Capstone Project: The Battle of Neighborhoods

Location Analysis and Recommendation

Introduction(Business Problem)

The ideology behind the problem taken into consideration is basically for people moving into a new city so that they can find their best suited area of preference for finding a stay. Based on the requirements of the client, the analysis is performed and a location is found with the maximum avaibility of these requirements. This is to help these new people to settle and get accustomed to the new city.

The problem taken at hand is explained below:

Problem Statement:

A person wants to find a place for his stay in New York City. The person loves Asian food and hence wants to find a location where it is available. Using Foresquare API, the areas of the city are analyzed and explored to find an area with maximum number of Asian Restaurants. Furthermore, the avaibility of Market Places, Health Care Stores, Shopping Malls ,Salons etc are also to taken into consideration while finding the best location. Finally a list of all venues in the selected neighborhood is given and plotted on the map.

Data:

For the above stated problem, the very first requirement is a dataset of all the places in New York City. The data source from which this is obtained is: https://geo.nyu.edu/catalog/nyu_2451_34572. This is a free to download dataset available via the link. The dataset consists of four columns namely the Boroughs ,their respective neighborhoods and the latitudes and longitudes of each neighborhood.

The New York City is divided into five Boroughs. A Borough is a town or a district of administrative unit. Each Borough has its own number of neighborhoods. For e.g. - Bayside is a neighborhood in the Queens Borough.

Now to find Asian Restaurants in the city, Foresquare API is used to find all the venues in the city consisting of Asian Restaurants in a radius of 1000 meters and having a limit of 100.The Borough with highest number of Asian Restaurants is found and then further analysis of the neighborhoods of that Borough is done .