Capstone Coursera Project

Business Problem:

- Toronto is the capital city of the Canadian province of Ontario. With a recorded population of 2,731,571, it is the most populous city in Canada and the fourth most populous city in North America.

- The way we dine out has been transformed in the last decade with independent cafes and restaurants opening on every corner and food stalls booming throughout multiple cities.

- We want to support our stakeholders in finding the optimal location within the city where to open a new restaurant

- It is not so easy to decide on a venue for such a business: Beyond providing great food, wine, and service, your job is to find a place where food businesses start as an idea and quickly grow into a brick and mortar venue

- We may presume that the majority of the existing restaurants are concentrated in the city centre and most touristic venues, to benefit from the influx of short-term visitors.

- It may then be a good option to look for venues with fewer existing restaurants, so not to be hindered by excessive competition, so as to attract a clientele of national residents that are accustomed to varieties of cuisines and may build up a base of regular and affectionate clients.

- We will then be working with the 39 Toronto neighbourhoods and use the "Foursquare API" to build a venue data analysis and subsequently to cluster the various locations in order to identify the most promising places for their business.

Data

- We assemble the dataset containing the list of the 39 Toronto neighbourhoods with their postal codes

- Python Geopy, used to get the coordinates for each of the Toronto neighbourhoods, in terms of latitude and longitude

- Foursquare API, which is instrumental to derive and populate the most common venues and locations, we explored the venues associated to each Toronto neighbourhood, with a choice of radius of 500 m for each quartier and prepared a graph to depict the counts of venues per neighbourhood