COURSERA CAPSTONE

Explore Italian restaurants in New York

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BUSINESS CASE

The objective of this capstone project is to explore and analyze the best locations for Italian restaurants throughout the city of New York.

Food Business News stated that worldwide pasta sales were up for the second year in a row with the United Sates holding the largest market. New York is a major metropolitan area with nearly 10 million people living within city limits. Most of the Italian immigration into the United States occurred during the late 19th and early 20th century with over two million immigrants between 1900 and 1910.

With almost 750,000 Manhattan inhabitants reporting Italian ancestry, the need to find and enjoy Italian cuisine is on the rise. This presentation depicts the neighborhoods and boroughs of New York City that has the most as well as the best Italian restaurants. Additionally, it answers the questions “Where should I open an Italian Restaurant?” and “Where should I stay If I want authentic Italian food?”

DATA

Data Pre-requisites:

- ❑ List of borough & neighborhoods of New York
- ❑ Latitude & Longitude coordinates of the neighborhoods
- ❑ Venue data specific to restaurants

Data Sources

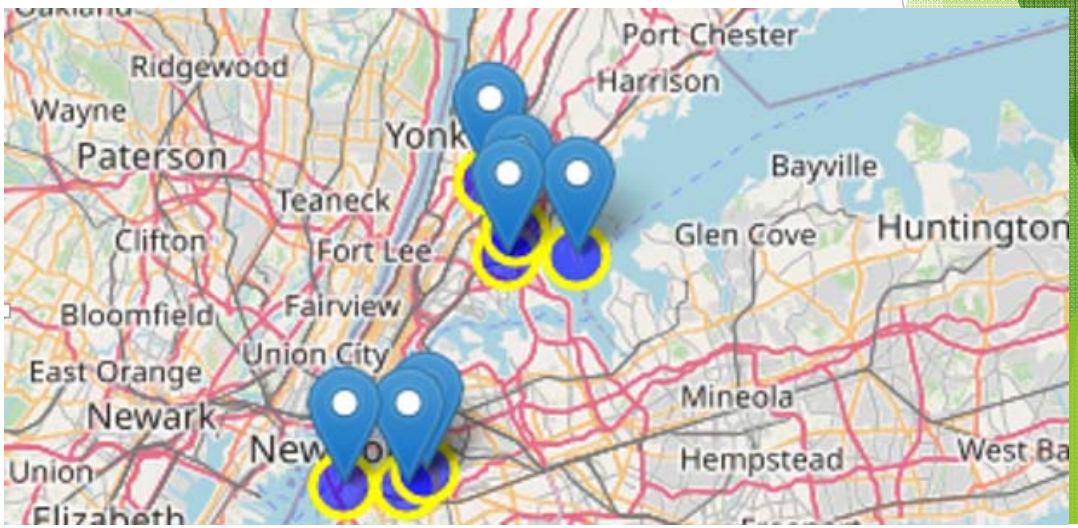
- ❑ New York dataset: https://cocl.us/new_york_dataset
- ❑ New York City data with neighborhood boundaries: https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm
- ❑ Geocoder package for latitude & longitude co-ordinates
- ❑ Foursquare API for venue data

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 Italian restaurants. Ratings, tips, and likes by users will be counted and added to the data frame
- Data will be sorted based on different metrics
- Assess the data visually using Python libraries

RESULTS

- Manhattan has the least number of neighborhoods per borough
- Belmont of The Bronx holds the most Italian Restaurants at 17
- Despite the above data, Manhattan has the most number of Italian restaurants as well as the highest average rating (>8.0)
- Manhattan is clearly the densest borough in regards to Italian restaurants making competition high
- Brooklyn and Queens provide less competition based on Italian restaurant density while maintaining high average ratings.



DISCUSSION

- Based on the results, Manhattan and Queens have the best rated Italian restaurants on average
- I would state that Manhattan and Queens are the best locations for Italian cuisine in NYC. To have the best shot of success, I would open an Italian restaurants in Queens
- Queens has multiple neighborhoods with average ratings exceeding 8.0 of a scale of 1.0 to 10.0 and has the least number of Italian restaurants making competition easier than in other boroughs
- I would go to Gramercy in Manhattan for the best Italian food based on 131 likes

CONCLUSION

Manhattan and Queens have the best rated Italian restaurants on average. Queens and The Bronx have the least amount of Italian restaurants per borough. However, of note, Belmont of The Bronx is the neighborhood in all of NYC with the most Italian Restaurants. Despite Manhattan having the least number of neighborhoods in all five boroughs, it has the most Italian restaurants. Based on this information, I would state that Manhattan and Queens are the best locations for Italian cuisine in NYC. To have the best shot of success, I would open an Italian restaurants in Queens. Queens has multiple neighborhoods with average ratings exceeding 8.0 of a scale of 1.0 to 10.0 and has the least number of Italian restaurants making competition easier than in other boroughs. Finally, I would go to Gramercy in Manhattan for the best Italian food based on 131 likes. As a final note, all of the above analysis is depended on the adequacy and accuracy of Four Square data. A more comprehensive analysis and future work would need to incorporate data from other external databases.

Thank you!