



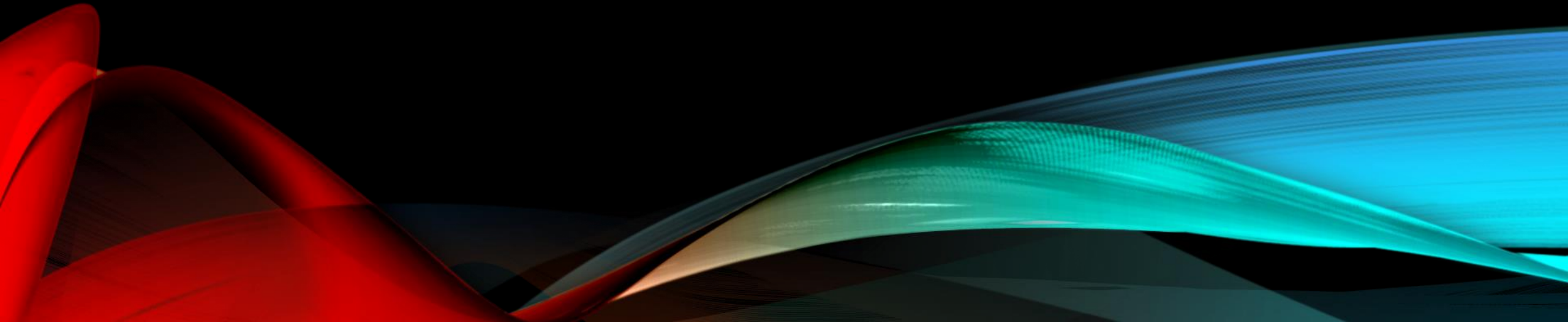
APPLIED DATA SCIENCE CAPSTONE PROJECT

By:-

Nidhi Goyal

THE BATTLE OF NEIGHBORHOOD

ITALIAN RESTAURANT in New York City



PROBLEMS WE ARE WORKING ON THIS PROJECT

Problem -1

What is / are the best location(s) for Italian cuisine in New York City?

Problem-2

In what Neighborhood and/or borough should I open an Italian restaurant to have the best chance of being successful?

Problem-3

Where would I go in New York City to have the best Italian food?

