



# Battle of the Neighborhoods TORONTO AND NEW YORK CITIES

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# **1.Introduction**

This project will analyze neighborhoods between Toronto, Canada and New York City, New York. A Gad company is looking to move its headquarters to either Toronto or New York City. The company wants insight into the neighborhoods and local businesses in the cities so that its employees may have the optimum living standards and quality of life. This project will explore the similarities and dissimilarities between certain neighborhoods in the two cities, and determine which neighborhoods best fit the culture of the Gad company's employees.

## **2.Data source**

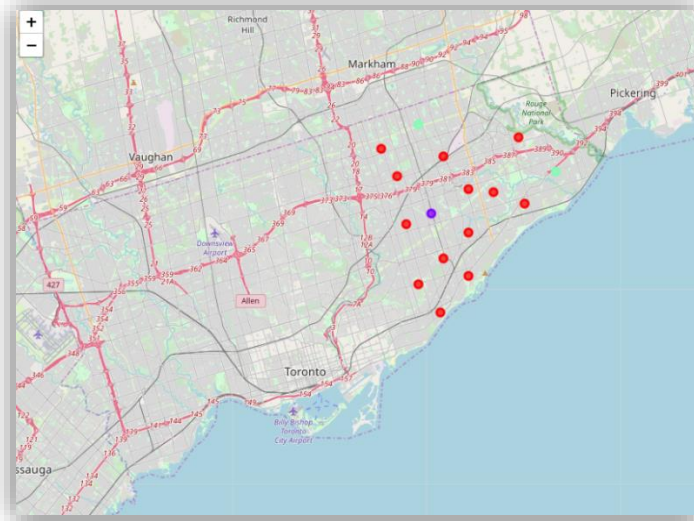
The data used for this project will be acquired from the respective cities Wikipedia website pages. The datasets consists of the postal codes, neighborhood names, latitude, and longitude information for each neighborhood. Foursquare API search feature will be used to collect neighborhood venue information. Details about local venues and locality will be provide insight into the qualities of a neighborhood. In addition to Foursquare, various python packages will be used to create maps and machine learning models to further provide insights into our neighborhood battle project.

## **3.Methodology**

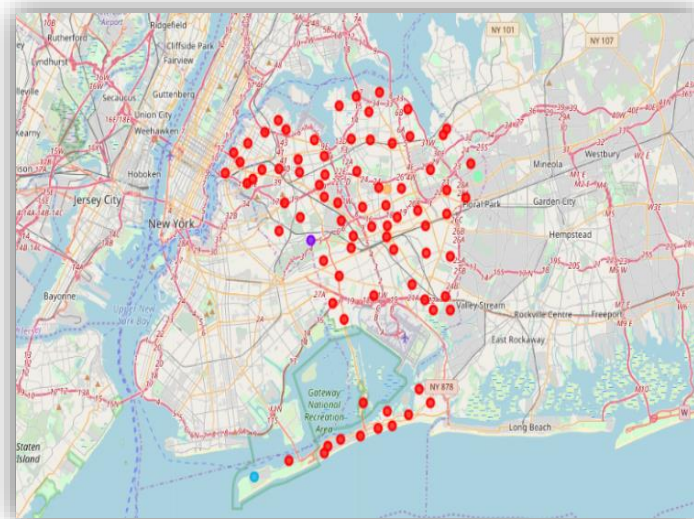
- Collect neighborhoods top venues using Foursquare.
- Form neighborhoods based on venue categories using unsupervised k-means clustering algorithm.
- Identify and understand the similarities and dissimilarities between Scarborough and Queens's neighborhoods to obtain insights into neighborhoods.

## **4.Results and Discussion**

- Map of Scarborough in Toronto



- Map of Queens in New York City



## - Comparison between Scarborough and Queens neighborhoods:

- ❖ Scarborough has 79 distinct venues in 52 categories.
- ❖ The most common venues in Scarborough are coffee shops, international restaurants and pharmacy.
- ❖ Queens has 1758 distinct venues in 271 categories.
- ❖ The most common venues in Queens are bodegas, bakeries, coffee shops and hotels.

## **5. Conclusion**

Based on the quantity and variety of venues, Queens is a better choice than Scarborough to relocate the headquarters of the Gad Company.

Queens offers a greater amount of grocery stores, restaurants and hotels for individual and families of the employees.