IBM Advanced Data Science Capstone Final Project

Week 4 Report

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Introduction

Background

The current situation in USA and rather the entire world is in such a way that even if someone says that the whole world is in a standstill, no one would disagree. However, one good thing about this time is that a lot of people have some free time on their hands where they are contemplating what can they do to better themselves. This also includes many people who will probably upskill themselves and would be looking for a better job when the situation around the world settles a little. It also includes quite a few businessmen, and new entrepreneurs who either would like to set up a new company or expand an existing company. Anyone looking to establish a decent sized organization or is thinking of expanding it would most likely contact real estate agents to figure out an ideal location for their new office. Real estate agents even if experienced in the field would still need to back up their claims for best suitable option for their clients with some real data. In this capstone project, the aim is to help such real estate agents to figure out the types of neighbourhoods and then recommend them neighbourhoods best suited for their client's needs.

Business Problem

The main business problem is to help real estate agents suggest their client's ideal or close to ideal locations/places in accordance to their requirements. Some of the questions which cab be solved after going through the analysis are "suggest a good place to start my new office", "suggest me a place to move in near my office", etc.

Target Audience

The main audience for the analysis are the real estate agents in and around New York City, NY who cater to many clients. This analysis would help them understand behaviour of neighbourhoods in and around NYC with data to back them up which would significantly increase the trust their clients will have on them.

This analysis can also be used by people who are looking to shift their location. It would give them an idea of which neighbourhoods to target to look for a house.

Data

The data needed for this analysis would be information of neighbourhoods in New York City, NY with information of their borough and latitude and longitude. We would also be needing information of venues in the neighbourhood and which type of venues they are.

There are mainly two data required as stated above, one is data containing borough, neighbourhood, latitude, and longitude which is taken from json file available here and the information regarding venues will be extracted using Foursquare API while passing required inputs into API.