The perfect location for the perfect restaurant

1. Introduction

An important restauration group is thinking about to open a restaurant in the city of Toronto. This group has developed different types of restaurants around the world and have the knowledge to set up any restaurant type: Italian, Belgian, Thai, Chinese, etc. However, their knowledge about Toronto area and their citizens likes is none.

The idea is to define a data science methodology, that by using data from Foursquare API, makes possible to find:

- Which type of restaurants better fits the customer likes in Toronto?
- Where is the best location to set this new restaurant?

This methodology could be implemented in other cities and by others restauration groups.

2. Data

The data from Toronto will be picked from different sources:

- Wikipedia: List of postal codes of Canada.
  'https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M'
- Geospatial data of these neighbourhoods.
  'https://cocl.us/Geospatial_data'
- Using Foursquare API:
  - The recommended restaurants in each neighbourhood in an area of radius 750 meters and its name, latitude, longitude and venue category.
  - The likes that people give to each of these restaurants.

Then, the dataset used is a list of the restaurants of the different neighbourhoods. The dataset has the next attributes:

- Neighbourhood name.
- Neighbourhood latitude.
- Neighbourhood longitude.
- Venue name.
- Venue Latitude.
- Venue Longitude.
- Venue Category: Pizza Place, Thai Restaurant, etc.
- Venue number of likes.

Example:

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category	Venue likes
6	Regent Park, Harbourfront	43.65426	-79.360636	Roselle Desserts	43.653447	-79.362017	Bakery	48
7	Regent Park, Harbourfront	43.65426	-79.360636	Impact Kitchen	43.656369	-79.356980	Restaurant	51
8	Regent Park, Harbourfront	43.65426	-79.360636	Morning Glory Cafe	43.653947	-79.361149	Breakfast Spot	36
9	Regent Park, Harbourfront	43.65426	-79.360636	Souk Tabule	43.653756	-79.354390	Mediterranean Restaurant	53
10	Regent Park, Harbourfront	43.65426	-79.360636	Figs Breakfast & Lunch	43.655675	-79.364503	Breakfast Spot	55

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