**Capstone Project - The Battle of Neighborhoods**

**Introduction/Business Problem**

The city of Toronto will be used to determine where to recommend to open a restaurant for someone looking to create a major impact and have the best chances at getting a profitable business up and running.

Opening restaurants is a high risk business where only a few can survive and location matters the most at the time of deciding where to open up to clients.

**Data**

The data to be used to determine the best place to open a restaurant will be build from the information derived in Week 3 of this course. A list of postal codes from Canada will be obtained from Wikipedia. This information will give us the postal codes, boroughs, and neighborhoods. This information will be paired with the latitude and longitude coordinates listed in a separate file matching each individual borough. Then, the boroughs specifically located in Toronto will be selected. This information will be useful for later identifying all the venues in each borough. The venues with the least number of restaurants will be identified as the best places for opening up a new place.

**Methodology**

The main data to be analyzed provided a view of the most common venues by neighborhood in Toronto. This data was used to determine the quantity of restaurants currently available in the neighborhoods. Neighborhoods where the quantity of restaurants was the lowest were a prime candidate for the ideal area to open a business.

**Results**

The outcome resulted more challenging than expected. After many tries to transform the data, it was observed that indeed some venues contained more restaurant than others.

**Discussion**

After multiple attempts at transforming the data to show the number of restaurants for a given neighborhood, the information could not be presented in a meaningful way. It was indeed observed that some neighborhoods were more prime for having new restaurants opened in those areas.

**Conclusion**

This assignment prove to be a though one to complete. The amount of time needed to complete it was overwhelming and started consume time separated for other things. However, the journey and challenge were rewarding. It was nice to learn about the complex topic of data science. There is more to it than what this course provided but at least I was able to get an introduction and an idea on what it involves and its potential.