

Analysis of Indian Restaurants in New York City

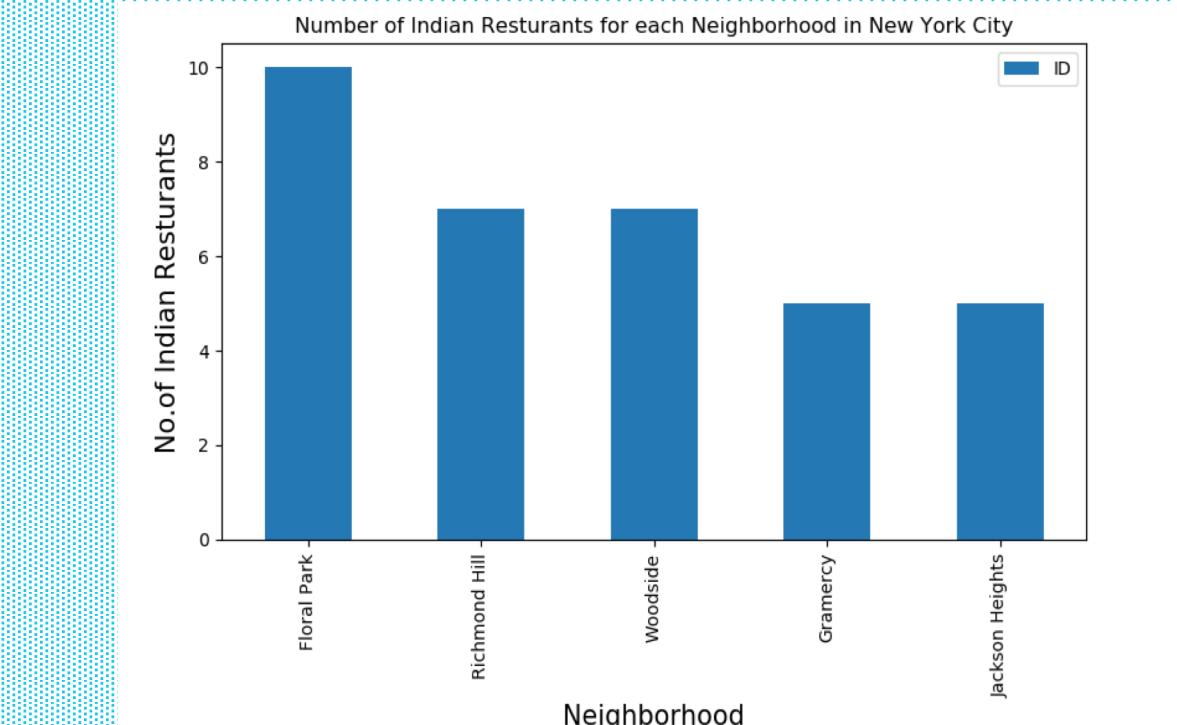
Introduction

- We can see from the New York City's demographic data that it is very ethnically diverse. It is also one of the largest city in the US. The city's population in 2010 was 44% white (33.3% non-Hispanic white), 25.5% black (23% non-Hispanic black), 0.7% Native American, and 12.7% Asian. Hispanics of any race represented 28.6% of the population, while Asians constituted the fastest-growing segment of the city's population between 2000 and 2010.
- With this huge diversity in population there is also is a huge diversity in food. There are many different restaurants which provide many different types of cuisine like Chinese, Indian, Italian, etc
- We will try to analyze the data regarding Indian cuisine and tackle problems listed in the next slide.

Problem

- We will try to deal with the following problems in this project:
 1. Find areas which have restaurants which serve Indian cuisine
 2. Find best locations for Indian cuisine
 3. Areas which lack good Indian restaurants
 4. Visualize best locations for Indian cuisine on a map

