



Battle of the BEST of Toronto

Data

To solve the problem faced by travellers, I have used a Sample data from a website with Neighborhood details of Toronto. Which contains Postal code, Borough names and Neighborhoods in Toronto, I have created below dataframe as requested in Week 3 using Beautifulsoap API.

Out[10]:

	Postal_Code	Borough	Neighborhood
0	M1B	Scarborough	Rouge, Malvern
1	M1C	Scarborough	Highland Creek, Rouge Hill, Port Union
2	M1E	Scarborough	Guildwood'n, Morningside, West Hill
3	M1G	Scarborough	Woburn
4	M1H	Scarborough	Cedarbrae
5	M1J	Scarborough	Scarborough Village
6	M1K	Scarborough	East Birchmount Park'n, Ionview, Kennedy Park
7	M1L	Scarborough	Clairlea, Golden Mile, Oakridge
8	M1M	Scarborough	Cliffcrest, Cliffside, Scarborough Village West'n
9	M1N	Scarborough	Birch Cliff, Cliffside West'n
10	M1P	Scarborough	Dorset Park, Scarborough Town Centre, Wexford ...

After creating data frame I gathered the details of the Latitude, Longitude of the neighborhoods.

	Postal_Code		Borough	Neighborhood	Latitude	Longitude
0	M5A	Downtown Toronto		Harbourfront	43.640080	-79.380150
1	M5A	Downtown Toronto		Regent Park	43.660706	-79.360457
2	M5B	Downtown Toronto		Ryerson	43.621573	-79.559130
3	M5B	Downtown Toronto		Garden District	43.656502	-79.377128
4	M5C	Downtown Toronto		St. James Town	43.669403	-79.372704
5	M4E	East Toronto		The Beaches	43.671024	-79.296712
6	M5E	Downtown Toronto		Berczy Park	43.648001	-79.375385
7	M6G	Downtown Toronto		Christie	43.664111	-79.418405
8	M5H	Downtown Toronto		Adelaide	43.650298	-79.380477
9	M5H	Downtown Toronto		King	43.648949	-79.377754
10	M5H	Downtown Toronto		Richmond	43.655443	-79.355780
11	M6H	West Toronto		Dovercourt Village	43.665307	-79.432636
12	M6H	West Toronto		Dufferin	43.660203	-79.435651
13	M5J	Downtown Toronto		Harbourfront East	43.640080	-79.380150

Further I have user foursquare API to find out the popular venues around Toronto these were within 500m are of the neighborhoods, once I got the list of venues, I looked up for the categories of the venues and mapped each category into a higher level of category the traveller might be interested in.

Below are the categories which I used.

1. Food
2. Art
3. Nature
4. Adventure
5. History
6. Outdoors

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category	Summary	Venue ID
0	Harbourfront	43.64008	-79.38015	Lake Ontario	43.639398	-79.379589	Lake	This spot is popular	4d07f8041657a35d19272ae7
1	Harbourfront	43.64008	-79.38015	Harbour Square Park	43.639253	-79.378395	Park	This spot is popular	4e49413e81dc766f3e3d6312
2	Harbourfront	43.64008	-79.38015	Harbourfront	43.639526	-79.380688	Neighborhood	This spot is popular	4bfaa3494a67c928d08528cf
3	Harbourfront	43.64008	-79.38015	BeaverTails	43.639899	-79.380197	Bakery	This spot is popular	55a19437498eeea53fa58b54
4	Harbourfront	43.64008	-79.38015	Sharetea-Waterfront	43.640176	-79.379606	Bubble Tea Shop	This spot is popular	57b22076498efeeeb93cfc47

To divide into these categories I found the unique categories and manually found the keywords which we usually find in categories of these venues which helped me divide the venues.

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category	Summary	Venue ID	My Categories
0	Harbourfront	43.64008	-79.38015	Lake Ontario	43.639398	-79.379589	Lake	This spot is popular	4d07f8041657a35d19272ae7	Nature
1	Harbourfront	43.64008	-79.38015	Harbour Square Park	43.639253	-79.378395	Park	This spot is popular	4e49413e81dc766f3e3d6312	Nature
2	Harbourfront	43.64008	-79.38015	Harbourfront	43.639526	-79.380688	Hike	This spot is popular	4bfaa3494a67c928d08528cf	Adventure
3	Harbourfront	43.64008	-79.38015	BeaverTails	43.639899	-79.380197	Bakery	This spot is popular	55a19437498eeea53fa58b54	Food
4	Harbourfront	43.64008	-79.38015	Sharetea-Waterfront	43.640176	-79.379606	Bubble Tea Shop	This spot is popular	57b22076498efeeeb93cfc47	Food

A major chunk of venues fall into food hence it cannot be considered a dominant factor while forming clusters. We can probably look into neighborhoods which have a higher number of various attractions and suggest user based on his interest which neighbourhood can be a better option for him / her to get a hotel in and he might further use the venue list as his list of places in itinerary.