WHERE HAS BEST PUB IN NYC?

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INTRODUCTION

- The City of New York is the most populous city in the United States. It is diverse and is the financial capital of USA. It is multicultural. It provides lot of business opportunities and business friendly environment. It has attracted many different players into the market.

- This report explores which neighborhoods and boroughs of New York City have the most as well as the pubs. Additionally, I will attempt to answer the questions "Where I can find best pub in NYC?"

# DATA ACQUISITION AND CLEANING

- Data 1: Neighborhood has a total of 5 boroughs and 306 neighborhoods which each borough as well as the latitude and longitude coordinates of each neighborhood. This dataset exists for free on the web. Link to the dataset https://geo.nyu.edu/catalog/nyu_2451_34572

- Data 2: For the below analysis we will get data from Wikipedia as given below:
  - https://en.wikipedia.org/wiki/Neighborhoods_in_New_York_City

- Data 3: we are using Foursquare API to utilize city geographical coordinates data which will be leveraged to provision venues information for each neighborhood

METHODOLOGY

- Scraping data from Wikipedia link

- extract data from newyork_data.json and convert json to data frame

- find the coordinates of the target place and list of neighborhoods

- Create a map of North York and extract Pubs in NYC data from Foursquare API.

- The borough and neighborhood have the most Pub

- check each pub (Rating, Tips, Like) from Foursquare API.

- Find Average rating of Pub for each neighborhood and borough

- Use Folium display locations of best pubs in the map
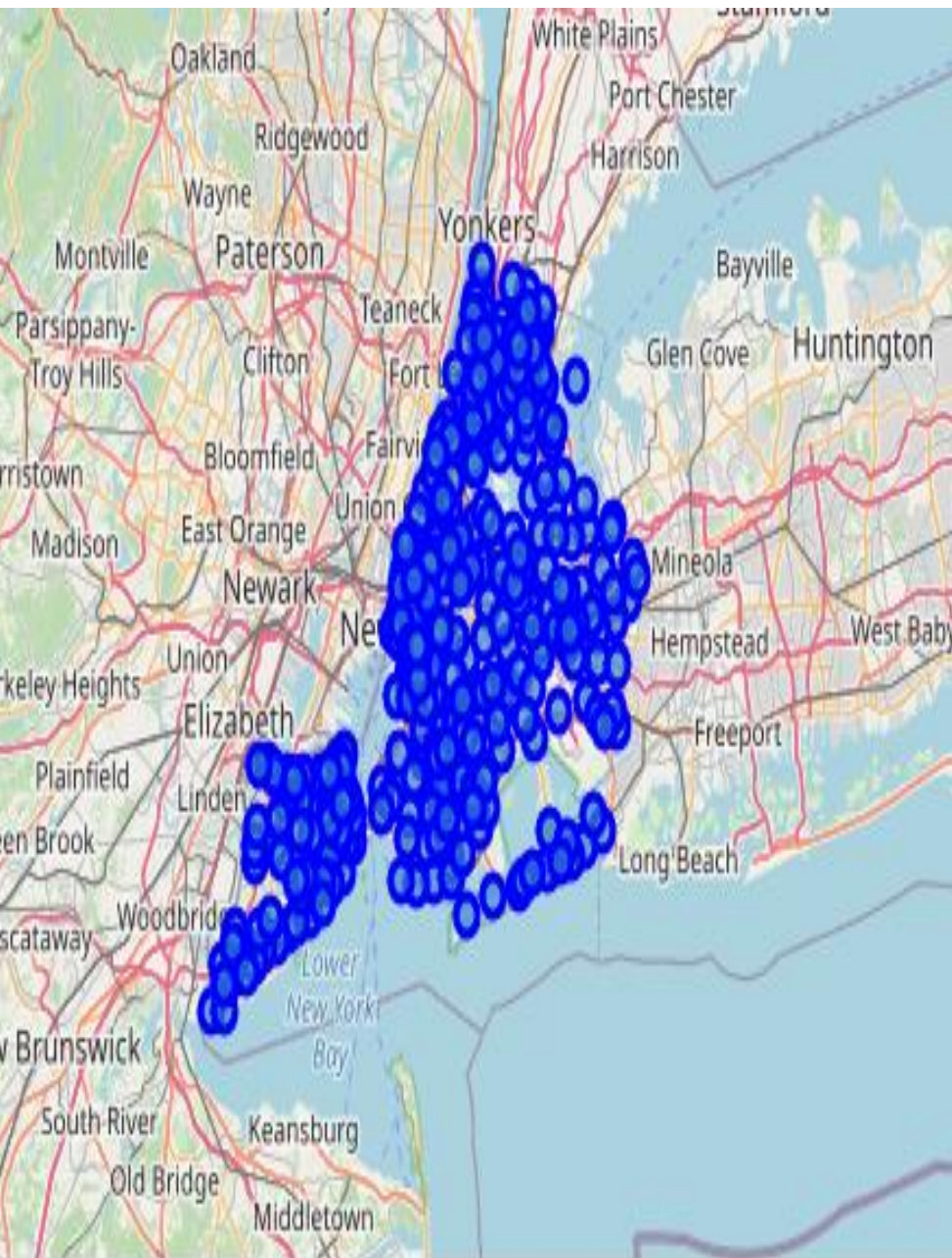
RESULTS

