IBM Data Science Capstone Project

Asian Cuisine Restaurant

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Introduction

A businessman, John, living in Toronto, Canada often travel to Asia- Pacific Region to conduct his business. John is in his 60s now and he plans to retire soon, he is always keen on the idea of opening his own restaurant in Toronto, specifically Asian cuisine as that is what he have been eating during his business trip. Now that he had saved more than enough money, he wants to bring his idea to reality by approaching a Data Scientist to help him decide on the location of his restaurant and the potential of different Asian cuisines. John also planned to hire a chef from one of his many contacts that he had gather throughout his years of traveling to move to Toronto.

Problem

As a Data Scientist, your objective is to help John to realize the potential of his restaurant's location and the type of Asian cuisine that would help his restaurant business prosper.

Methodology/Data

The data that you will use here are:

- Toronto, Canada M postal code
- Latitudes and longitudes of Toronto's neighbourhood
- Data of nearby competitors (restaurants)

To approach this problem in a scientific way, you will first need to have plan on the methodology that you will be using.

Firstly, you will need to scrap data from https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M as that will be the area to focus on.

Secondly, latitudes and longitudes of Toronto's neighbourhood will be obtained via Geocoder package that is available.

Next, data of nearby competitors, food restaurants, will be obtained via Foursquare API and analysed carefully to determine the potential of the different types of cuisine.

Lastly, a clustering method of your choice to find a suitable outcome and map it out with Folium package to be presented to John for his final decision.

You are also allowed to use any other data which you think its necessary to improve the outcome.

Utilize the libraries available on python like numPy, Pandas, Folium and many more to solve the problem.