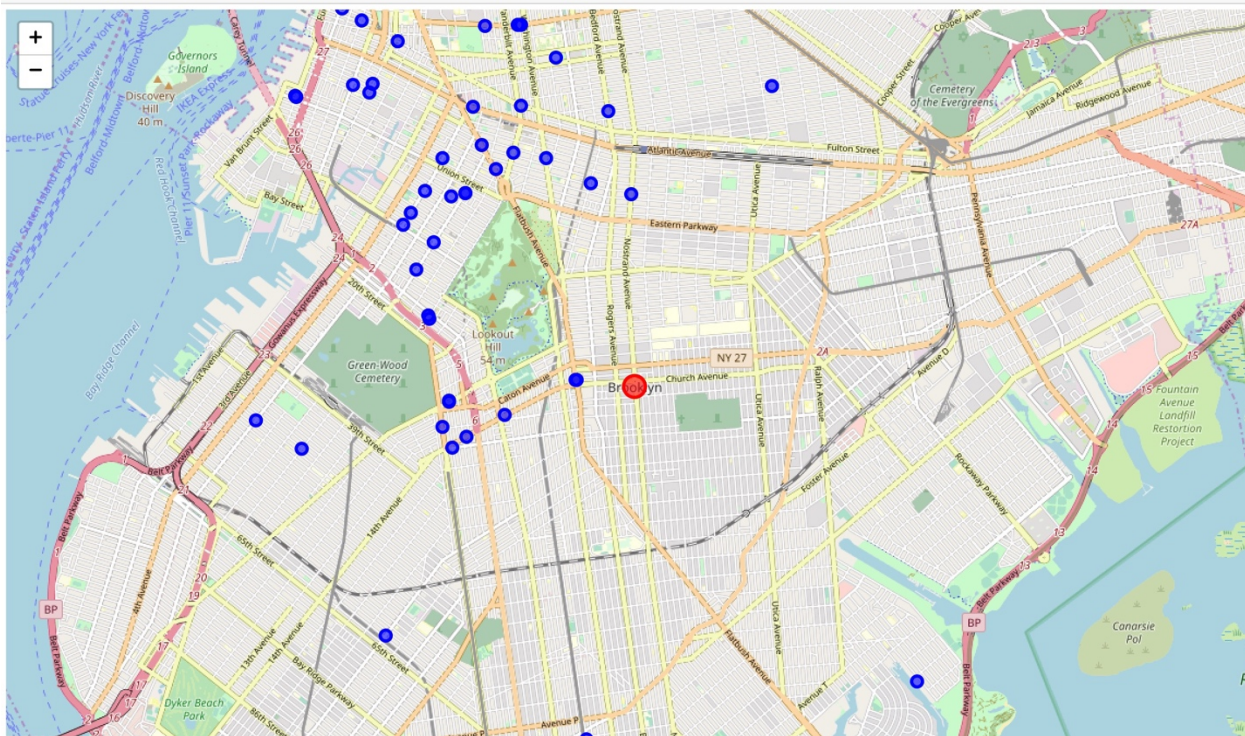


## The Bronx

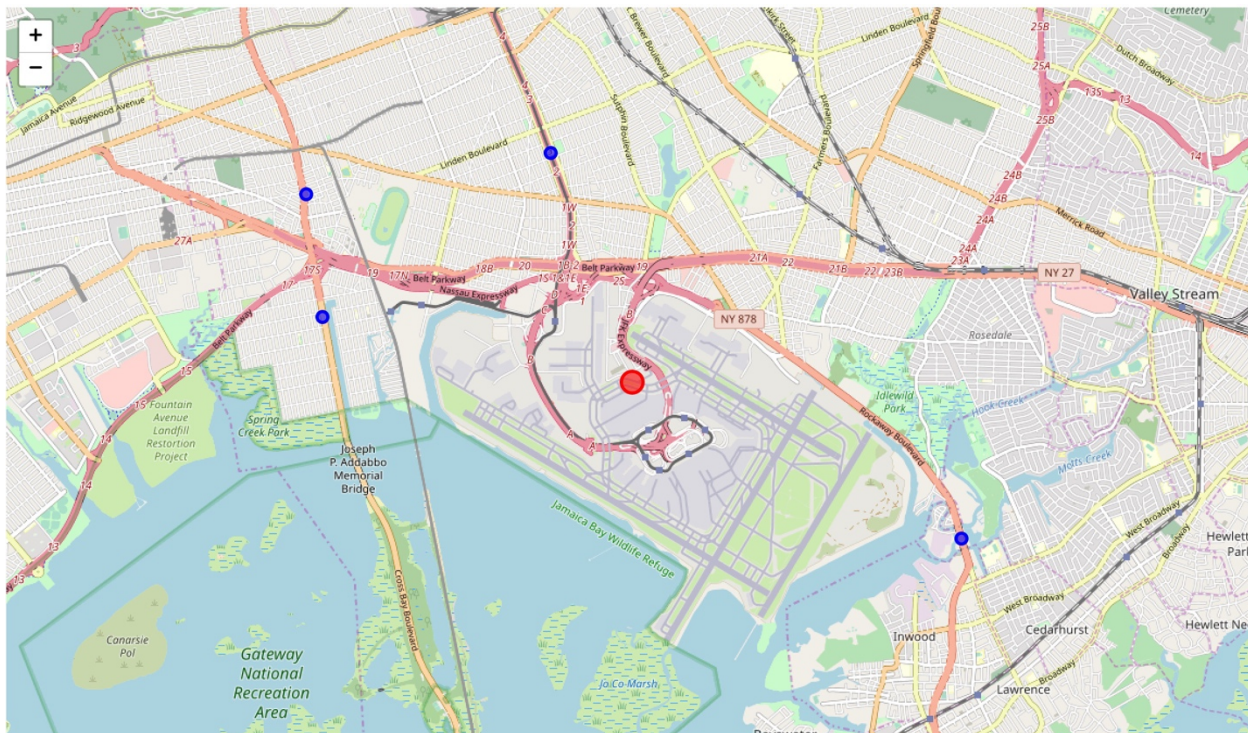




## Brooklyn



## Queens



## **Discussion**

The boroughs with highest number of Thai restaurants were Manhattan, Brooklyn, The Bronx, Queens, and Staten Island respectively. The high number implied higher competition. However, the high number also implies that Thai food was popular among the people resided in that particular area as well. The number of restaurants showed in The Bronx, Queens, and Staten Island could be considered as low. This implied that there was an opportunity for an entrepreneur to cultivate in that particular area. However, the data might imply that Thai food was not popular among residents in those areas as well. It is recommended that entrepreneur should calculate the tradeoff between the familiarity of people in one particular area towards Thai food, yet the investor must pay with high competition. On the other hand, if the entrepreneur decided to do business in those areas that had low density of Thai food restaurant, it might require additional effort to create familiarity of people toward Thai food in that area.

## **Conclusion**

It was concluded that Manhattan and Brooklyn were the areas that had highest numbers and density of Thai restaurants, which implied higher competition and popularity of Thai food in that area. On the other hand, it was showed that the numbers and density of Thai restaurants in The Bronx, Queens, and Staten Islands were considered as low. This might imply that Thai food was less popular in these areas