▪ The data extracting from Foursquare API of Pubs in NYC in each neighborhood.
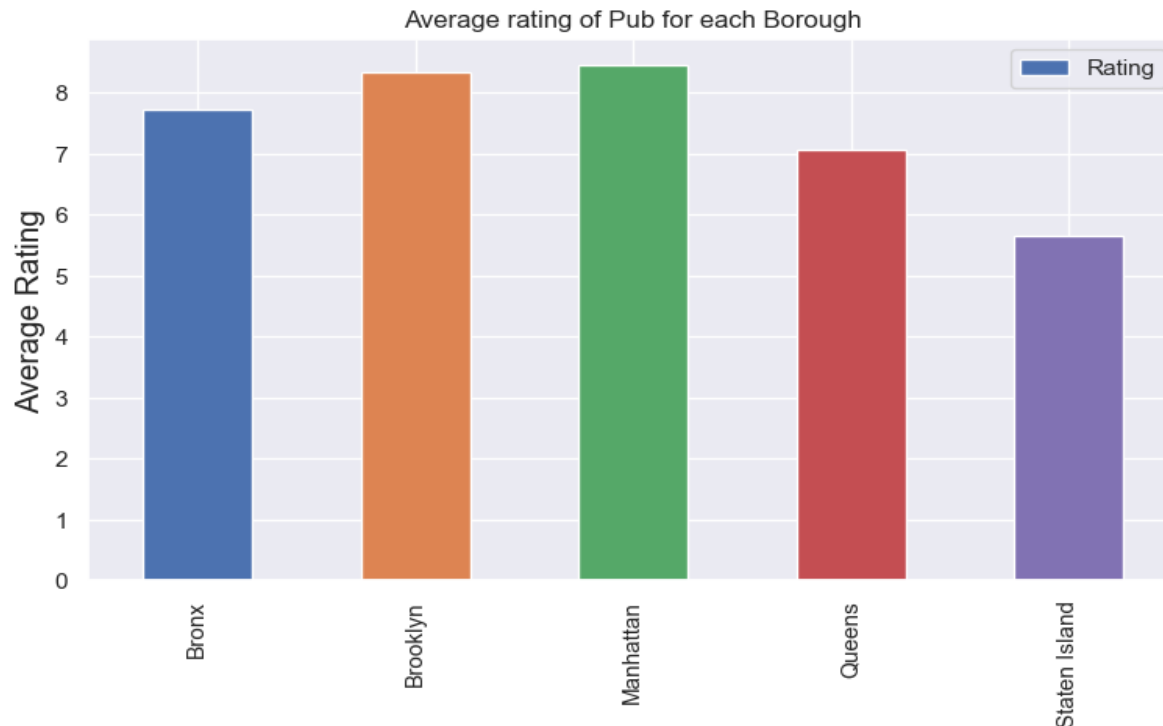

