Capstone Project

How Covid-19 could reshape Toronto’s neighbourhoods

1. Introduction
   1. Background

As Covid-19 has changed our lives over the past few months we are all wondering what live may be like once we are able to return to carrying out our lives as we had pre Covid-19. One of the current interests of the Canadian Government is focusing money towards the Canadian tourist economy with a domestic lens. Rather than trying to get foreigners to travel here, how does the Government get Canadians to explore and travel within their own country.

* 1. Problem

For the Canadian Government to focus the money properly we are going to try and see which neighborhoods may be hit the hardest within Toronto and use that information to better decide how the government could focus their tourism efforts

* 1. Interest

Toronto Businesses, the Federal and Provincial Government, all have a stake in growing the economy and learning how to focus money could give them another way to look at he problem and discover potential solutions for it.

1. Data Acquisition and Cleaning
   1. Data Acquisition

The data being used for this project will be acquired from open source locations including Wikipedia and Stats Canada

* 1. Data Cleaning

The Neighborhood data will be re-gathered from weeks 2-3 and used in a similar way to pin-point neighbourhoods and how their business profile looks.

Further data will be acquired from Stats Canada and used to determine the best way to graph which neighbourhoods should be hit the hardest.

1. Methodology

I decided to follow the steps we did in week 3 and add detail from stats Canada to be able to use the data from four square to figure out which Neighborhoods could be hit the hardest. I decided to base it from the top 10 venues from each Neighborhood.

Example: York Mills West

The Top venue in this area is Grocery Store which has a frequency of 0.08 From the CSV’s I created I could find out which NAIC value ‘Grocery Store’ is connected to. I then used the Stats Canada Information to find out what percentage of companies under that NAICS value who had to lay of 80% or more of their staff.

Frequency \* NAICS Percent = Sum

I then added up the Sums in each Neighborhood which gave me the percentage of Companies who had to lay of 80% or more of their staff

In coding step[23]: You can see the table that was created with these details

Once that was done, I added the job loss information to the cluster map so that an end user could click on a cluster and see the job loss in that area

1. Results

Please look at step [23] to see the list with the results and if you make the notepad trusted you can see the map in step [52] as well

1. Discussion

I found these results were harder than ascertain than I had originally envisioned and help to put into perspective how to approach a future problem better

1. Conclusion

The data frame and map that has been created could be used as a quick tool by the local and provincial government to give them an understanding of the neighborhoods which could see the most issues with job loss and how to address how money could be spend in certain sectors in the Toronto area.