Capstone Project: The Battle of Neighborhoods

Location Analysis and Recommendation

Introduction(Business Problem)

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.

The New York City is divided into five Boroughs. A Borough is a town or a district of dataset consists of four columns namely the Boroughs ,their respective neighborhoods and the latitudes and longitudes of each neighborhood. This sums up all the locations of the city at hand for the analysis.

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.