

# Mexican Restaurant in Toronto Downtown Area.

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Peer graded Assignment - Capstone Project  
(The Battle of Neighbourhoods)



# Background

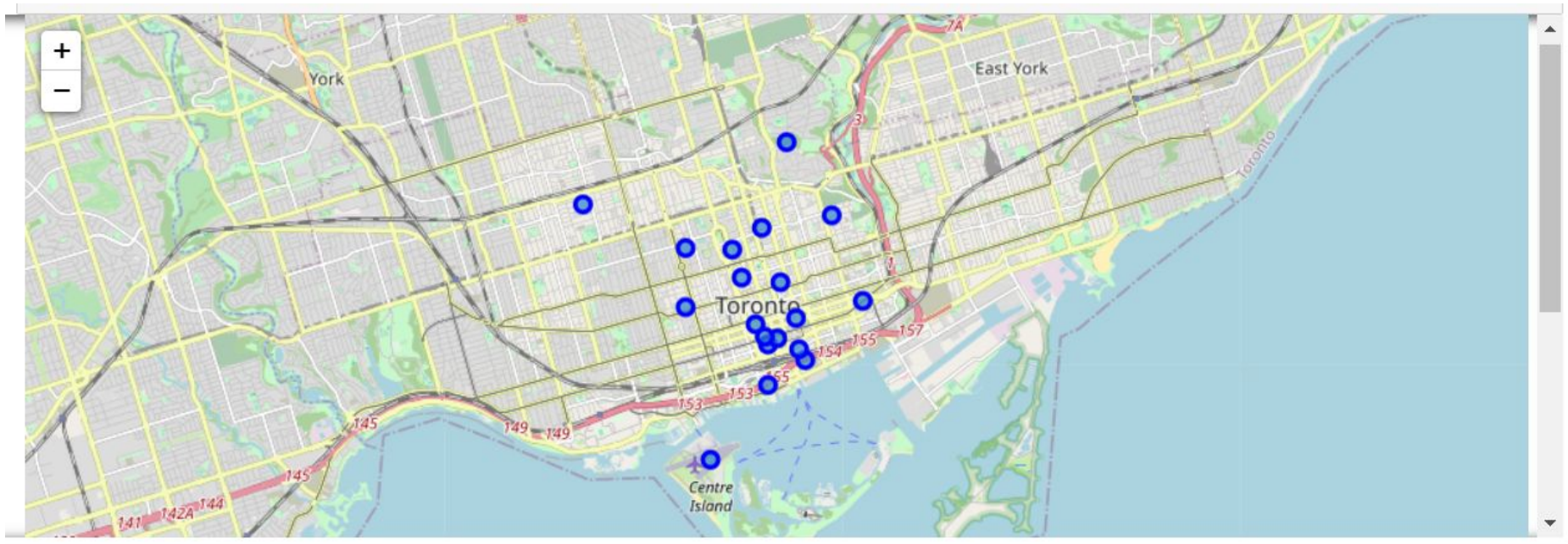
My client, a wealthy and successful restaurateur from Mexico is eager to expand business operations into Toronto. They want to create an authentic Mexican eatery that will serve and offer the full richness of Mexican culture and cuisine to the people of Downtown Toronto.

Since Downtown Toronto is very competitive, my client needs insight from data in order to decide in which neighborhood to establish this authentic Mexican eatery.

# Data acquisition and cleaning

- This project utilized publicly available data from Wikipedia and Foursquare.
- Specifically, all Toronto neighborhood details along with their postal codes are available here:  
[https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)
- For Geospacial Data I used this dataset:  
[https://cocl.us/Geospatial\\_data](https://cocl.us/Geospatial_data)
- The table was cleaned down to 103 rows & 3 features.

# Map of Toronto Downtown



- ❖ Used k-means to cluster the neighborhood into 5 clusters.
- ❖ Added clustering labels, Created a map & Visualized the Clusters into a map.

# Cluster 1

```
# Cluster 1
tor_merged.loc[tor_merged['Cluster Labels'] == 0, tor_merged.columns[[2] + list(range(6, tor_merged.shape[1]))]]
```

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue	11th Most Common Venue	12th Most Common Venue	13th Most Common Venue
2	Regent Park, Harbourfront	Restaurant	French Restaurant	Vietnamese Restaurant	Doner Restaurant	German Restaurant	Filipino Restaurant	Fast Food Restaurant	Falafel Restaurant	Ethiopian Restaurant	Eastern European Restaurant	Dumpling Restaurant	Dim Sum Restaurant	Re

# Cluster 2

```
# Cluster 2
tor_merged.loc[tor_merged['Cluster Labels'] == 1, tor_merged.columns[[2] + list(range(6, tor_merged.shape[1]))]]
```

