Capstone Project - The Battle of Neighborhoods

Vietnamese Restaurant¶

1. Introduction

New York City's demographics show that it is a large and ethnically diverse metropolis. It is the largest city in the United States with a long history of international immigration. New York City was home to nearly 8.5 million people in 2014, accounting for over 40% of the population of New York State and a slightly lower percentage of the New York metropolitan area, home to approximately 23.6 million. Over the last decade the city has been growing faster than the region. The New York region continues to be by far the leading metropolitan gateway for legal immigrants admitted into the United States.

Throughout its history, New York City has been a major point of entry for immigrants; the term "melting pot" was coined to describe densely populated immigrant neighborhoods on the Lower East Side. As many as 800 languages are spoken in New York, making it the most linguistically diverse city in the world. English remains the most widely spoken language, although there are areas in the outer boroughs in which up to 25% of people speak English as an alternate language, and/or have limited or no English language fluency. English is least spoken in neighborhoods such as Flushing, Sunset Park, and Corona. (Source: Wiki)

With that cultural diversity, of course the cuisine will also be very rich. There are many eateries opened here serving many different subjects. In this project we will list and visualize all Vietnamese restaurants.

2. Data

We will use data:

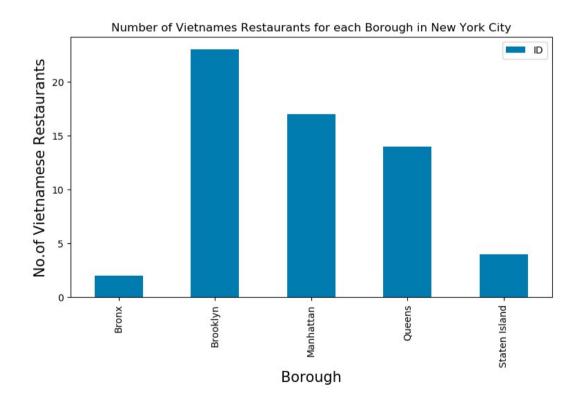
- New York City data that contains list Boroughs, Neighborhoods along with their latitude and longitude:
 - Data source: https://cocl.us/new_york_dataset
 - We will use this dataset to explore the neighborhoods of new york.
- Vietnamese restaurant in NewYork city:
 - Foursquare API get info.
- GeoSpace data:
 - Data source: https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tgmi-i8zm
 - Visualize choropleth map

3. Exploratory Data Analysis

- Install required
- Import library
- Define function.
- Number of Neighborhood for each Borough in New York City

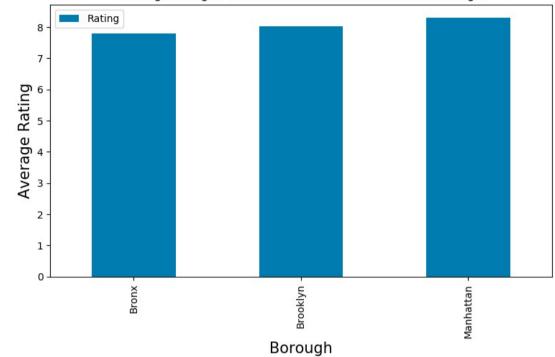


- Vietnamese Restaurant for each neighborhoods



- Average rating of Vietnamese Restaurants for each Borough

Average rating of Vietnamese Restaurants for each Borough



- Show on map



4. Conclusion

- We used Foursquare Api to get the venues information on given location.
- Top 10 location for Vietnamese Restaurant.

5. Acknowledgment

In this project, we have to acknowledgment the data science course provided by IBM powered by Coursera.