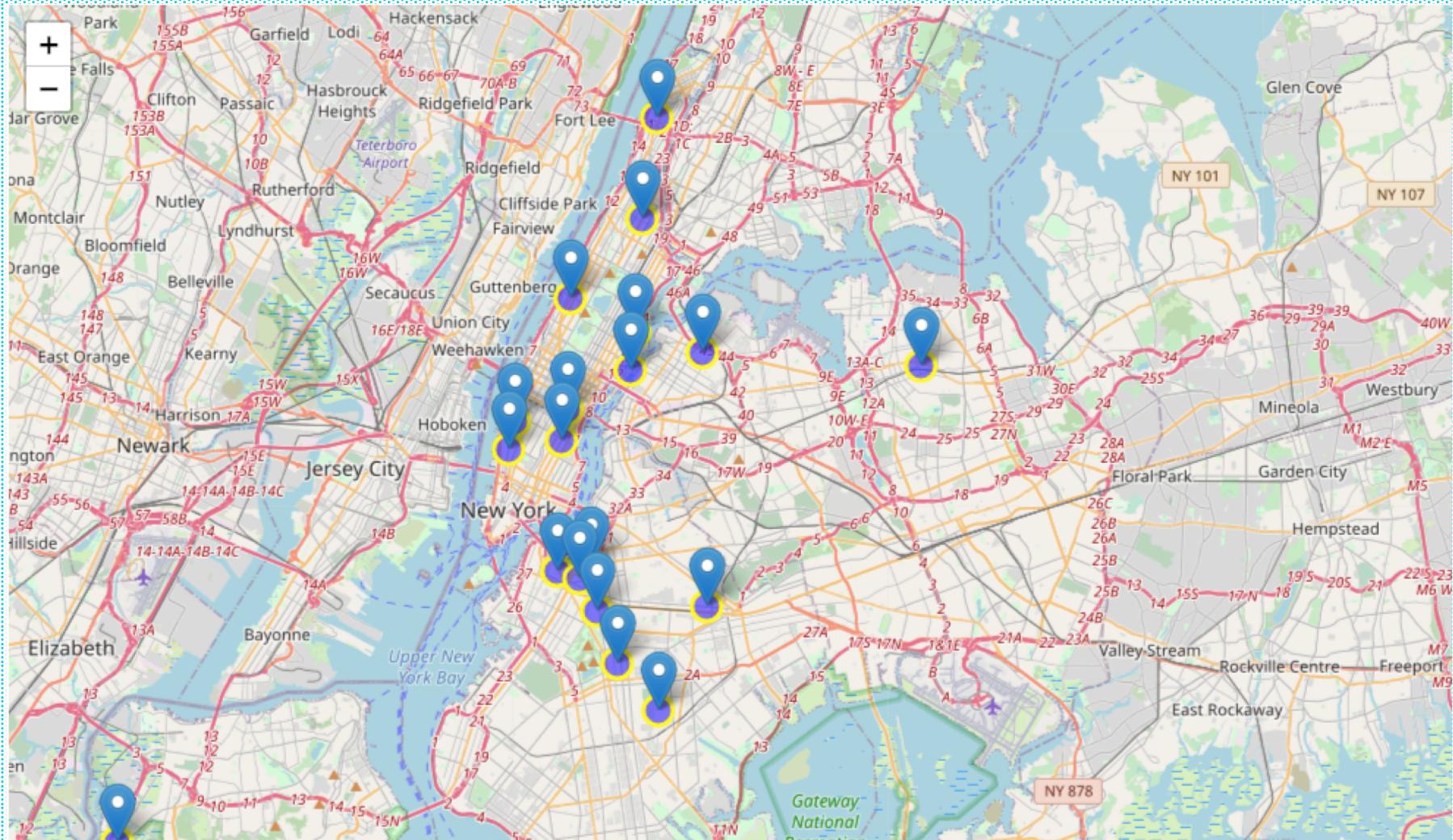
Number of restaurants in Boroughs and Neighbourhoods



Dataframe containing names of restaurants along with parameters like Ratings, Tips, etc.

	Borough	Neighborhood	ID	Name	Likes	Rating	Tips
0	Bronx	Woodlawn	4c0448d9310fc9b6bf1dc761	Curry Spot	5.0	7.8	10.0
1	Bronx	Parkchester	4c194631838020a13e78e561	Melanies Roti Bar And Grill	3.0	6.0	2.0
2	Bronx	Spuyten Duyvil	4c04544df423a593ac83d116	Cumin Indian Cuisine	13.0	6.0	9.0
3	Bronx	Concourse	551b7f75498e86c00a0ed2e1	Hungry Bird	8.0	6.8	3.0
4	Bronx	Unionport	4c194631838020a13e78e561	Melanies Roti Bar And Grill	3.0	6.0	2.0

Visualizing best neighborhoods for Indian cuisine on the map



Methodology

1. The first step is obviously to collect the New York City data, which we collected through the link 'https://cocl.us/new_york_dataset'.
2. We find all the neighbourhoods and boroughs along with their longitude and latitude from the dataset.
3. We then fetch data regarding the Indian restaurants from the Foursquare API for the neighbourhoods we have identified.
4. Next we find the number of Indian restaurants in each borough and neighbourhood.
5. Again using the Foursquare API we will find all the relevant data regarding each of the restaurants like Ratings, Tips, etc.
6. Using average ratings as a constraint, we can sort neighbourhoods and boroughs.
7. We join this dataset with the latitude and longitude database, and visualize it on the map using python's Folium library.

Results

1. We found areas which have Indian restaurants.
2. Astoria(Queens), Fort Greene(Brooklyn), Clinton Hill(Brooklyn) are some of the best neighbourhoods for Indian cuisine.
3. Bronx has least average rating of any boroughs. Also in our data Union port has the least average rating.
4. We have visualized on the map the best neighborhoods for Indian cuisine.