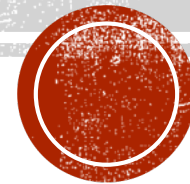


**RECOMMENDATION OF PROMISING HOUSES  
DEVELOPMENT AREA IN TORONTO  
FOR REAL ESTATE DEVELOPERS**



# BUSINESS PROBLEMS

- Toronto is the capital city of the Canadian province of Ontario. With a recorded population of 2,731,571, it is the most populous city in Canada and the fourth most populous city in North America.
- Since Toronto is the largest city in Canada and the center of economic activities, it can not be denied that the need for housing will continue to increase in the future.
- Peoples tend to look for a house as a place to live that is not far from their office/work in the downtown, near from public transportations and also have a comfortable and safe environment for their children



# DATA SOURCES AND PREPARATION

- Postal code [https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada: M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada: M)
- Google Maps Geocoding API
- Foursquare API

## Preparation:

- Scrapping List of postal code of Canada from Wikipedia, we only looking for the name and postal code of the neighbours around Toronto, and apply the postal code to Google Maps Geocoding API for getting their latitude and longitude coordinates.
- Analyzing the people's habits, activities and hobbies on each neighbour by exploring most visited venues on each neighbours using Foursquare API.



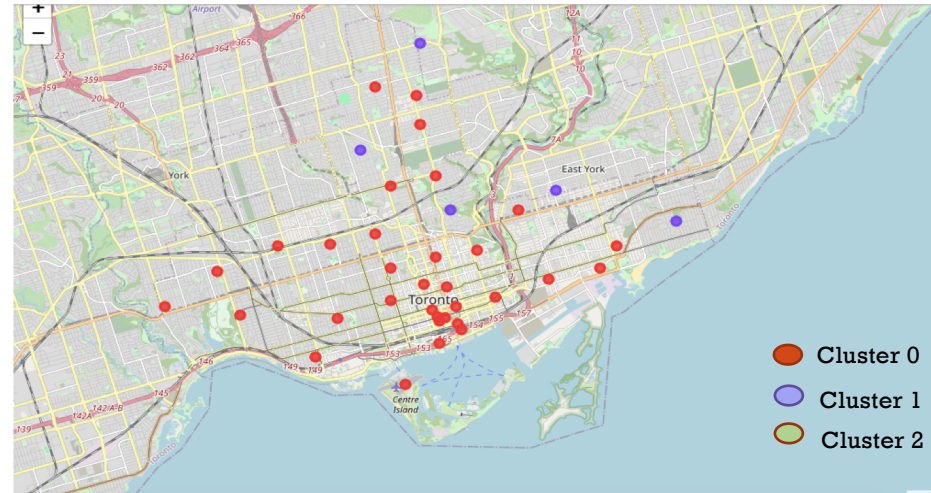
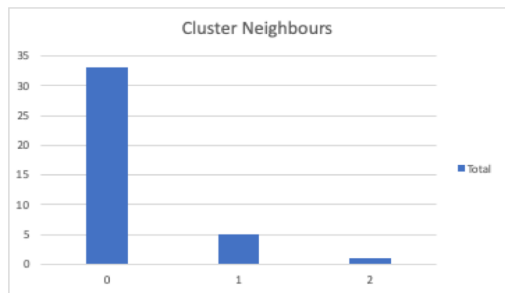
# METHODOLOGY

- Analysing the people's habits, activities and hobbies on each neighbour by exploring most visited venues on each neighbours using Foursquare API.
- Unsupervised learning approach using K-means Clustering to cluster the neighbor based on similarity of their people's habit, activities, and hobbies.



# RESULT

- There are 3 clusters of neighborhood



- Cluster 0 → 33 neighbors. According to most visited venues, it's related to lifestyle interest (coffee-shop, café, store, restaurants, etc )
- Cluster 1 → 5 neighbors. According to most visited venues, it's related to family interest (park, playground, school, public transportation, restaurants, etc )
- Cluster 2 → 1 neighbor



# CONCLUSION

- Cluster 1 is the cluster which most meet our requirements for developing houses area. So, real estate developers can focus on below area for developing new houses:
  - ❖ Rosedale
  - ❖ Forest Hill North & West
  - ❖ Lawrence Park
  - ❖ The Beaches
  - ❖ The Danforth East

