



New Restaurant Recommendation

IBM / Coursera Capstone Project

Business case

- ABC company business development and market presence
- Canada market and food industry
- Where to open a new Restaurant?
- What to consider when analyzing where to open a new business
- Who is the target audience

DATA ACQUISITION AND CLEANING

- **Data 1:**

Wikipedia provides a list of postal codes in the city of Toronto in the province of Ontario. The data will be scraped and wrangled from Wikipedia's page to a data frame

- **Data 2:**

The city of Toronto website offers an Open Data Catalogue in which a dataset, including the neighborhood's profile, will be used providing relevant information for analyses.

- **Data 3:**

A CSV file that has the geographical coordinates of each postal code of the Toronto. The geographic coordinates data is provided in the third link below.

The information of the coordinates will be applied to the application of clustering for better geographical understanding and visualization of the data.

- **Link Foursquare:**

The Foursquare API service is the primary source of data for a detailed comprehension of restaurants located in each neighborhood

DATA ACQUISITION AND CLEANING

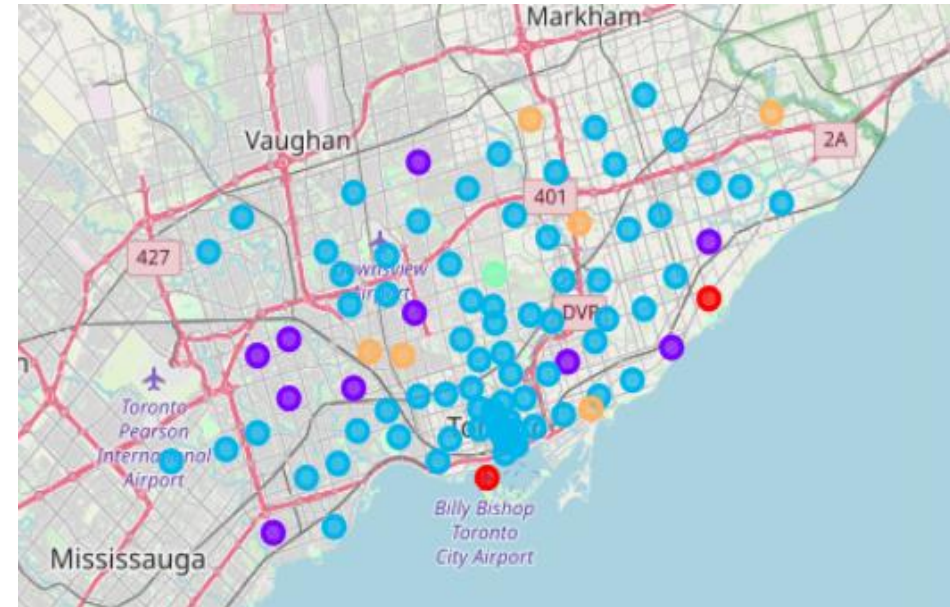
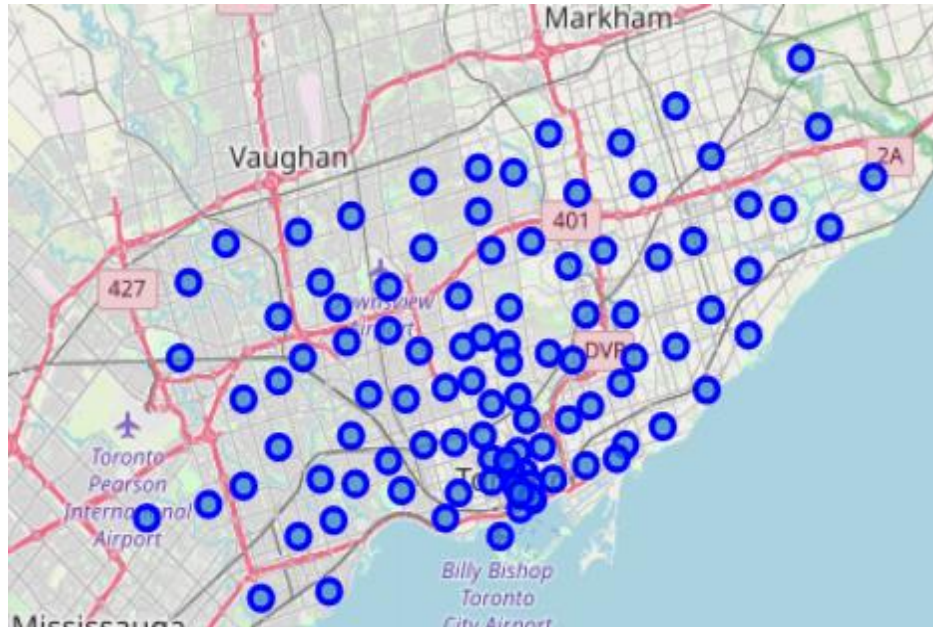
	Postcode	Borough	Neighbourhood
0	M1B	Scarborough	Rouge, Malvern
1	M1C	Scarborough	Highland Creek, Rouge Hill, Port Union
2	M1E	Scarborough	Guildwood, Morningside, West Hill
3	M1G	Scarborough	Woburn
4	M1H	Scarborough	Cedarbrae

	Postcode	Borough	Neighbourhood	Latitude	Longitude
0	M1B	Scarborough	Rouge, Malvern	43.806686	-79.194353
1	M1C	Scarborough	Highland Creek, Rouge Hill, Port Union	43.784535	-79.160497
2	M1E	Scarborough	Guildwood, Morningside, West Hill	43.763573	-79.188711
3	M1G	Scarborough	Woburn	43.770992	-79.216917
4	M1H	Scarborough	Cedarbrae	43.773136	-79.239476

