Capstone Project - Battle of the Neighborhoods By Laura Pretorius 25 May 2021



Business Problem

The objective of this Capstone Project is to analyse and select the best locations in the city of NY, to open a cozy Mexican restaurant. Using Data Science we will be able to achieve the answers to the business problem:



Where in the city of NY should the investor open a Mexican restaurant?

Data Required:

To solve the problem, we will need the following data:

- ✓ New York City Data containing neighborhoods and boroughs.
- ✓ Latitude and longitude coordinates of the neighborhoods, this will also assist in plotting the map.
 - ✓ We will also require venue data, related to restaurants.

Sources:

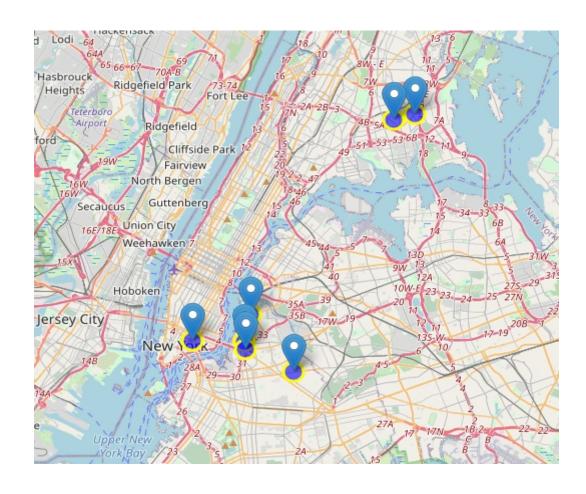
- ✓ New York City data containing the neighborhoods and boroughs, latitudes, and longitudes will be obtained from the data source: https://cocl.us/new_york_dataset
- ✓ All data related to locations and quality restaurants will be obtained via the FourSquare API utilized via the Request library in Python.

Methodology

- Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a data frame.
- FourSquare be used to locate all venues and then filtered by Mexican restaurants. Ratings, tips, and likes by users will be counted and added to the data frame.
- Data will be sorted based on rankings.
- Finally, the data be will be visually assessed using graphing from Python libraries.

Results:

- ❖ Manhattan has the highest number of Mexican Restaurants compared to the other boroughs
 - ❖ Manhattan has the highest average rating compared to the other boroughs



Discussion

◆ Based on the results, Manhattan, Brooklyn and Bronx are the best locations for a Mexican Restaurant



Conclusion

- Manhattan and Brooklyn have the best rated Mexican restaurants on average.
- Staten Island and The Bronx have the least amount of Mexican restaurants per borough.
- However, Manhattan and Brooklyn has the highest number of Mexican Restaurants in all of NY.
- > Despite Manhattan having the least number of neighborhoods in all five boroughs, it has the most number of Mexican restaurants.
- Manhattan and Brooklyn are the best locations for Mexican Restaurant in NYC.
- > To have the best shot of success, I would open a Mexican restaurant in Brooklyn.
- As a final note, all of the above analysis is depended on the accuracy of Four Square data. A more comprehensive analysis and future work would need to incorporate data from other external databases.

End.

