Finding Neighborhoods in Downtown Toronto similar to Parkwoods

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1. Introduction: Problem

In this project we will try to find locations in Downtown Toronto similar to Parkwoods. One of the most popular venue in Parkwoods is KFC, if KFC wishes to replicate their success from Parkwoods in Downtown Toronto, this project would be very much helpful. It can also be used by residents moving from Parkland and wish to be in a similar neighborhood in Downtown Toronto.

We will use our data science powers to generate similar and dissimilar neighborhoods to guide the stakeholders.

2. Data

Based on definition of our problem, the major factor that will influence our decision are the types of venues in each neighborhood

Following data sources will be needed to extract/generate the required information:

- List of Postal Codes in Canada gotten from the Wikipedia page
- CSV file containing Canadas Geospatial coordinates
- Types of venues in every neighborhood in Downtown Toronto will be obtained using *Foursquare API*
- Geographical coordinate of Downtown Toronto will be obtained using *Geocoder*

2.1 Scrapping and wrangling the data of Toronto Neighborhoods

Scrapping the Wikipedia webpage using *BeautifulSoup* to extract data such as:

- Postal Code
- Borough and
- Neighborhood of the various cities in Canada.

2.2 Reading Geospatial Coordinates

The geographical coordinates of the neighborhoods containing each postal code was gotten from a csv file downloaded through the link above.

2.3 Merging the data to add Latitude and Longitude to the Data Frame

The geospatial data containing the postal codes contains just three (3) columns:

- Postal Code
- Latitude
- Longitude

So, the data would be merged with the one gotten after scrapping the Wikipedia page, the criteria for merging both data would be the Postal Code. In line with our objective, the data from Parkwood neighborhood and Downtown Toronto borough would be separated and each would have their own individual data frames.