	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585
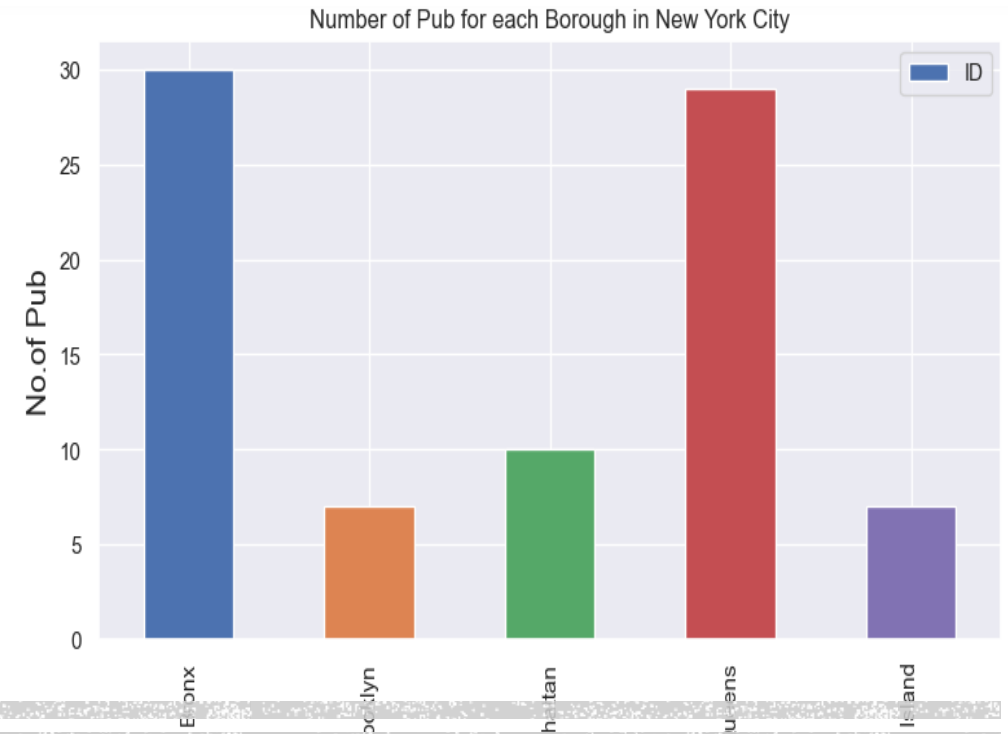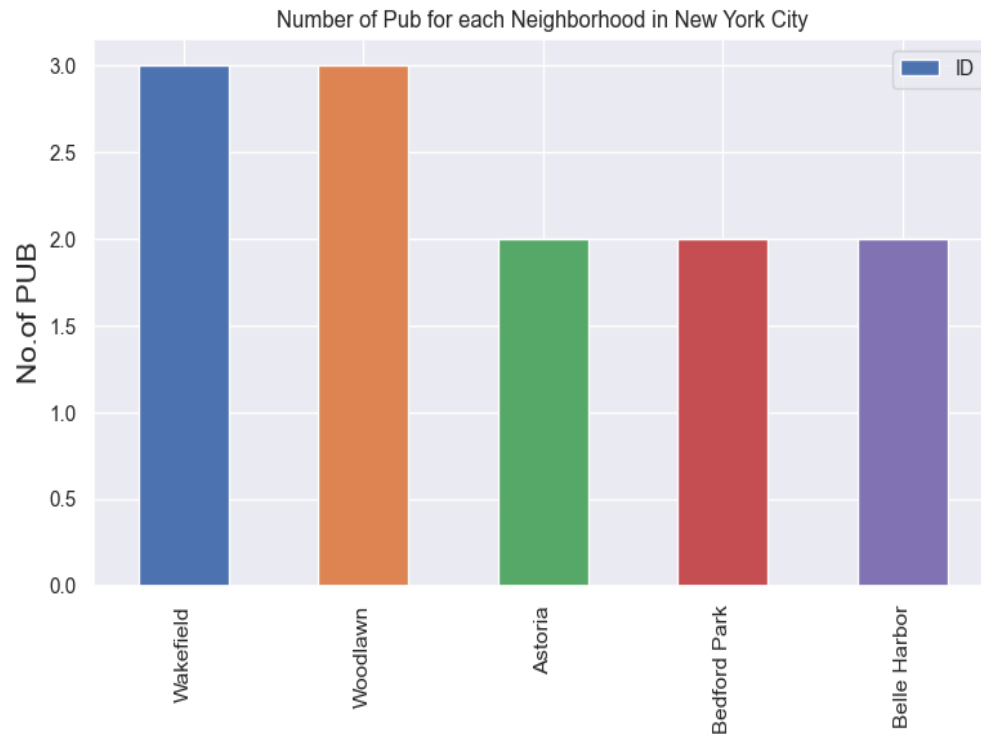
THE BOROUGH AND NEIGHBORHOOD HAS THE MOST PUB

Average rating of Pub for each Borough

	Neighborhood	Average Rating
37	Prospect Heights	8.90
17	Fort Greene	8.90
39	Ravenswood	8.65
56	Washington Heights	8.60
52	University Heights	8.60
1	Astoria	8.55
26	Marble Hill	8.55
20	Inwood	8.55
14	Fieldston	8.50
45	Spuyten Duyvil	8.50

