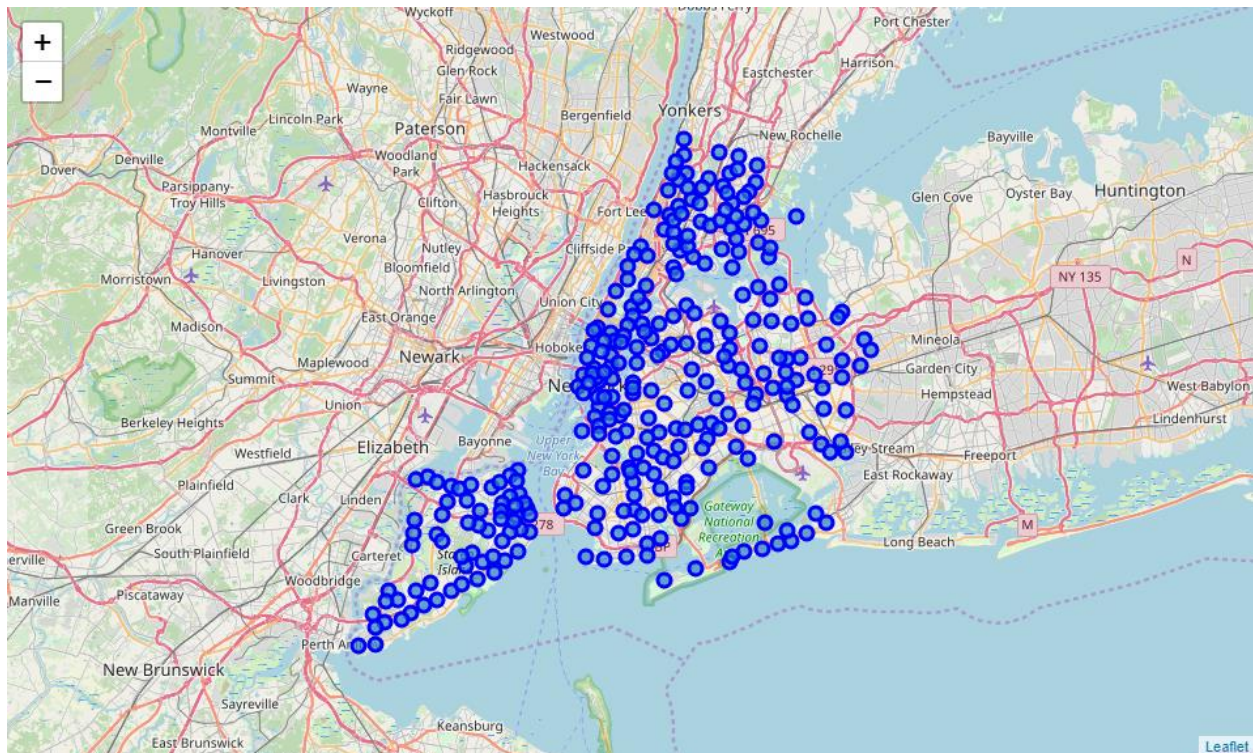


Introduction

This report focuses on New York city. Bars are common in this city and can be considered as money making business. New York is one of the busiest and progressive cities in the world. Bars are always filled with people. this report will target the best places to put up Bars for business.