	Category	Topic	Data Source	Characteristic	City of Toronto	Agincourt North	Agincourt South-Malvern West	Alderwood	Annex	B&D
0	Neighbourhood Information	Neighbourhood Information	City of Toronto	Neighbourhood Number	NaN	129	128	20	95	42
1	Neighbourhood Information	Neighbourhood Information	City of Toronto	TSNS2020 Designation	NaN	No Designation	No Designation	No Designation	No Designation	No Designation
2	Population	Population and dwellings	Census Profile 98-316-X2016001	Population, 2016	2,731,571	29,113	23,757	12,054	30,526	27
3	Population	Population and dwellings	Census Profile 98-316-X2016001	Population, 2011	2,615,060	30,279	21,988	11,904	29,177	26
4	Population	Population and dwellings	Census Profile 98-316-X2016001	Population Change 2011-2016	4.50%	-3.90%	8.00%	1.30%	4.60%	2.5

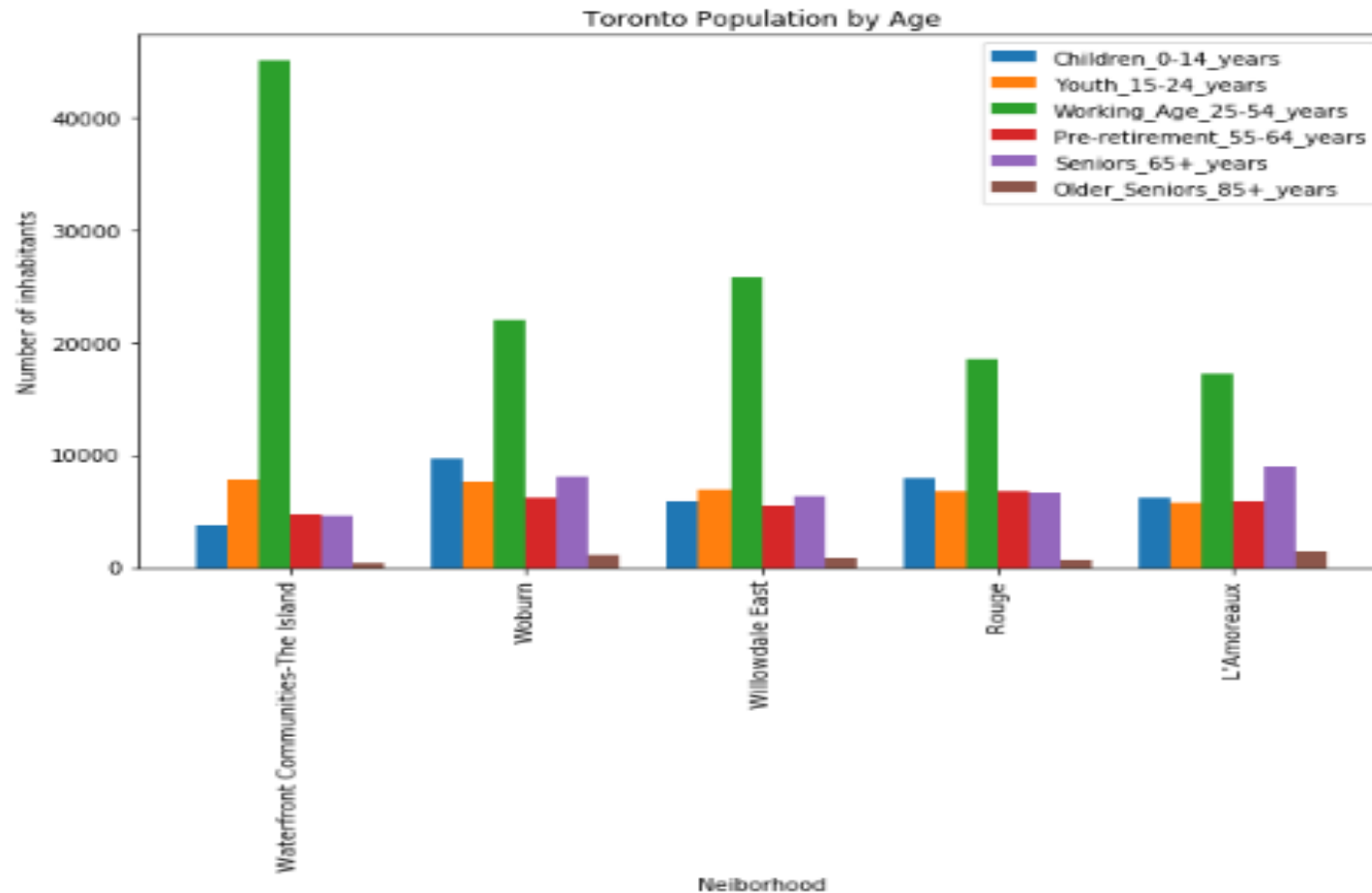
TORONTO NEIGHBORHOODS

- Explore Neighborhoods in Toronto
- Cluster Neighborhoods



RESULTS

- People between 25 to 54 years (working age) account for the significant age demography of the area. The result is showed in the chart below:



RESULTS

- Types of restaurants that there are in that area



CONCLUSION

- Although through the data provided it was possible to draw a conclusion where would be more appropriate to open a restaurant, in a real-life situation addition data should be included to cover other aspects that may or may not impact its success. Toronto has a vast commercial area with a large number of restaurants, and a small detail can have a massive impact on new business.



THANK YOU