The Battle of Neighborhoods

Introduction

This Project aim to create an analysis of favorable features to open a new branch of an entertainment company in Toronto. To differentiate the best neighborhood, I will use 4 mains features, as follow:

1. The mediam housing price.
2. The crime rates of that particular area.
3. The road connectivity and recreational facilities.
4. Rating of the nearby locations.

Data Description

To find "entertainment data" I will use the Foursquare location. As I will be using the free account the information from Foursquare will includes just the venue names, locations and ratings. To gather infrastructure data, I will utilize the Wikipedia page suggested in the past weeks of this course:

https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M

Methodology

Using concepts obtained in the methodology course for data science I searched only for information that I deemed necessary to solve the problem, thus avoiding dispersion of attention or unnecessary ramblings. Items 1 and 2 are easily obtained through a quick search, so I focused the analysis on items 3 and 4 in the central region of Toronto. As we are talking about an entertainment company it should have easy access (in this case close to a metro station) and popular spots around (restaurants and shopping centers).

Results

Similar to engineering, much information can be obtained from a more in-depth view of tables, graphs and maps. Therefore, my analysis and the consequent decision was based on these 3 items. Bellow are the results obtained:
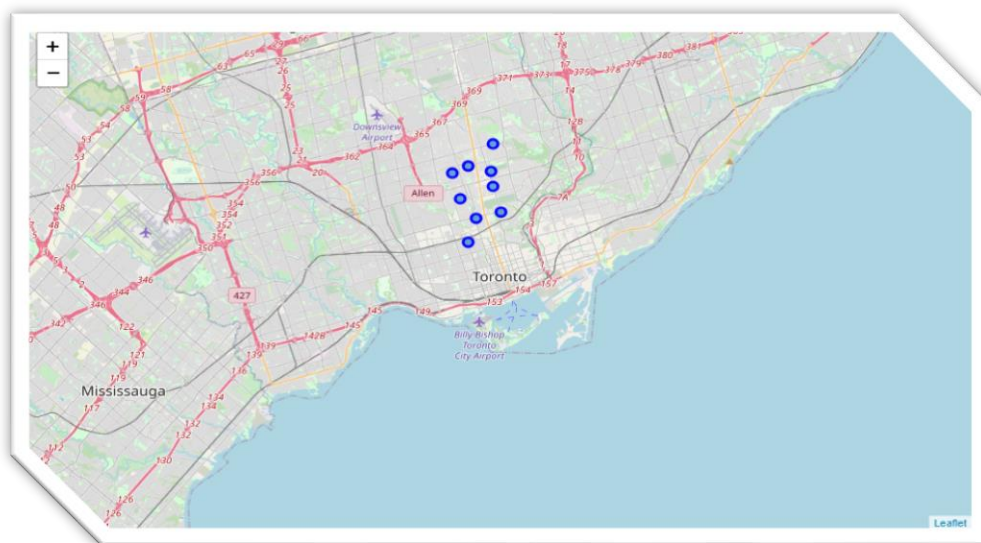

Figure 1 - Central Toronto Neighborhoods

	name	categories	address	lat	lng
0	Internet Kitchen Store	Furniture / Home Store	158 Eglinton Ave W	43.705734	-79.402993
1	The UPS Store	Shipping Store	34 Eglinton Ave W	43.706425	-79.399645
2	Mystery Store A	Miscellaneous Shop	NaN	43.706884	-79.398612
3	The Beer Store	Beer Store	609 Roehampton Ave	43.711825	-79.379605
4	3rd Floor Convenience Store	Convenience Store	2180 Yonge St.	43.705068	-79.398579
5	Mobile Store	None	NaN	43.704488	-79.398944
6	The UPS Store	Shipping Store	3219 Yonge St	43.728270	-79.402966
7	Convenience Store	Candy Store	200 Eglinton East	43.708077	-79.391321
8	The Brick Mattress Store	Furniture / Home Store	NaN	43.704865	-79.407319
9	Happy Lucky Convenience Store	Convenience Store	Yonge	43.700405	-79.396494
10	The UPS Store	Shipping Store	6 Belsize Drive	43.700352	-79.396030