DATA WE ARE USING IN ANALYZING THIS PROBLEM

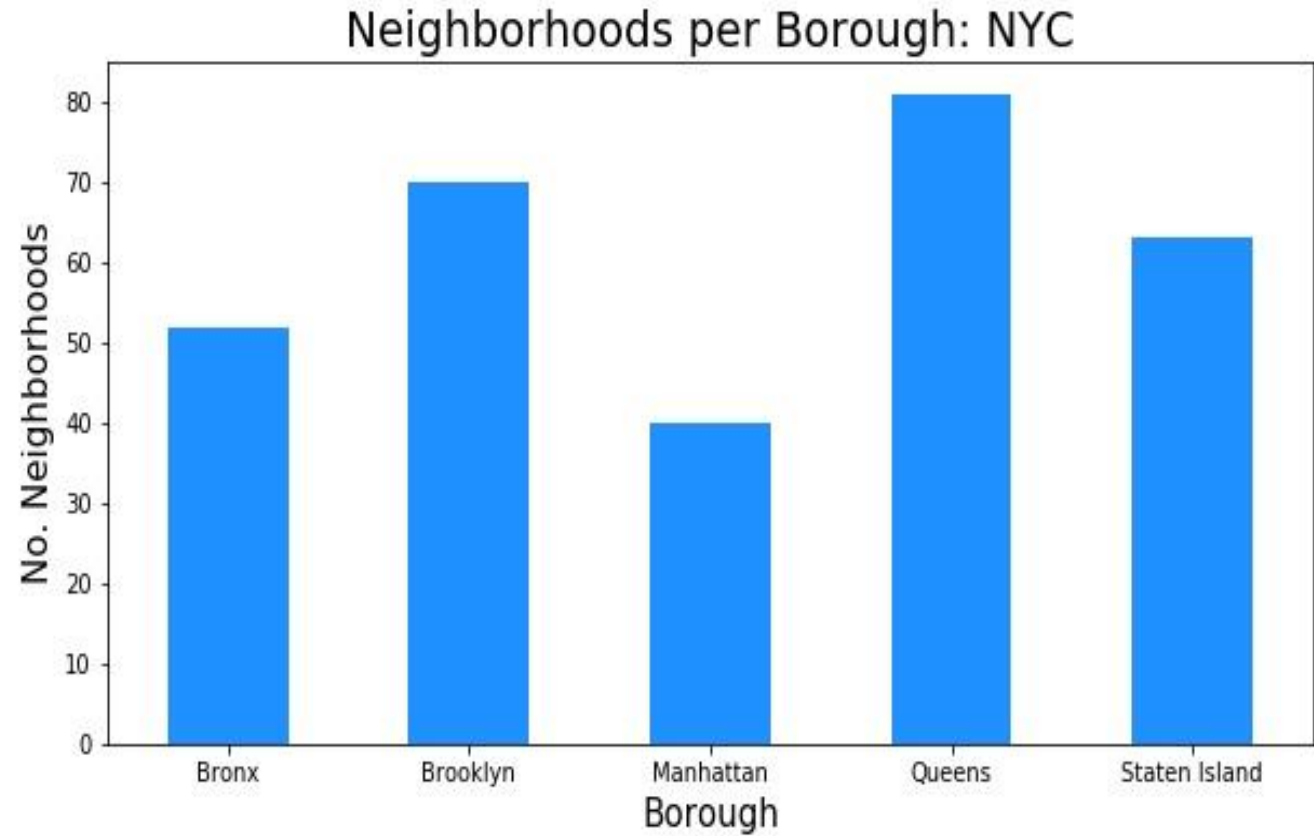
1. New York City data containing the neighborhoods and boroughs, latitudes, and longitudes will be obtained from the data source : https://cocl.us/new_york_dataset
2. New York City data containing neighborhood boundaries will be obtained from the data source: <https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>
3. All data related to locations and quality of Italian restaurants will be obtained via the FourSquare API utilized via the Request library in Python.

METHODOLOGY

- 1.Data will be collected from https://cocl.us/new_york_dataset and cleaned and processed into a dataframe.
- 2.FourSquare be used to locate all venues and then filtered by Italian restaurants. Ratings, tips, and likes by users will be counted and added to the dataframe.
- 3.Data will be sorted based on rankings.
- 4.Geopy is used to get the geological location of each community board.
- 5.BeautifulSoup is used to scrape boroughs and organize a table containing Community Board, Area, Pop.Census, Neighborhoods information of New York City.
- 6.Finally, the data be will be visually assessed using graphing from various Python libraries.

