

Sindhu

Comparing Neighborhoods of North York, Canada

Problem Statement:

Moving to new neighborhoods is not a trivial task. You do not know what it offers once you move in and actually live there and how your life will change. Data science can help us in quickly analysing the different places which can not be done manually considering there are so many factors to consider and there is so much data there that can not be manually processed. You can out in varuious features that are important to you whether you are going to live there as citizen or starting a new business you can analyse the data and get the results to decide the most feasible area.

Project Description:

In this project, we do not analyse all the features but just give a hint of how it would look like analysing the data on large scale. This project can be molded for your own city and for your own type of requirements for the new place to move in . Here we consider that a family is moving to a new place North York and want to analyse which town is best in North York to live in. We use two features for that. One is average prices of the houses and the other one is schools in that town and how good are the schools. What are their ratings. Data is colleted from foursquare API as described in previous weeks. All the code of previous week is described here and data is specifically categorized for North York city which has the rows of 24 and 5 rows. Then we get the nearby venues and

analyse based on average housing prices and schools rating. The data is partially taken from internet about each neighborhood as there was no proper data set available so it was bit of manual task. At end the graph shows the comparison and hence we can choose from visual descriptions in seconds.

Data Extraction:

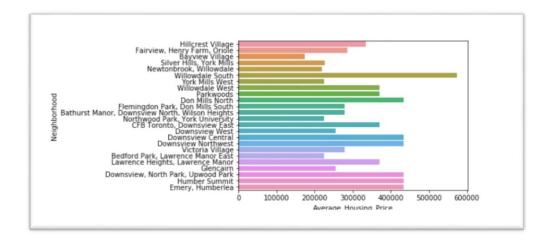
	Postalcode	Borough	Neighborhood	Latitude	Longitude
0	М2Н	North York	Hillcrest Village	43.802556	-79.356566
1	M2J	North York	Fairview, Henry Farm, Oriole	43.780306	-79.348687
2	M2K	North York	Bayview Village	43.780607	-79.376921
3	M2L	North York	Silver Hills, York Mills	43.749360	-79.380690
4	M2M	North York	Newtonbrook, Willowdale	43.791800	-79.406428

Nearby Venues:

```
NorthYork_venues = getNearbyVenues(names=df['Neighborhood'],
                                   latitudes=df['Latitude'],
                                   longitudes=df['Longitude']
Hillcrest Village
Fairview, Henry Farm, Oriole
Bayview Village
Silver Hills, York Mills
Newtonbrook, Willowdale
Willowdale South
York Mills West
Willowdale West
Parkwoods
Don Mills North
Flemingdon Park, Don Mills South
Bathurst Manor, Downsview North, Wilson Heights
Northwood Park, York University
CFB Toronto, Downsview East
Downsview West
Downsview Central
Downsview Northwest
Victoria Village
Bedford Park, Lawrence Manor East
Lawrence Heights, Lawrence Manor
Glencairn
Downsview, North Park, Upwood Park
Humber Summit
Emery, Humberlea
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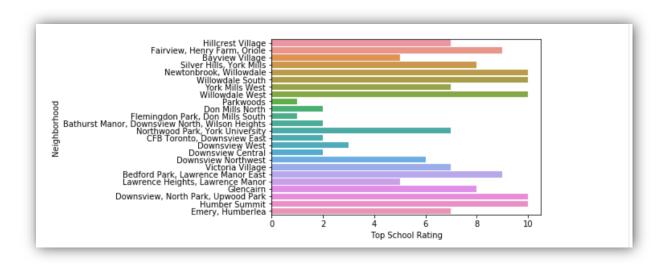
Analysing Housing Prices:

	Neighborhood	Average_Housing_Price
)	Hillcrest Village	335000.0
	Fairview, Henry Farm, Oriole	286600.0
?	Bayview Village	175000.0
;	Silver Hills, York Mills	225900.0
ı	Newtonbrook, Willowdale	219400.0
,	Willowdale South	573900.0
;	York Mills West	225000.0
	Willowdale West	370500.0
;	Parkwoods	370500.0
)	Don Mills North	433500.0
0	Flemingdon Park, Don Mills South	279200.0
1	Bathurst Manor, Downsview North, Wilson Heights	279200.0
2	Northwood Park, York University	225000.0
3	CFB Toronto, Downsview East	370500.0
4	Downsview West	255400.0
5	Downsview Central	433500.0
6	Downsview Northwest	433500.0
7	Victoria Village	279200.0
8	Bedford Park, Lawrence Manor East	225000.0
9	Lawrence Heights, Lawrence Manor	370500.0
0	Glencaim	255400.0
1	Downsview, North Park, Upwood Park	433500.0
2	Humber Summit	433500.0
n	Fman/ Humbarlas	433EUU U



Analysing School Ratings:

	Neighborhood	Top School Rating
)	Hillcrest Village	7
1	Fairview, Henry Farm, Oriole	9
2	Bayview Village	5
3	Silver Hills, York Mills	8
1	Newtonbrook, Willowdale	10
5	Willowdale South	10
6	York Mills West	7
7	Willowdale West	10
3	Parkwoods	1
9	Don Mills North	2
10	Flemingdon Park, Don Mills South	1
11	Bathurst Manor, Downsview North, Wilson Heights	2
12	Northwood Park, York University	7
13	CFB Toronto, Downsview East	2
14	Downsview West	3
15	Downsview Central	2
16	Downsview Northwest	6
17	Victoria Village	7
18	Bedford Park, Lawrence Manor East	9
19	Lawrence Heights, Lawrence Manor	5
20	Glencairn	8
21	Downsview, North Park, Upwood Park	10
22	Humber Summit	10
23	Emery, Humberlea	7



Conclusion:

From the visuals,it is clear that which town has the most school ratings and also the housing prices. So based on that decision can be made according to personal preferences