## Introduction

There is a plan to open a new Thai restaurant in the city of Toronto. The requirement is to recommend the location for the restaurant.

The restaurant business is highly competitive. There are many factors that will contribute to a restaurant's success (or failure) including location, food quality, service quality, marketing, and competition.

There are several environmental factors that may impact the success (or failure) of a restaurant that is entirely based on the location of that business. Some of these factors are "Amount of Foot or Vehicular Traffic", "Demography of the area", "Easy Parking", "Possible Fixed Customer Bases such as presence of offices, apartment complexes, University etc", "Rate of population growth", "Rate of job growth" and "overall cost of living". Opening a restaurant in a remote location is not recommended.

In the current project, location analysis of city of Toronto will be done. Boroughs and neighborhoods will be explored for existing restaurants and type of restaurants if possible. Presence of offices, apartment complexes, University, hospitals will be explored to understand fixed customer base.

Analysis done in this project will help the restaurant company to decide the location of their Thai restaurant in the city of Toronto.

## **Data**

Foursquare location data will be used to explore the city of Toronto neighborhood. Foursquare provides details about neighborhood using latitude and longitude.

Postal Codes, Boroughs and Neighborhood details of City of Toronto will be taken from Wikipedia <a href="https://en.wikipedia.org/wiki/List of postal codes of Canada: M">https://en.wikipedia.org/wiki/List of postal codes of Canada: M</a>

Geographical coordinates of the postal code will be taken from <a href="http://cocl.us/Geospatial\_data">http://cocl.us/Geospatial\_data</a>

Using Foursquare location details, number of restaurants and type of restaurant in each neighborhood will be explored. Other details such as presence of apartment complexes, Hospitals, University will also be tried to be obtained using Foursquare location data.

Neighborhood with no restaurant will not be considered for recommendation.

Neighborhood with at least two restaurants of any type will be considered for recommendation.

Neighborhood with more than two Thai restaurants will not be considered for recommendation.

Neighborhoods having presence of "Apartment complexes", "University", "Hospital" will be shortlisted for recommendation.