FACTS

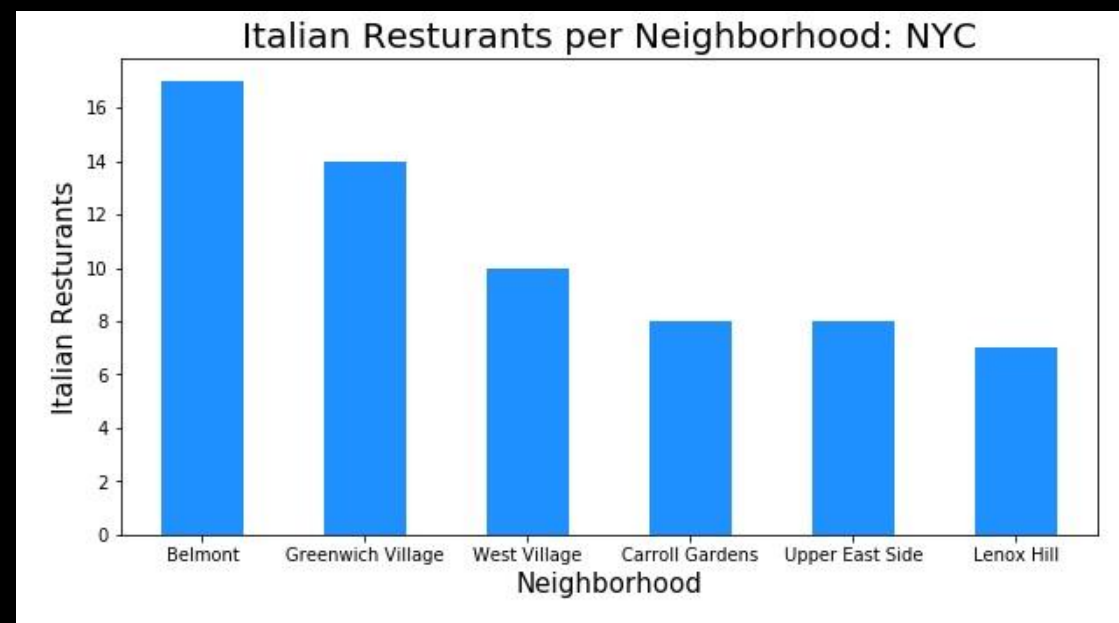
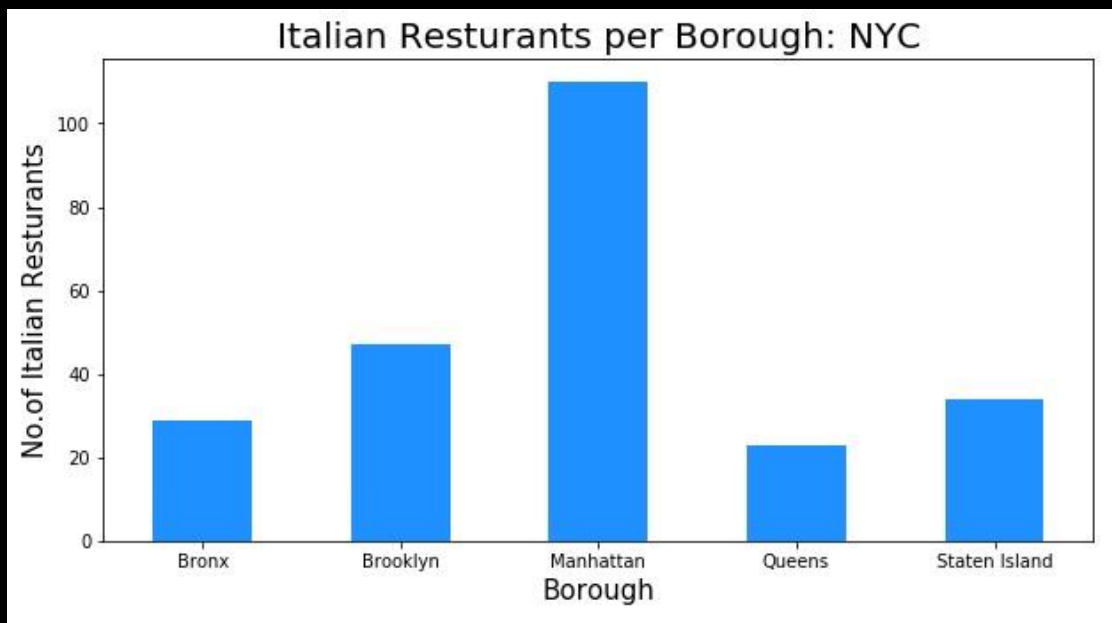
- There are 306 Boroughs in New York city which has Italian restaurants.
- Let's see the number of neighborhoods per Borough in NY city.



