

A decorative graphic on the left side of the slide, consisting of white lines and circles on a blue gradient background, resembling a circuit board or a stylized tree structure.

# BATTLE OF THE NEIGHBORHOODS

TORONTO VS NEW YORK CITY

# OBJECTIVE

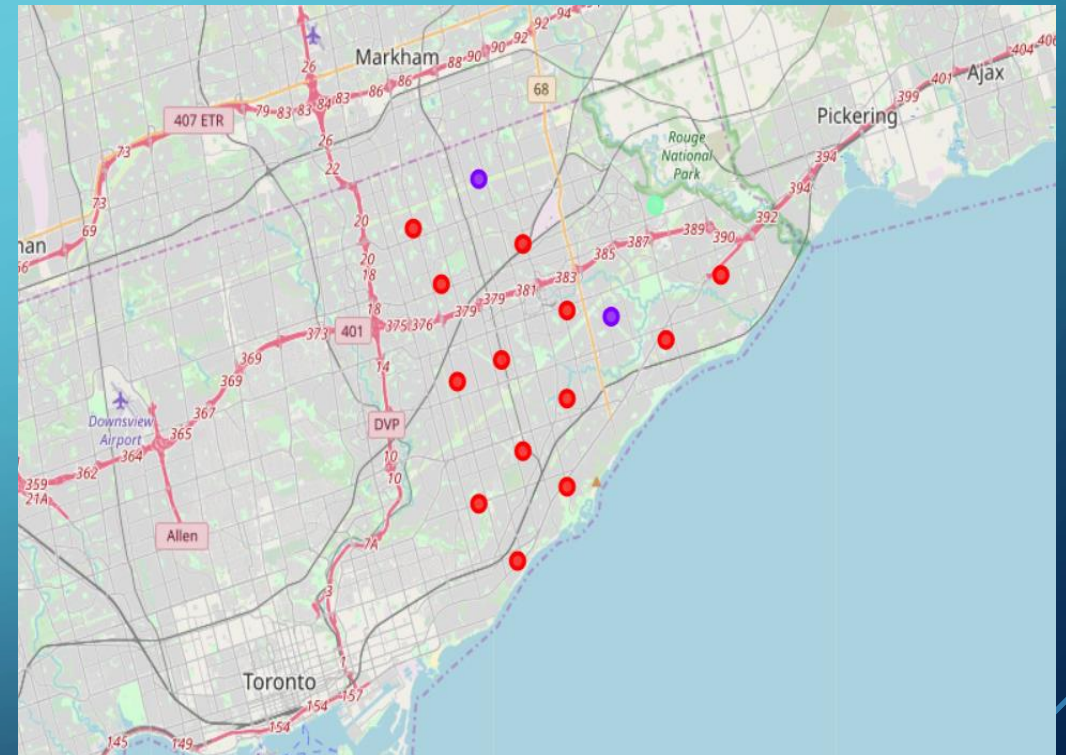
- Compare the similarities and dissimilarities between Bronx, New York City and Scarborough, Toronto, Canada, especially concerning living quality of potential employees
- Determine which neighborhood is a better choice for a new headquarter for XYZ company

# METHODOLOGY

- Collect data for both cities into dataframe containing borough, neighborhood, geographical coordinate( latitude and longitude) information.
- Data cleaning and feature extraction. We extract only boroughs of interest and, via the Foursquare API, search for the needed neighborhood venue information.
- By Folium module, visualize clustering information for further analysis.
- K-means clustering is used to form clusters of different categories of venues and the clusters will be used for further analysis.

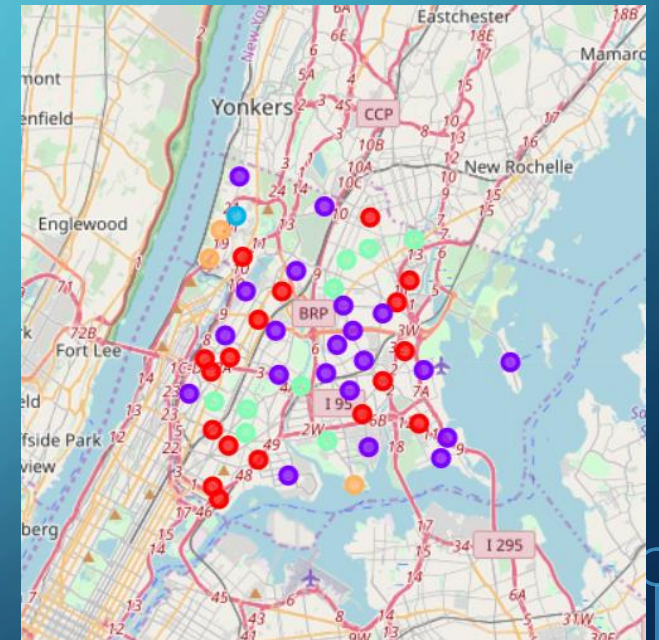
# SCARBOROUGH, TORONTO

- 96 venues with 56 unique categories
- 3 clusters
  - Cluster-1: various restaurants
  - Cluster-2: coffee shop and playground
  - Cluster-3: fast food restaurant
  - Other: skating rink, convenience store, rental car location and so on



# BRONX, NEW YORK CITY

- 1226 venues with 173 unique categories
- 5 clusters:
  - Cluster-1: Latin American restaurant, fast food restaurant, pizza place and pharmacy
  - Cluster-2: pizza place and Italian restaurant
  - Cluster-3: plaza
  - Cluster 4: grocery store and bus station
  - Cluster 5: park
  - Other: bank, gym, supermarket, pub, Chinese/Asian restaurant, Mexican restaurant, farmers/fish markets, donut shop, pub and coffee shops and so on





# CONCLUSION

- Based on the amount and variety of venues, Bronx is a better living choice for office workers and Scarborough is probably a better fit for college students .
- Bronx is a better choice as a location of new headquarter.