

## Introduction

The purpose of this capstone project is to help people finding better facilities in and around their neighbourhood. It will help people in taking smart decision on selecting better neighbourhood in Scarborough, Toronto. The project aims to create an analysis of features for a people migrating to Scarborough to search a great neighbourhood as a comparative analysis between neighbourhoods. The features include house price, better school, low crime rates, good road connectivity and weather conditions, good services in case of emergencies, fresh water resources, etc. This project will help people to get awareness 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. Social presence in society in terms of like-minded people. Connectivity to the airport, bus stand, city centre, markets and other daily needs things nearby.

1. Sorted list of houses in terms of housing prices in an ascending or descending order
2. Sorted list of schools in terms of location, fees, rating and reviews

### Work Flow:

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