# The Battle of Neighbourhoods | Business Proposal | Introduction

# Introduction:

The purpose of this Project is to help people in exploring better facilities around their neighbourhood. It will help people making smart and efficient decision on selecting great neighbourhood out of numbers of other neighbourhoods in North York, Toronto.



Lots of people are migrating to various states of Canada and needed lots of research for good housing prices and repeated schools for their children. This project is for those people who are looking for better neighbourhoods. For ease of accessing to Cafe, School, Supermarket, medical shops, grocery shops, mall, theatre, hospital, likeminded people, etc.

This Project aim to create an analysis of features for a people migrating to North York to search a best neighbourhood as a comparative analysis between neighbourhoods. The features include median housing price and better school according to ratings, crime rates of that area, road connectivity, weather conditions, good management for emergency, water resources both fresh and wastewater and excrement conveyed in sewers and recreational facilities.

It will help people to get to know of the area and neighbourhood before moving to a new city, state, country, or place for their work or to start a new fresh life.

# **Problem Which Tried to Solve:**

The major purpose of this project is to suggest a better neighbourhood in a new city for the person who are shifting there. Connectivity to the airport, bus stop, city center, market and other daily necessities around. List of houses sorted by house price in ascending or descending order. List of schools sorted by location, cost, rating, and reviews.

#### The Location:

North York is an eclectic, multicultural district home to the hands-on Ontario Science Centre and the Aga Khan Museum, with exhibits on Islamic culture in a striking modern building. In the area's north, Black Creek Pioneer Village is an 1800s living museum. Sprawling Downsview Park includes a lake, event spaces, and a flea and farmers' market, while Edwards Gardens has a greenhouse, fountains, and botanic gardens.

# Workflow:

Using credentials of Foursquare API features of near-by places of the neighbourhoods would be mined. Due to http request limitations the number of places per neighbourhood parameter would reasonably be set to 100 and the radius parameter would be set to 500.

# **Clustering Approach:**

To compare the similarities of two cities, we decided to explore neighbourhoods, segment them, and group them into clusters to find similar neighbourhoods in a big city like New York and Toronto. To be able to do that, we need to cluster data which is a form of unsupervised machine learning: k-means clustering algorithm