FACTS

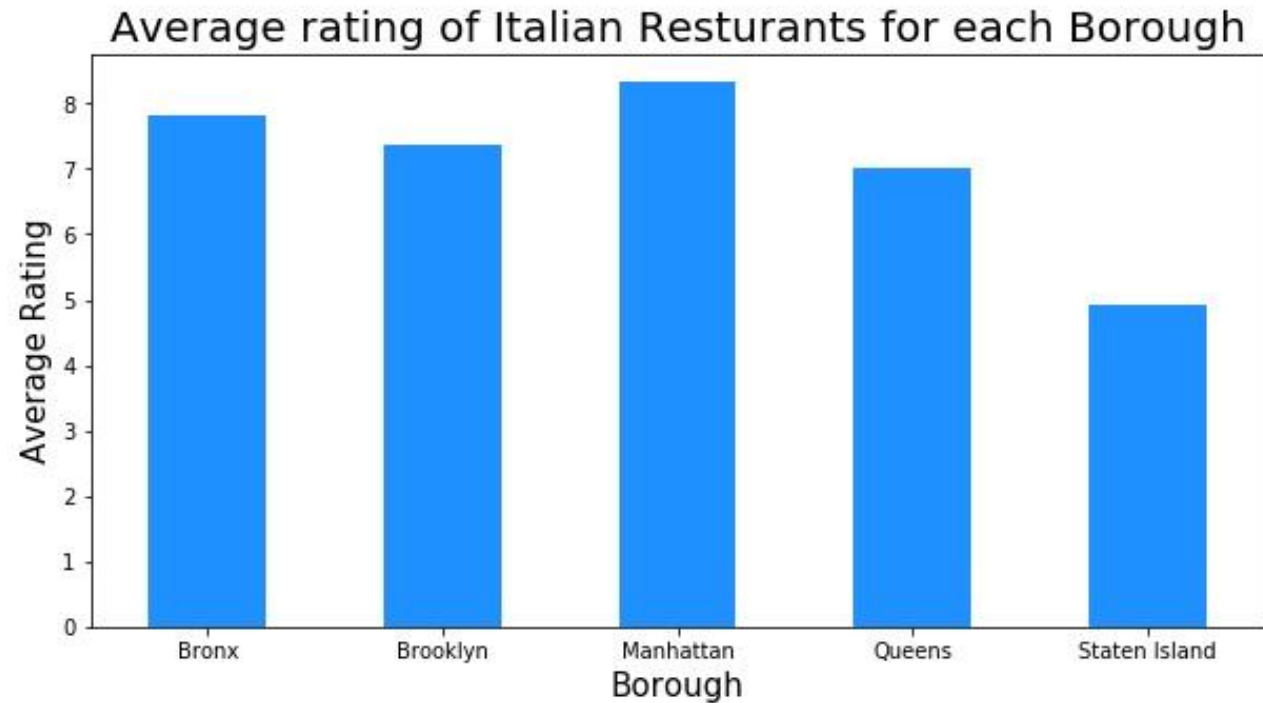
Manhattan had the least number of neighborhoods, but it does have the highest number of Italian restaurants.

The neighborhood of Belmont has the highest number of Italian restaurants in all of NYC and is in the borough of Manhattan



RATINGS

- Manhattan has maximum rating based on reviews & liking
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- Though Bronx & Brooklyn has fair amount of ratings as well

