

Introduction/Business Problem

Toronto is the provincial capital of Ontario and the most populous city in Canada. Toronto is an international center of business, finance, arts, and culture, and is recognized as one of the most multicultural and cosmopolitan cities in the world. Its economy is highly diversified with strengths in technology, design, financial services, life sciences, education, arts, fashion, business services, environmental innovation, food services, and tourism.

The strength and vitality of the many neighbourhoods that make up Toronto, Ontario, Canada has earned the city its unofficial nickname of "the city of neighbourhoods. We've heard Toronto described as "New York City run by the Swiss". Both cities are very diverse and are the financial capitals of their respective countries.

In this project, we will use results in previous assignments i.e. we explored New York City and the city of Toronto and segmented and clustered their neighborhoods, to compare the similarity between the city of Toronto and New York City.

Moreover, the project will try to answer the following questions:

- The first question will help someone who would like to open a restaurant to find a location for his restaurant in the city.
- The second question is if a contractor is trying to start their own business, where would you recommend that they setup their office?

Data Sources

The data sources to be used in this study includes the followings:

1. The city of Toronto data.

- Data source: https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

2. Geospace data for each neighborhood in Toronto City.

- Data source: https://cocl.us/Geospatial_data.csv file

3. Venue data.

- Data source: <https://developer.foursquare.com/docs>

How data will be used to solve the problem

1. A list of neighborhoods in the city of Toronto from the Wikipedia page, will be imported to the Notebook to generate a dataframe with 3 columns i.e. Postal code, Borough and Neighbourhood.

2. The coordination data set in term of latitude and longitude will be imported from Geospatial_data.csv file. Two more columns will be added to the existing dataframe based on the postal code i.e. Latitude and Longitude. Now we will be able to locate the Neighbourhood with the corresponding Latitude and Longitude data.

3. The map of neighbourhoods in the city of Toronto will be generated using Folium package.

4. Foursquare API will be applied to explore the neighborhoods. Foursquare will return the venue data in JSON format and we will extract the venue name, venue category, venue latitude and longitude. From this, we can start analyze each neighborhood.