Coursera Capstone Report

Italian Restaurants of New York City

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Introduction:

You are a young entrepreneur with a knack for food. You have always wanted to start a niche Italian restaurant, but do not know where start the business. You have experience living in New York City, so you want to narrow it down to the neighborhoods in that city. NYC is a large city with a large market and opportunity. In this project, I explore the different factors that can affect the decision for where in New York City would be ideal to start a restaurant.

Business Problem:

The objective of this project is to gather and analyze restaurant data from New York City. By using data analysis and machine learning tools, we want to find out where in the city would provide the best opportunity to open an Italian restaurant.

Target Audience:

This project would be relevant to Italian restaurant owners who are looking to expand their franchise and entrepreneurs looking to start an Italian restaurant. With a city as big as New York City, there is a surplus of restaurants with numerous styles of cuisines, so knowing which neighborhood would lead to the most traffic for your restaurant is ideal.

Data:

For this business problem we will need to gather the following data:

- A data frame of the neighborhoods of New York City as well as their respective latitude and longitude coordinates. This data will be useful to find patterns and similarities between the neighborhoods.
- Data of restaurants within the New York City area to give a sense of where the competition is located.

Data Extraction Methods:

To obtain the data for the neighborhoods of New York City, I will use the URL of the dataset provided in Week 3 lab and clean the data frame to get the list of neighborhoods and their respective latitude and longitude coordinates.

To get the restaurant data, I will use the Foursquare API to properly view other Italian restaurants. I will use this by creating a Foursquare account and obtaining a Client ID and Client Secret number to call the relevant data.

For example:

https://foursquare.com/explore?mode=url&ne=40.713435%2C-73.89164&q=italian%20restaurants&sw=40.466801%2C-74.291267