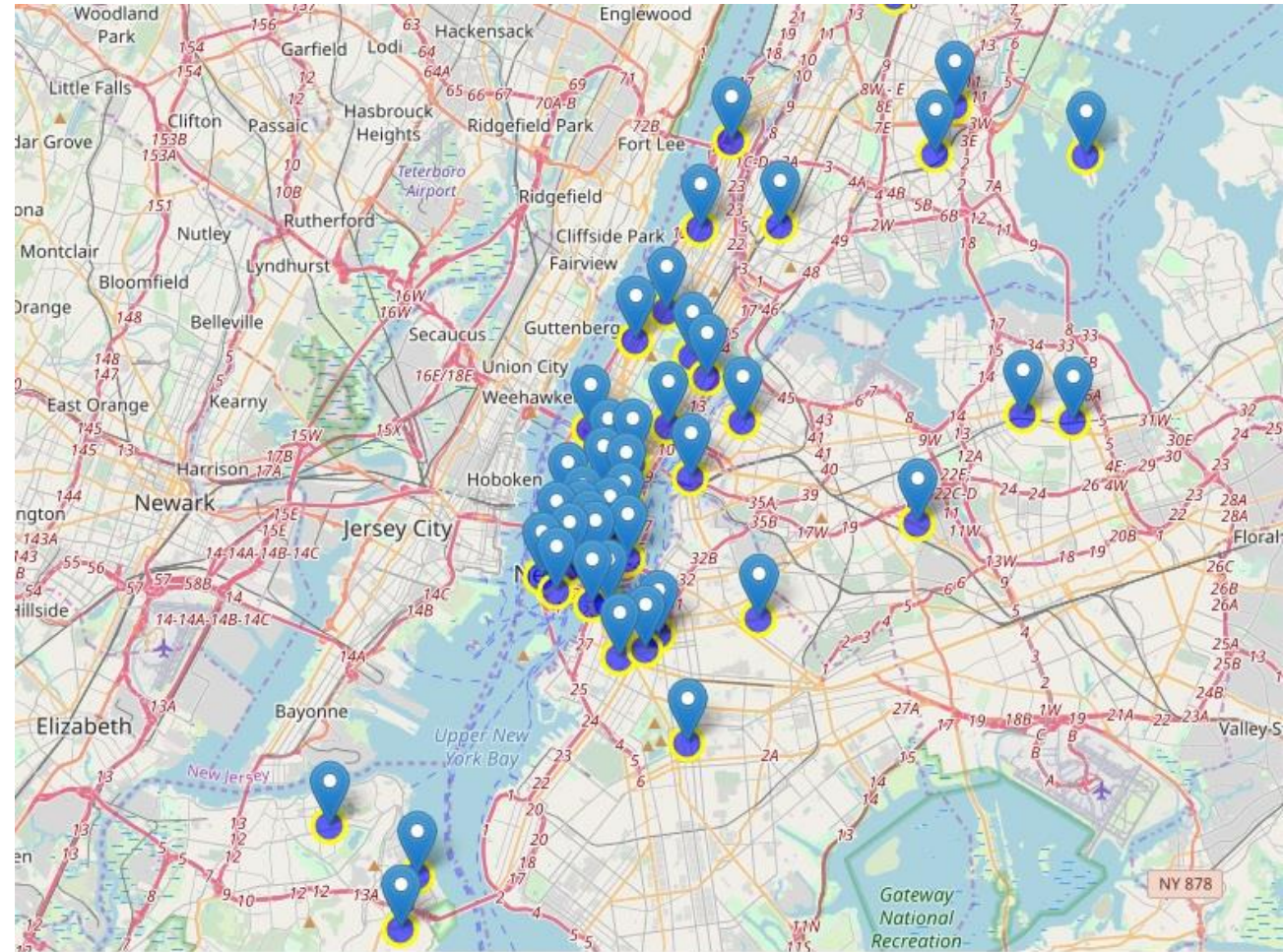


VISUALIZATION

LET'S SHOW THE
PLACES
ACCORDING TO THE
REVIEWS AS
MARKERS ON NYC
MAP ON NEXT SLIDE

VISUALIZATION

BOROUGH	NEIGHBORHOOD	AVERAGE RATING
Manhattan	Tribeca	9.2
Brooklyn	Bushwick	9.2
Brooklyn	Boerum Hill	9.2
Manhattan	Hamilton Heights	9
Brooklyn	Dumbo	8.9
Brooklyn	Fulton Ferry	8.9
Manhattan	Lower East Side	8.9





RESULTS

MANHATTAN

It has the best rated Italian restaurants on average .

It has the least number of neighborhoods in all five boroughs, it has the most Italian restaurants.

QUEENS

the least amount of Italian restaurants per borough.

Queens has multiple neighborhoods with average ratings exceeding 8.0

BELMONT

Belmont of The Bronx is the neighborhood in all of NYC with the most Italian Restaurants.

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THANK YOU

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