AVERAGE RATING OF PUB IN EACH NEIGHBORHOOD
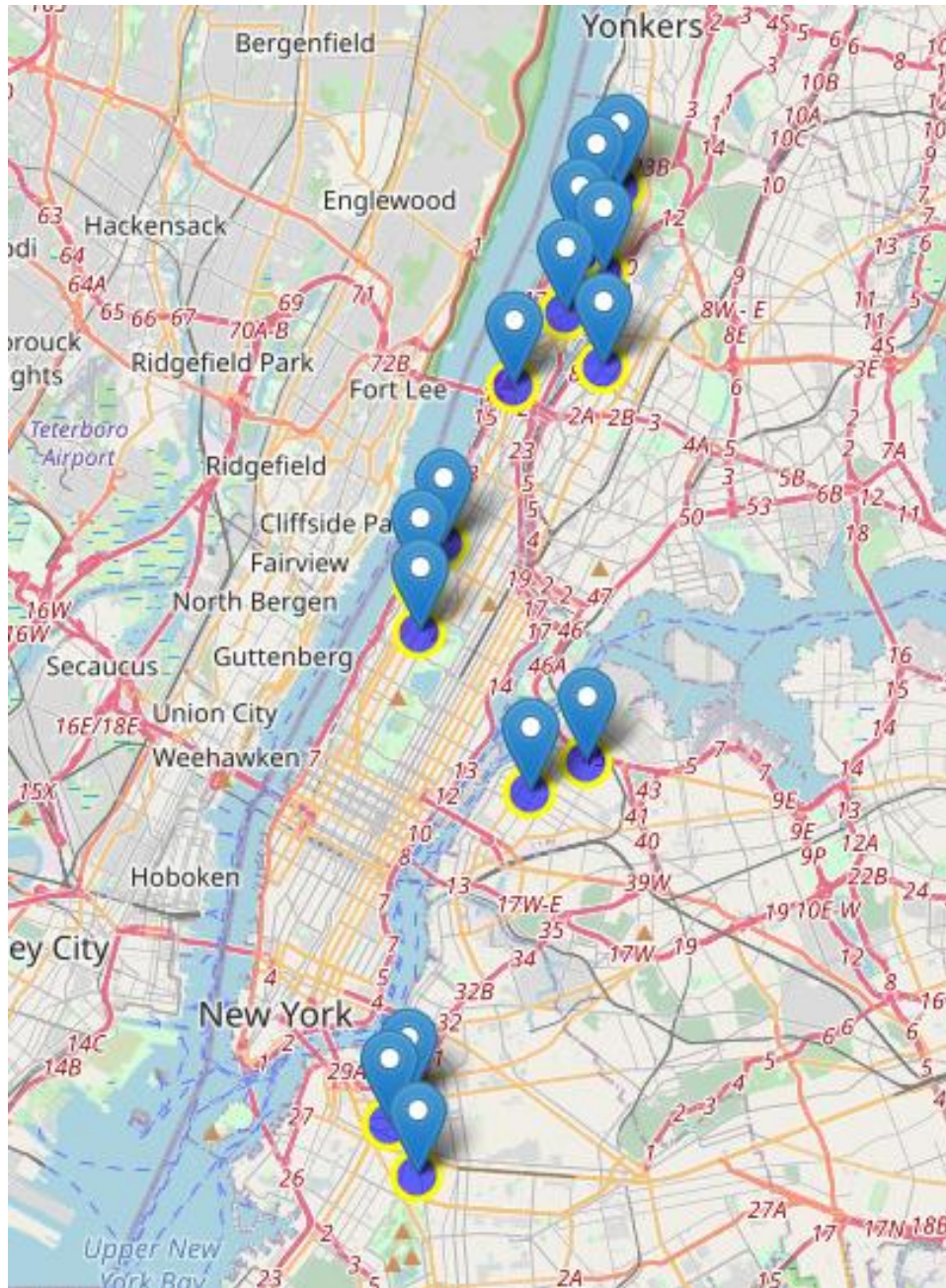
1	Brooklyn	Clinton Hill	40.693229	-73.967843	8.50
2	Bronx	Fieldston	40.895437	-73.905643	8.50
3	Brooklyn	Fort Greene	40.688527	-73.972906	8.90
4	Manhattan	Inwood	40.867684	-73.921210	8.55
5	Manhattan	Manhattan Valley	40.797307	-73.964286	8.50
6	Manhattan	Manhattanville	40.816934	-73.957385	8.50
7	Manhattan	Marble Hill	40.876551	-73.910660	8.55
8	Manhattan	Morningside Heights	40.808000	-73.963896	8.50
9	Brooklyn	Prospect Heights	40.676822	-73.964859	8.90
10	Queens	Ravenswood	40.761705	-73.931575	8.65
11	Bronx	Riverdale	40.890834	-73.912585	8.50
12	Bronx	Spuyten Duyvil	40.881395	-73.917190	8.50

LOCATION OF PUB HAS RATING OVER 8.5 AND DISPLAY

CONCLUSION

- This project successfully using the foursquare API to find the best pub in NYC using the average rating. Regarding the results, I would recommend if you are looking for the best pub, using the map I create to find each location.

- Although all the dataset may not be representative of all the pubs in NYC, for future work, I would be adding multi-feature to represent the better recommendation.