THE BATTLE

OF

NEIGHBOURHOODS

Introduction

- This project is intended to help in exploring facilities around the neighborhood, to make efficient decision on selecting a particular region out from the neighborhood of Scarborough, Toronto.
- This project is for people looking for better neighborhoods. For ease of access to amenities such as Cafe, School, Supermarket, medical shops, grocery shop, theatre, hospital, ethnics, etc.
- This project aims to create an analysis of features for a people migrating to Scarborough to search a best neighborhood as a comparative analysis between neighborhoods.

Data Section

- Scarborough is a region for new immigrants in Canada to live. Scarborough is one of the most diverse and multicultural areas in the Greater Toronto Area, being home to various religious groups and places of worship.

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

Methodology

For this project we make use of the following:
1. Clustering Approach: To compare the similarities of two cities, exploring neighborhood
2. Work Flow:
3. Foursquare API: location API, location search and sharing
4. Libraries Which are Used to Developed the Project:
   - Pandas
   - Folium
   - Scikit Learn
   - JSON
   - XML
   - Matplotlib

Result
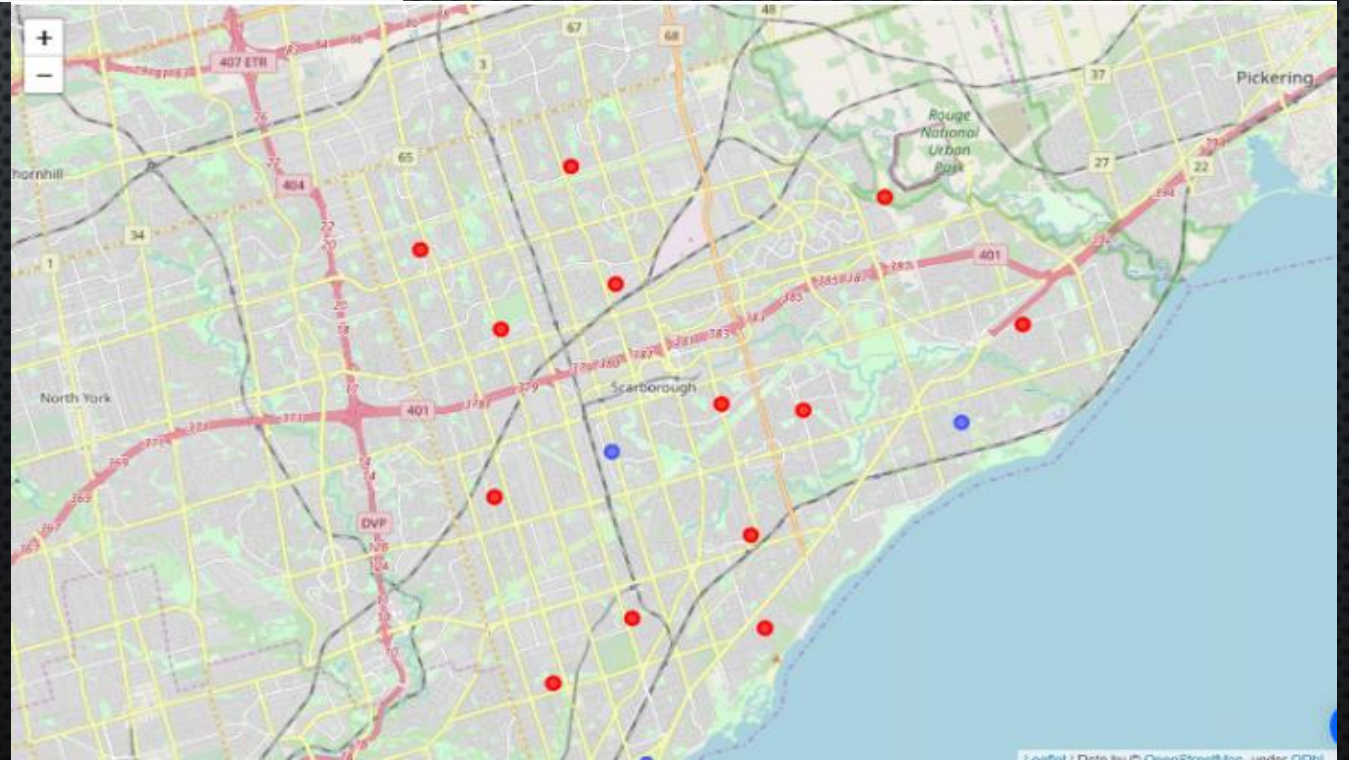
Cluster result
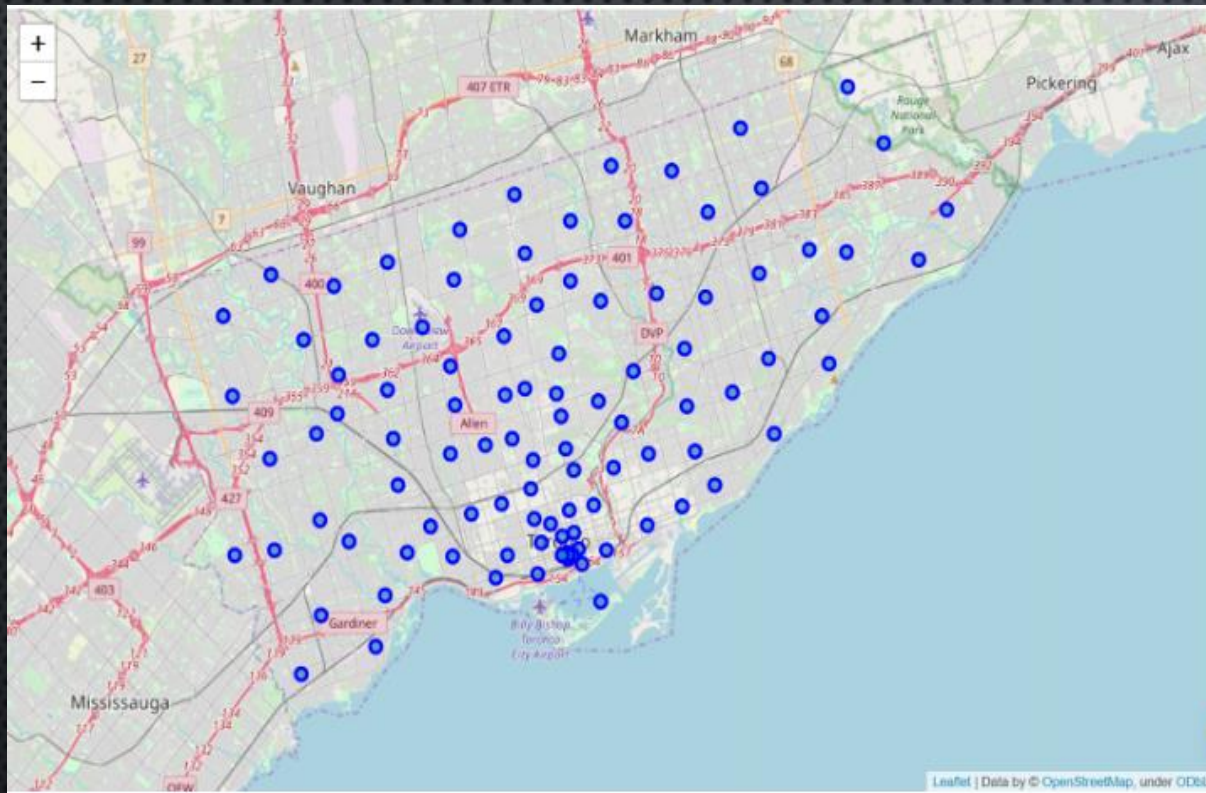
Map of Scarborough

