
Description of Data and Solution

We would be needing the Neighborhood information of 2 Cities here

- 1) New York
- 2) Toronto

New York neighborhood data with latitude and longitudes are already available in the link - https://cocl.us/new_york_dataset

This data is json format, this must be converted into Tabular format.

Toronto dataset is not readily available, but we can find the neighborhood information with zip codes Wikipedia page

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

This has to be web scraped and cleansed before the same can be used.

- Drop the postcodes with Borough's 'Not Assigned'
- Group the Neighborhood with more than one post code
- Replace Neighborhood names which are 'Not Assigned' with respective Borough names.

Latitude and longitude data for Toronto neighborhoods can be found in this location http://cocl.us/Geospatial_data

Once the above 2 data sets are gathered, we would require Venue details which are selling coffee around 500 meters of the above-mentioned neighborhoods. This data can be acquired from foursquare using explore api with relevant filters.

Once the data is cleansed and Venue details are captured, the same can be split into 2 data frames

- 1) coffee companies selling coffee
- 2) Other Outlets selling coffee

The same needs to be visualized using Folium on a New York map to see the distribution of Non-Coffee shops, and the same can be used to estimate the possibility of opening a coffee shop in the vicinity.

We can also do the same analysis for Toronto, which later can be used to cluster with New York to see which Coffee Drinking Neighborhood in Toronto is similar to a neighborhood in New York.