Capstone Project: Battle of Neighbourhoods

Data description

Description:

The main aim of the project is to explore the neighbourhoods in the city of Toronto, hence Toronto neighbourhoods data is essential. The structured format of the data is not available on the internet, hence we need to scrap it through an existing Wikipedia page that has all the required information. The coordinates of the neighbourhoods is important in the data. The information like the most common venues, population, Borough are also required and should be present in the final report. The data needs to be cleaned up and should look like the following:

	PostalCode	Borough	Neighbourhood	Latitude	Longitude
0	M1B	Scarborough	Rouge, Malvern	43.8067	-79.1944
1	M1C	Scarborough	Highland Creek, Rouge Hill, Port Union	43.7845	-79.1605
2	M1E	Scarborough	Guildwood]], Morningside, West Hill	43.7636	-79.1887
3	M1G	Scarborough	Woburn	43.771	-79.2169
4	M1H	Scarborough	Cedarbrae	43.7731	-79.2395
5	M1J	Scarborough	Scarborough Village	43.7447	-79.2395
6	M1K	Scarborough	East Birchmount Park, Ionview, Kennedy Park	43.7279	-79.262
7	M1L	Scarborough	Clairlea, Golden Mile, Oakridge	43.6915	-79.2866
8	M1M	Scarborough	Cliffcrest, Cliffside, Scarborough Village West	43.7163	-79.2395
9	M1N	Scarborough	Birch Cliff, Cliffside West	43.6927	-79.2648

Data features:

We will be using the information provider, Foursquare.com, to explore the various venues in each neighbourhood. The information on how busy the neighbourhood is, is obtained by understanding the trends of theses venues in the respective neighbourhood. The information obtained are:

1. Neighbourhood
2. Neighbourhood Latitude
3. Neighbourhood Longitude
4. Venue Name
5. Venue Category
6. Venue Latitude
7. Venue Longitude

	Neighbourhood	Neighbourhood Latitude	Neighbourhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Rouge, Malvern	43.806686	-79.194353	Wendy's	43.807448	-79.199056	Fast Food Restaurant
1	Highland Creek, Rouge Hill, Port Union	43.784535	-79.160497	Royal Canadian Legion	43.782533	-79.163085	Bar
2	Highland Creek, Rouge Hill, Port Union	43.784535	-79.160497	Affordable Toronto Movers	43.787919	-79.162977	Moving Target
3	Guildwood]], Morningside, West Hill	43.763573	-79.188711	Swiss Chalet Rotisserie & Grill	43.767697	-79.189914	Pizza Place
4	Guildwood]], Morningside, West Hill	43.763573	-79.188711	G & G Electronics	43.765309	-79.191537	Electronics Store
5	Guildwood]], Morningside, West Hill	43.763573	-79.188711	Big Bite Burrito	43.766299	-79.190720	Mexican Restaurant
6	Guildwood]], Morningside, West Hill	43.763573	-79.188711	Enterprise Rent-A-Car	43.764042	-79.193371	Rental Car Location
7	Guildwood]], Morningside, West Hill	43.763573	-79.188711	Woburn Medical Centre	43.766631	-79.192286	Medical Center
8	Guildwood]], Morningside, West Hill	43.763573	-79.188711	Eggsmart	43.767800	-79.190466	Breakfast Spot
9	Woburn	43.770992	-79.216917	Starbucks	43.770037	-79.221156	Coffee Shop

Conclusion:

We will segment these neighbourhoods to understand the similarities between them and analyse further. With all these features, we will further discover useful features and come up with the list of high priority areas for the Toronto Police Department. For example, the area with high population and more public places will be more prone to the virus spread since more people are found in groups.