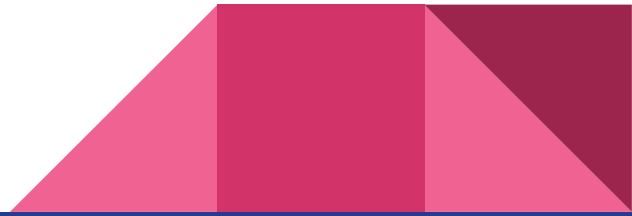
Business Expansion in Toronto

Business Problem:

A Chinese restaurant brand based in Manhattan, New York is looking to expand their business in Toronto, Canada.

The client wants to understand the neighbourhoods in Toronto so it can conclude where their next restaurant in Toronto could be The client is also interested whether the neighbourhoods in New York and Toronto are similar or dissimilar so it can target the neighbourhood accordingly ultimately leading to profit.



Data acquisition and cleaning

1)New York:

• The data is in json format. https://cf-courses-data.s3.us.cloud-object storage.appdomain.cloud/IBMDeveloperSkillsNetwork DS0701EN SkillsNetwork/labs/newyork_data.json

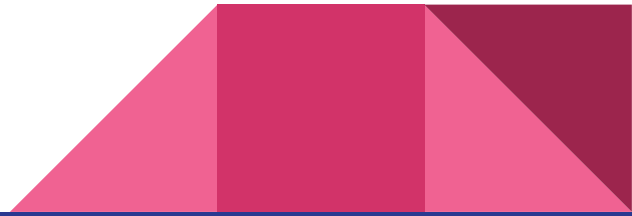
2)Toronto:

• For the Toronto neighbourhood data, the below Wikipedia page exists that has all the information we need to explore and cluster the neighbourhoods in Toronto. We will be required to scrape the Wikipedia page and wrangle the data, clean it, and then read it into a pandas dataframe so that it is in a structured format like the New York dataset. The BeautifulSoup package will help in web scraping.

https://en.wikipedia.org/w/index.php?title=List_of_postal_codes_of_ Canada:_M&direction=prev&oldid=926287641 Foursquare API

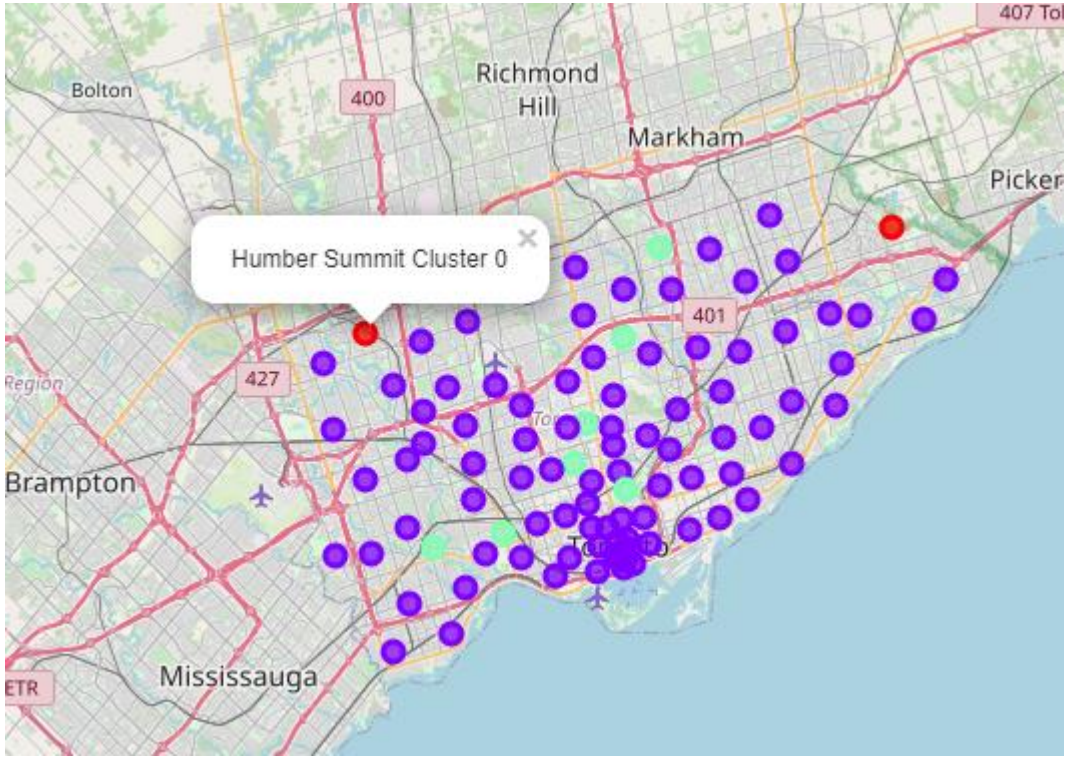
Methodology:

1) ETL
2) Use Foursquare API to explore neighbourhoods
3) Explore and cluster Manhattan Neighbourhoods using K - Means
4) Explore and cluster Toronto neighbourhoods
5) Visualisations



Observations:

Neighbourhoods in Cluster 0 and 2 does not have any Chinese restaurants. We could target these neighbourhoods. These neighbourhoods are mostly central and away from coastal area of Toronto. Opening a restaurant in these neighbourhoods could prove an advantage and avoid competition from existing restaurants. The Chinese restaurants in Manhattan city are over 43 whereas in Toronto there overall only 7 mostly in the heart of the city. This opens an opportunity for Toronto as a new upcoming market for opening up Chinese restaurants. Cluster 0 and 1: Zero Chinese Restaurants Cluster 1: Most Chinese Restaurants.


Bolton
400
Richmond Hill
Markham
Humber Summit Cluster 0
401
427
Brampton
Mississauga
ETR