Figure 2 - Some of the Stores near Eglinton Station

Figure 3 - Map of Stores near Eglinton Station

	name	categories	address	crossStreet	lat	lng
0	Bikkuri Japanese Restaurant	Japanese Restaurant	1835 Yonge St. #101	at Balliol St	43.696644	-79.396353
1	Hannah's Kitchen Restaurant & Catering	Restaurant	2177 Yonge St	NaN	43.704753	-79.397946
2	Odessa Restaurant	None	NaN	Hilda and Steeles	43.704145	-79.398331
3	Coquine Restaurant	French Restaurant	2075 Yonge St.	at Manor Rd.	43.702623	-79.397429
4	Mt Everest Restaurant	Indian Restaurant	804 Eglinton East	Eglinton and Sutherland	43.713266	-79.366520
5	Maybes Restaurant	Restaurant	188 Eglinton Ave E	NaN	43.708292	-79.392818
6	Centro Restaurant & Lounge	Restaurant	2472 Yonge St.	NaN	43.711421	-79.399603
7	Mars Uptown Restaurant	Diner	2363 Yonge St	at Broadway Ave	43.709141	-79.398706
8	Ho Su Korean & Japanese Restaurant	Asian Restaurant	NaN	NaN	43.710002	-79.393856
9	Alizé Restaurant	Italian Restaurant	2459 Yonge St	Yonge and Eglinton	43.711252	-79.399326
10	Good Bite Restaurant	Diner	2463 Yonge St.	btwn Erskine & Castlefield	43.711449	-79.399343

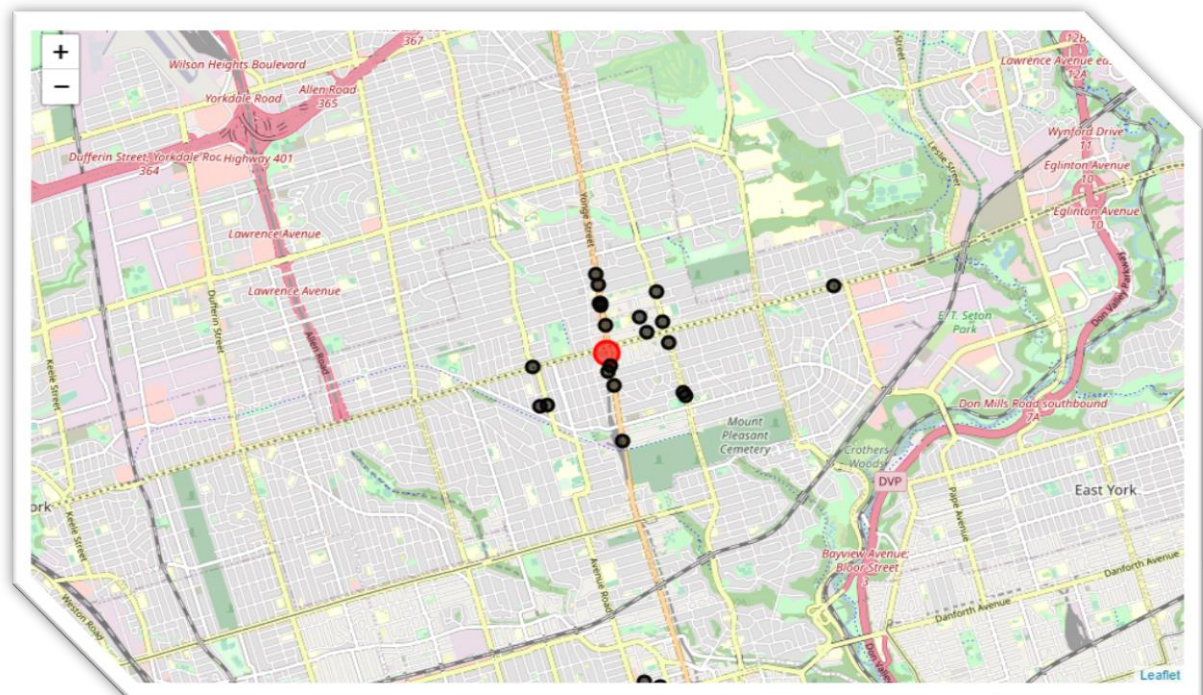*Figure 4 - Some of the Restaurants near Eglinton Station*

Figure 5 - Map of Restaurants near Eglinton Station

Discussion

Looking carefully at the maps obtained and the coordinates of the tables we see that some sandy areas have higher concentrations of attractions, and it is precisely in this area that we want to open a branch

Conclusion

We managed to get the answer by superimposing the two maps obtained (restaurants and shops) as the tendency is for these regions to develop and attract even more attractions. The exact location can be seen in figure 6 and 7.

Figure 6 - Comparing tthe region with more establishments

Figure 7 - Selecting the micro-region with the most density