Final Project Presentation

A case study to find the best place to build a restaurante to a client

Introduction

- Toronto is the provintial city of Ontario and the most populous city in Canada;

- There are many places to visit in Toronto;

- This city is na international centre for business and finance;

Objective

- Search for the perfect place for the client (Marco) to build his first restaurant;

- This place needs to be similar to Cloverdale – Neighborhood where Marcos live;

Dataset

- The dataset comes from two sources:
- ❑Wikipedia
- ❑Foursquare

Methodology

- Jupyter notebook was used as the enviroment for progamation;

- Many packages from python for generate map (folium), dataframes (pandas), and others;

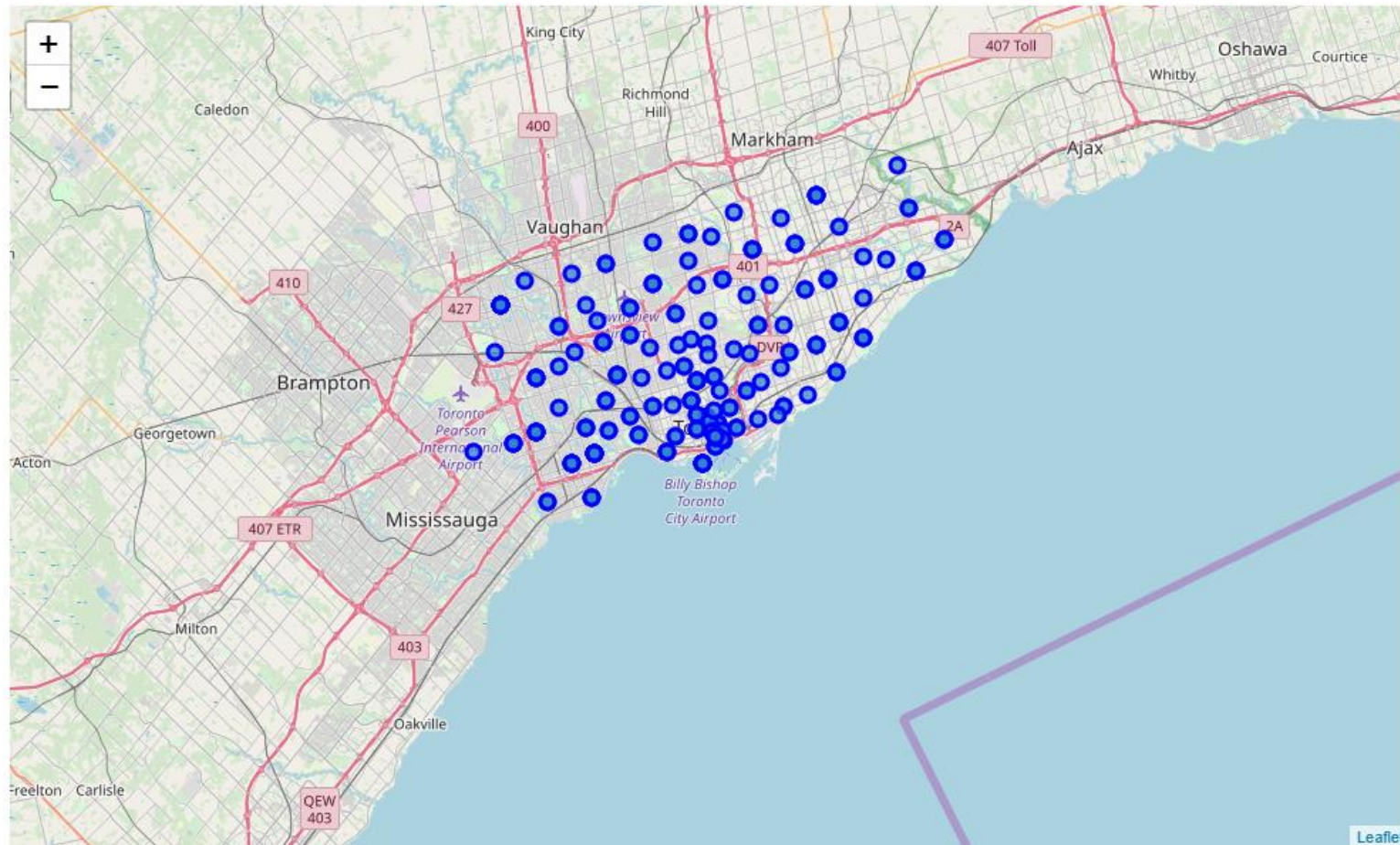- Cluster analysis using the package Kmeans from sklearn.cluster;

Results and Discussion

Data purchased from Wikipedia – Table 1

Postal Code	Borough	Neighborhood	Latitude	Longitude
0	M3A	North York	Parkwoods	43.753259	-79.329656
1	M4A	North York	Victoria Village	43.725882	-79.315572
2	M5A	Downtown Toronto	Harbourfront	43.654260	-79.360636
3	M5A	Downtown Toronto	Regent Park	43.654260	-79.360636
4	M6A	North York	Lawrence Heights	43.718518	-79.464763

Results and Discussion

Map of Toronto with its Neighborhoods – Table 2

Results and Discussion

Each neighborhood and its 10 most common venues– Table 3

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Adelaide	Coffee Shop	Café	Bar	American Restaurant	Thai Restaurant	Steakhouse	Hotel	Cosmetics Shop	Burger Joint	Bakery
1	Agincourt	Chinese Restaurant	Lounge	Sandwich Place	Breakfast Spot	Women's Store	Discount Store	Dog Run	Doner Restaurant	Donut Shop	Drugstore
2	Agincourt North	Park	Asian Restaurant	Playground	Women's Store	Donut Shop	Dim Sum Restaurant	Diner	Discount Store	Dog Run	Doner Restaurant
3	Albion Gardens	Grocery Store	Liquor Store	Sandwich Place	Fried Chicken Joint	Video Store	Coffee Shop	Pharmacy	Pizza Place	Beer Store	Fast Food Restaurant
4	Alderwood	Pizza Place	Coffee Shop	Gym	Skating Rink	Pharmacy	Pub	Dance Studio	Pool	Sandwich Place	Women's Store

Results, Discussion and Conclusion

The neighborhoods that belongs to class 2 – Table 4

	Borough	Neighborhood	Longitude	Cluster Labels
16	Etobicoke	Cloverdale	-79.554724	2
17	Etobicoke	Islington	-79.554724	2
18	Etobicoke	Martin Grove	-79.554724	2
19	Etobicoke	Princess Gardens	-79.554724	2
20	Etobicoke	West Deane Park	-79.554724	2

We see in Table 4 that all the neighborhoods that belong to class 2 are from the borough Etobicoke. It's an Expected result, because all these neighborhoods belong to the same borough. This is problematic for Marcos, because it restricts his choice.