Business Problem

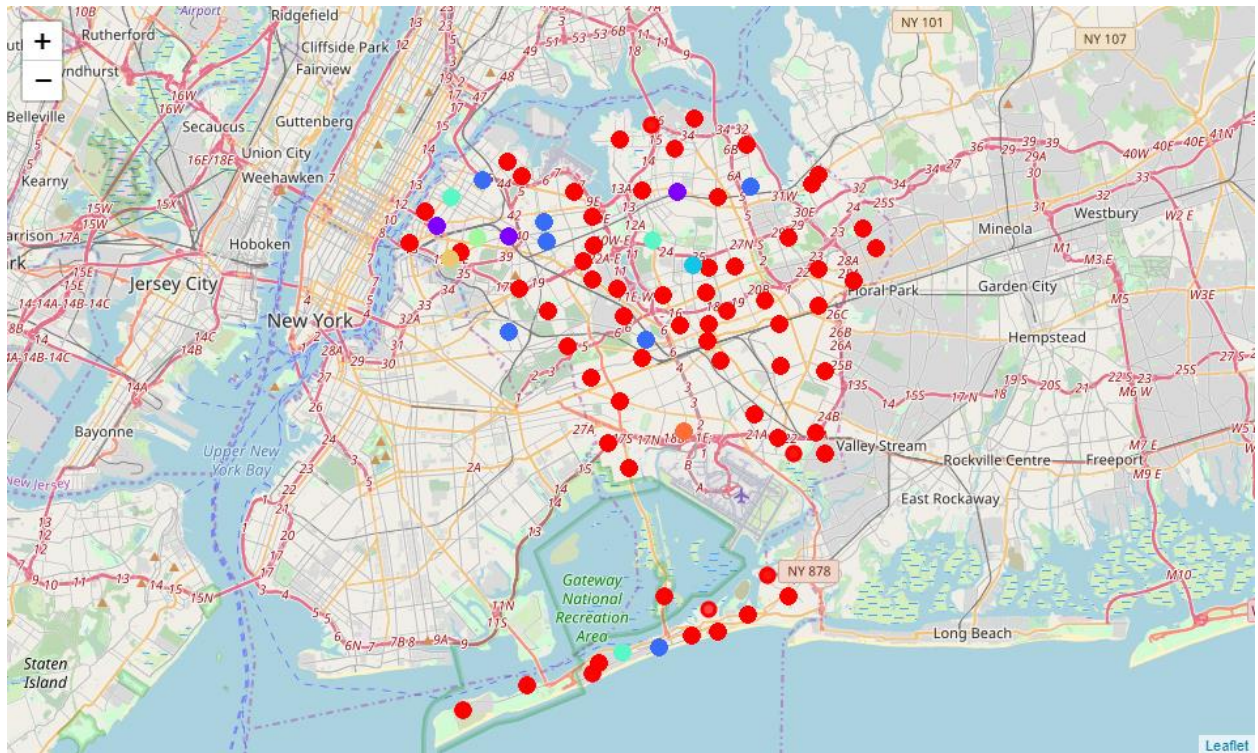
Determine the best up to date places in New York, Queens. This report will give small and big entrepreneurs ideas and suggestions where to start up a Bar.



Data

The following data will be use int his report:

1. New York neighborhoods dataset.
2. Neighborhood coordinates in Queens, New York.
3. Foursquare API for data related to Queens, New York.

