Coursera Capstone

New Japanese Restaurant in New York City

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Introduction

New York is well developed city of the United States of America. New York City's demographics show that it is a large and ethnically diverse metropolis. It is the largest city in the United States with a long history of international immigration. New York City is home to about 8.3 million people (2019), accounting for over 40% of the population of New York State.

There is a lot of business opportunities, it has no issue in attracting many different players into the market, but also this means that the market is highly competitive, the costs are high. Any new business venture needs to be explored carefully.

Business problem

This Capstone project analyses and selects the appropriate locations in the New York to open Japanese restaurant. The project will provide the best location where the investor should open a new Japanese Restaurant.

Target audience

The project is useful for developers and investors who are looking to new possibilities for Japanese restaurant in New York. As New York City is multinational city, it is a great place for such kind of restaurant.

Data

To explore the described business problem, the following data are be needed:

1. Data about New York City, including the neighbourhoods and boroughs.
2. Coordinates (latitude and longitude) of these neighbourhoods. This allows to visualize the map and get the venue data.
3. Venue data, specially related to restaurants.

Data about New York City with the neighbourhoods and boroughs are obtained from the open data source https://cocl.us/new_york_dataset. Afterwards the geographical coordinates of the neighbourhoods are added using Python Geocoder package. The venue data are obtained from Foursquare API. Foursquare API provides many categories of the venue data, but in this case the data related to restaurants are used to solve the above defined business problem.

In this project the following data science skills are necessary: scrapping data from web, working with API, data cleaning, data wrangling, visualization. In Methodology section exploratory data analysis, if any, inferential statistical tests, if any, machine learning techniques used in this project are discussed and described.