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue	11th Most Common Venue	12th Most Common Venue
0	St. James Town, Cabbagetown	Restaurant	Italian Restaurant	Chinese Restaurant	Indian Restaurant	Thai Restaurant	Taiwanese Restaurant	Sri Lankan Restaurant	Japanese Restaurant	Caribbean Restaurant	Doner Restaurant	Fast Food Restaurant	Falafel Restaurant
3	Garden District, Ryerson	Italian Restaurant	Japanese Restaurant	Middle Eastern Restaurant	Fast Food Restaurant	Ramen Restaurant	Vietnamese Restaurant	New American Restaurant	Ethiopian Restaurant	Mexican Restaurant	Chinese Restaurant	Modern European Restaurant	Restaurant
6	Central Bay Street	Italian Restaurant	Japanese Restaurant	Indian Restaurant	Chinese Restaurant	French Restaurant	Vegetarian / Vegan Restaurant	Korean Restaurant	Middle Eastern Restaurant	Falafel Restaurant	Modern European Restaurant	Thai Restaurant	Ramen Restaurant
8	Harbourfront East, Union Station, Toronto Islands	Italian Restaurant	Restaurant	Indian Restaurant	Vegetarian / Vegan Restaurant	Sushi Restaurant	Seafood Restaurant	Japanese Restaurant	New American Restaurant	Chinese Restaurant	Doner Restaurant	Fast Food Restaurant	Falafel Restaurant
11	University of Toronto, Harbord	Restaurant	Italian Restaurant	Japanese Restaurant	Comfort Food Restaurant	Chinese Restaurant	French Restaurant	Sushi Restaurant	Brazilian Restaurant	Eastern European Restaurant	Filipino Restaurant	American Restaurant	Asian Restaurant
13	Stn A PO Boxes	Seafood Restaurant	Restaurant	Italian Restaurant	Japanese Restaurant	French Restaurant	American Restaurant	Thai Restaurant	Sushi Restaurant	Vegetarian / Vegan Restaurant	Molecular Gastronomy Restaurant	Comfort Food Restaurant	Eastern European Restaurant



# Cluster 3

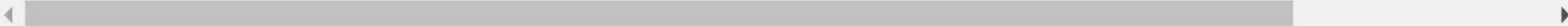
```
: # Cluster 3  
tor_merged.loc[tor_merged['Cluster Labels'] == 2, tor_merged.columns[[2] + list(range(6, tor_merged.shape[1]))]]
```

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue	11th Most Common Venue	12th Most Common Venue	1
15	Christie	Italian Restaurant	Restaurant	Vietnamese Restaurant	Doner Restaurant	French Restaurant	Filipino Restaurant	Fast Food Restaurant	Falafel Restaurant	Ethiopian Restaurant	Eastern European Restaurant	Dumpling Restaurant	Dim Sum Restaurant	R

# Cluster 4

```
# Cluster 4
tor_merged.loc[tor_merged['Cluster Labels'] == 3, tor_merged.columns[[2] + list(range(6, tor_merged.shape[1]))]]
```

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue	11th Most Common Venue	12th Most Common Venue	1
16	Queen's Park, Ontario Provincial Government	Sushi Restaurant	Italian Restaurant	Mexican Restaurant	Vietnamese Restaurant	Doner Restaurant	French Restaurant	Filipino Restaurant	Fast Food Restaurant	Falafel Restaurant	Ethiopian Restaurant	Eastern European Restaurant	Dumpling Restaurant	F