Result

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
Adelaide, King, Richmond	Coffee Shop	Café	Hotel	Gastropub	Burger Joint	Asian Restaurant	Bar	Restaurant	American Restaurant
Agincourt	Chinese Restaurant	Shopping Mall	Pizza Place	Supermarket	Sushi Restaurant	Breakfast Spot	Print Shop	Mediterranean Restaurant	Coffee Shop
Agincourt North, L'Amoreaux East, Milliken, St...	Pharmacy	Sandwich Place	Sushi Restaurant	Doner Restaurant	Donut Shop	Dumpling Restaurant	Eastern European Restaurant	Electronics Store	Elementary School
Albion Gardens, Beaumond Heights, Humbergate, ...	Grocery Store	Park	Sandwich Place	Discount Store	Japanese Restaurant	Fried Chicken Joint	Beer Store	Hardware Store	Pizza Place

Similar Venues in Neighborhoods

Map of cluster of Scarborough

Discussion

- Figure 1shows the map of Scarborough, Toronto and its neighborhood.

- Figure 2 shows the result obtained after using the cluster approach which listed the venues in Scarborough, Toronto. The venues listed include coffee shop, restaurant, electronic stores, yoga studio, bank, bakery etc.

- Figure 3 depicts the similar or common venues in the neighborhood in Scarborough, Toronto.

- Figure 4 depicts clusters of similar venues of facilities or amenities present in Scarborough, Toronto.

- Figure 5 shows the chart data of average house pricing of each neighborhood in Scarborough.

- Figure 6 shows the schools rating chart

Conclusion

In this Capstone project, using k-means cluster algorithm the neighborhood has been separated into 10(Ten) different clusters from dataset, which have very-similar neighborhoods around them. Charts presented in the result sections shows the average house prices and school rating based on each neighborhood.