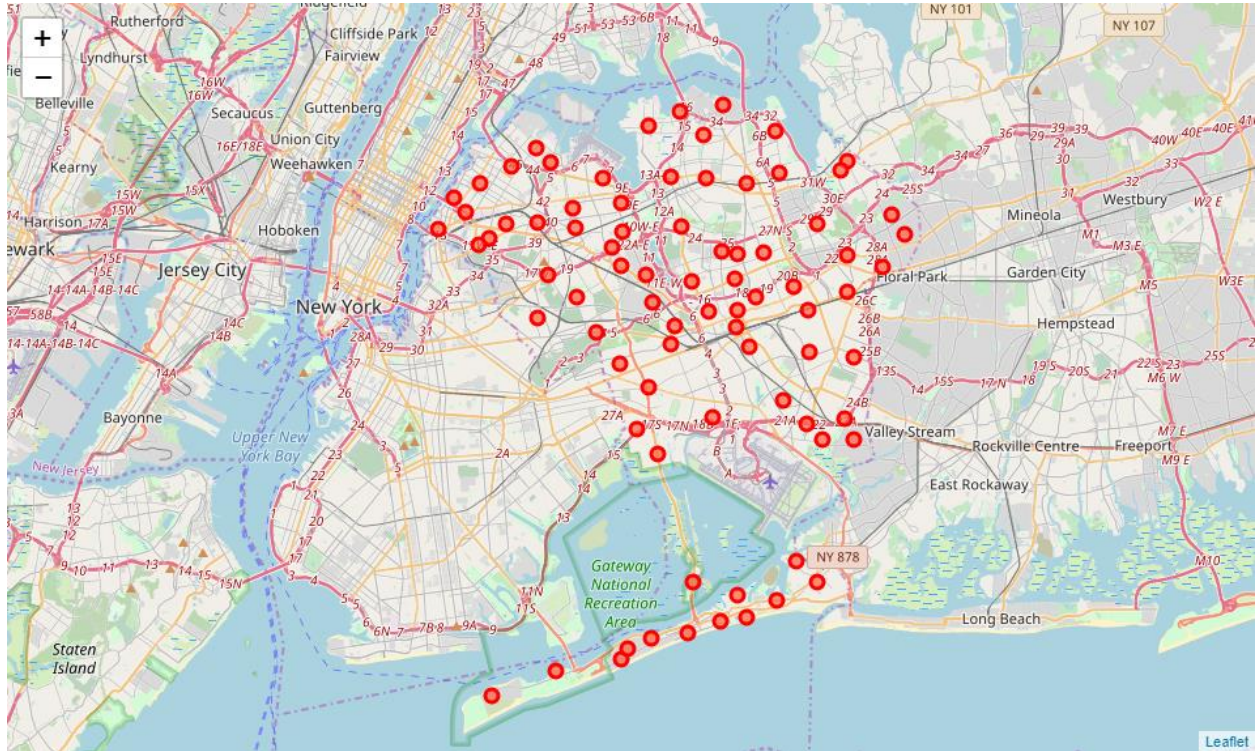


Methodology

Focusing on Queens, New York. Once the data stated in the data sections has been collected, create the necessary data frames to use for analysis as well as the required libraries to apply different analysis in Python. Most of the analysis was focused on location data, such as the neighborhoods, boroughs, and their corresponding coordinates. Because the aim is to identify the best places to startup a bar business, the location data and the Foursquare API are very useful. Clustering, K-Means, are very helpful in this analysis. Integrating Foursquare API makes the results even more understandable.

Data Process and Model

K-Means clustering is used to group the venues. Unsupervised, simple and easy to use. Eight clusters are made to narrow down the areas, and easily identify the best venues.



Results and Observations

The table below shows the number of Bars in each cluster. Cluster 0 is the most promising. It has the greatest number of neighborhoods.

Cluster	No. of Bars
0	0
3	1
6	1
7	1
4	3
5	3
1	6
2	7

Cluster's 1 and 2 are the ones with most numbers of Bars already. Clusters 3, 6, and 7 are also good choice to start up a business.

Cluster 0 Neighborhoods:

Arverne	Douglaston	Hunters Point	Queens Village
Astoria Heights	East Elmhurst	Jamaica Center	Queensbridge
Auburndale	Edgemere	Jamaica Estates	Rego Park
Bay Terrace	Far Rockaway	Jamaica Hills	Richmond Hill
Bayswater	Floral Park	Kew Gardens Hills	Rochdale
Beechhurst	Flushing	Laurelton	Rosedale
Bellaire	Forest Hills	Lefrak City	Roxbury
Belle Harbor	Forest Hills Gardens	Lindenwood	Somerville
Bellerose	Fresh Meadows	Little Neck	South Jamaica
Breezy Point	Glen Oaks	Malba	Springfield Gardens
Briarwood	Glendale	Maspeth	St. Albans
Broad Channel	Hammels	Middle Village	Steinway
Brookville	Hillcrest	Neponsit	Sunnyside
Cambria Heights	Hollis	North Corona	Utopia
College Point	Holliswood	Oakland Gardens	Whitestone
Corona	Howard Beach	Ozone Park	Woodhaven

Conclusion

Refer to the list of neighborhoods in cluster 0, there are the best candidates to answer our business problem. This is an advantage to lessen the risk of competition in the area.