IBM Applied Data Science Capstone Project

Introduction

This project will attempt to explore the hypothetical business problem of opening up a Chinese restaurant in Toronto. Opening up a restaurant that provides Chinese cuisine in Toronto can prove to be a lucrative idea considering that South Asians and Chinese immigrants are the leading minority categories in Toronto; both of which enjoy/are familiar with Chinese cuisines. Not only will opening up such a restaurant attract that demographic, it will also give them a sense of belonging when living in a foreign country. The **business problem** to be solved here is then where exactly should an entrepreneur open up the Chinese restaurant in Toronto, in the sense that a strategic location would bring about competitive advantage amongst the other restaurants. By that logic, it is to this research's best interest that the clustering method can be used in order to discover the ideal location in Toronto with less competitors – so that the entrepreneur can obtain a large part of the area's citizens as his/her uncontested market. Ergo, the **target audience** of this deliverable is the entrepreneurs who want to open up a Chinese restaurant in Toronto with a strategic location.

Data

In order to solve such a business problem, the following data will be required:

- List of neighbourhoods in Toronto
    - Source: https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M
    - Collection method: Web scraping using BeautifulSoup package
- Values of latitude and longitude of the associated neighbourhoods
    - Source: GeoSpace data of Toronto
    - Collection method: Using GeoCoder package in python or CSV file containing the GeoSpace data
- Location data regarding venues that are present within those neighbourhoods
    - Source: Foursquare database
    - Collection method: Using the latitude and longitude values mentioned above, we can communicate and request information from Foursquare using the Foursquare API