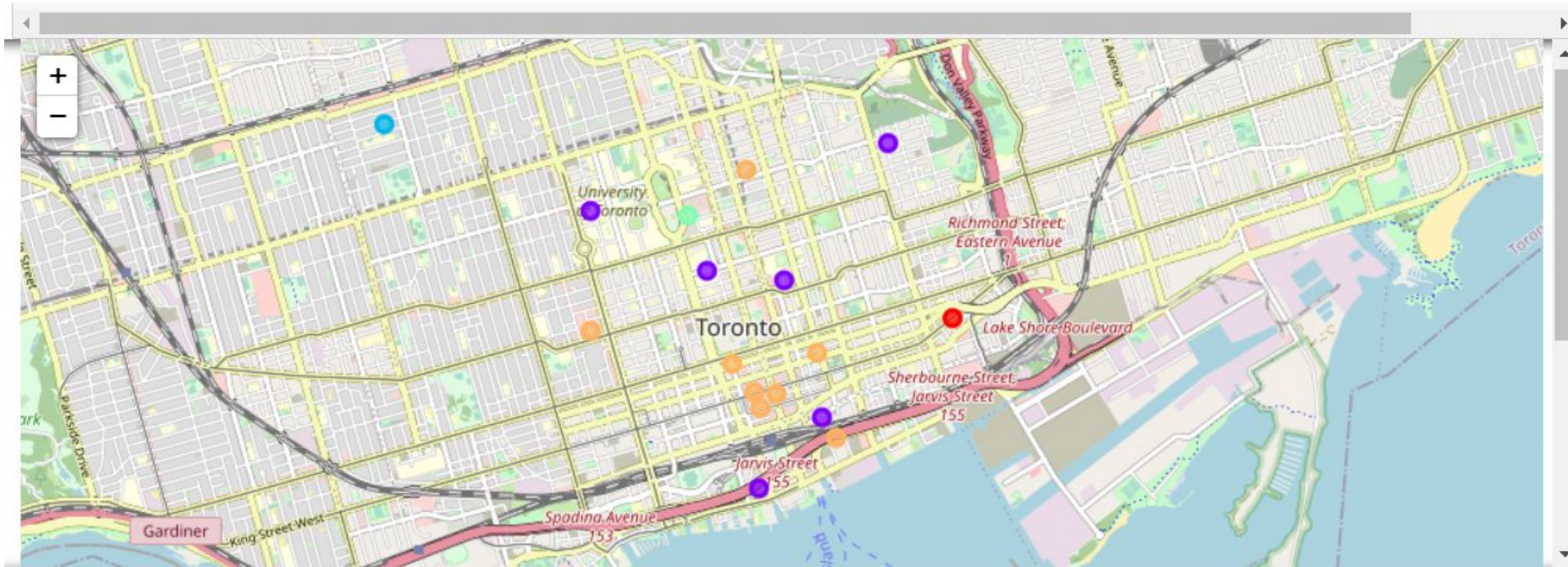


# Cluster 5

```
# Cluster 5
tor_merged.loc[tor_merged['Cluster Labels'] == 4, tor_merged.columns[[2] + list(range(6, tor_merged.shape[1]))]]
```

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue	11th Most Common Venue	12 C
1	Church and Wellesley	Sushi Restaurant	Japanese Restaurant	Restaurant	Mediterranean Restaurant	Indian Restaurant	Mexican Restaurant	American Restaurant	Caribbean Restaurant	Ethiopian Restaurant	Fast Food Restaurant	Afghan Restaurant	Re
4	St. James Town	American Restaurant	Italian Restaurant	Moroccan Restaurant	Restaurant	Japanese Restaurant	Vegetarian / Vegan Restaurant	Comfort Food Restaurant	Middle Eastern Restaurant	New American Restaurant	German Restaurant	Seafood Restaurant	Re
5	Berczy Park	Seafood Restaurant	Restaurant	Thai Restaurant	Greek Restaurant	Sushi Restaurant	Vegetarian / Vegan Restaurant	Japanese Restaurant	French Restaurant	Comfort Food Restaurant	Eastern European Restaurant	Vietnamese Restaurant	D Re
7	Richmond, Adelaide, King	Restaurant	Thai Restaurant	American Restaurant	Sushi Restaurant	Modern European Restaurant	Gluten-free Restaurant	Vegetarian / Vegan Restaurant	Latin American Restaurant	Mediterranean Restaurant	Colombian Restaurant	Fast Food Restaurant	A Re
9	Toronto Dominion Centre, Design Exchange	Restaurant	American Restaurant	Japanese Restaurant	Italian Restaurant	Seafood Restaurant	Asian Restaurant	Sushi Restaurant	Chinese Restaurant	Fast Food Restaurant	Vegetarian / Vegan Restaurant	French Restaurant	A Re
10	Commerce Court, Victoria Hotel	Restaurant	American Restaurant	Seafood Restaurant	Italian Restaurant	Japanese Restaurant	Thai Restaurant	Vegetarian / Vegan Restaurant	French Restaurant	Latin American Restaurant	Asian Restaurant	Gluten-free Restaurant	A Re
12	Kensington Market, Chinatown, Grange Park	Vietnamese Restaurant	Vegetarian / Vegan Restaurant	Mexican Restaurant	Comfort Food Restaurant	Japanese Restaurant	Filipino Restaurant	Dumpling Restaurant	Dim Sum Restaurant	Doner Restaurant	Caribbean Restaurant	Belgian Restaurant	Co Re
14	First Canadian Place, Underground city	Restaurant	Japanese Restaurant	American Restaurant	Asian Restaurant	Seafood Restaurant	Thai Restaurant	Sushi Restaurant	Colombian Restaurant	Fast Food Restaurant	Mediterranean Restaurant	Vegetarian / Vegan Restaurant	Re

# Final Map





# Conclusion

Hence by using publically available data we analyzed the best areas for a Mexican Restaurant in Toronto Downtown area.

The focus of this project waas to explore the Downtown Toronto neighborhoods that will be extracted and analyzed accordingly. By using the Foursquare API we obtained the geographical location data for Downtown Toronto, and explored the restaurant venues in the neighbourhods.

Now that the places for Venues for Mexican eatery in Downtown is mapped it will be utilized by my client for his Business expansion.

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