Determining Ideal Location for a Papa Pete’s Pizza in Toronto, Canada

1. Introduction
   1. Background

Pizza is an incredibly popular food for consumers across the globe. To capitalize on this trend, I would like to open a pizza shop in Toronto, Canada that serves a wide variety of pizza as well as alcoholic beverages for customers in the Toronto area. To maximize the potential of the business as well as minimize the risk as much as possible I would like to determine the best location by researching current competition throughout the Toronto area.

* 1. Business Problem

Where is the ideal location for a pizza shop in Toronto, Canada based on the current competition in the city? Determining this location will help to maximize the change of success for the new pizza shop.

* 1. Interest

Others who are interested in opening pizza shops will benefit from this information. Also, others will be able to implement the same process used in this project to obtain this information for other cities and other venues.

1. Data

In order to complete this project, we will be using data found at the following link: <https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M> which will provide a list of neighborhoods in Toronto. Latitude and Longitude coordinates will also be used for the respective neighborhoods which is required to obtain venue data and plot any necessary maps. Also, data related to other coffee shops and where they are located throughout the city will be utilized.

As mentioned before the data will be pulled from the url: <https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M>. As with previous projects throughout the course we will be utilizing python requests and the Beautiful Soup package as well as the Geocoder to obtain latitude and longitude coordinates needed.

I will the utilize the Foursquare API which we used in the other cases as well to obtain the necessary venue data to complete the case. Currently, foursquare has one of the largest databases available with over 105 million places and is being used by more than 125,000 developers. As with the previous cases I will be able to utilize some of the skills I have learned throughout this course including web scraping, data cleaning/wrangling, clustering, mapping, working with the Foursquare API and more.

1. Methodology

As mentioned, before I utilized the skills, I learned throughout the course to collect, clean, and then pull the data into the necessary data frame. After doing so I created multiple graphs including a folium map to get a better visual understanding of the city of Toronto. After doing all of this I was able to create a ML algorithm to determine which neighborhoods would be best suited for a Papa Pete’s Pizza.

A close up of a map

Description automatically generated

1. Conclusion

After completed the K-Means Clustering I was able to determine that Cluster five is best suited for a Papa Pete’s Pizza (see below). Currently, these boroughs do not have pizza places and would be great places for Papa Pete’s Pizza to begin their first pizza shop in Canada.

A screenshot of a cell phone

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