

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

Neighbourhood Recommendation

Problem Definition

- ▶ Client currently lives in Forest Hill West neighbourhood of Central Toronto
- ▶ He is tired of the fast pace of central Toronto and wants to move out of the neighbourhood
- ▶ Still wants to be within commuting distance from Central Toronto
- ▶ Has Identified Etobicoke as the Ideal Borough to move to
- ▶ Want a recommendation of neighbourhoods similar to Forrest hill to move to

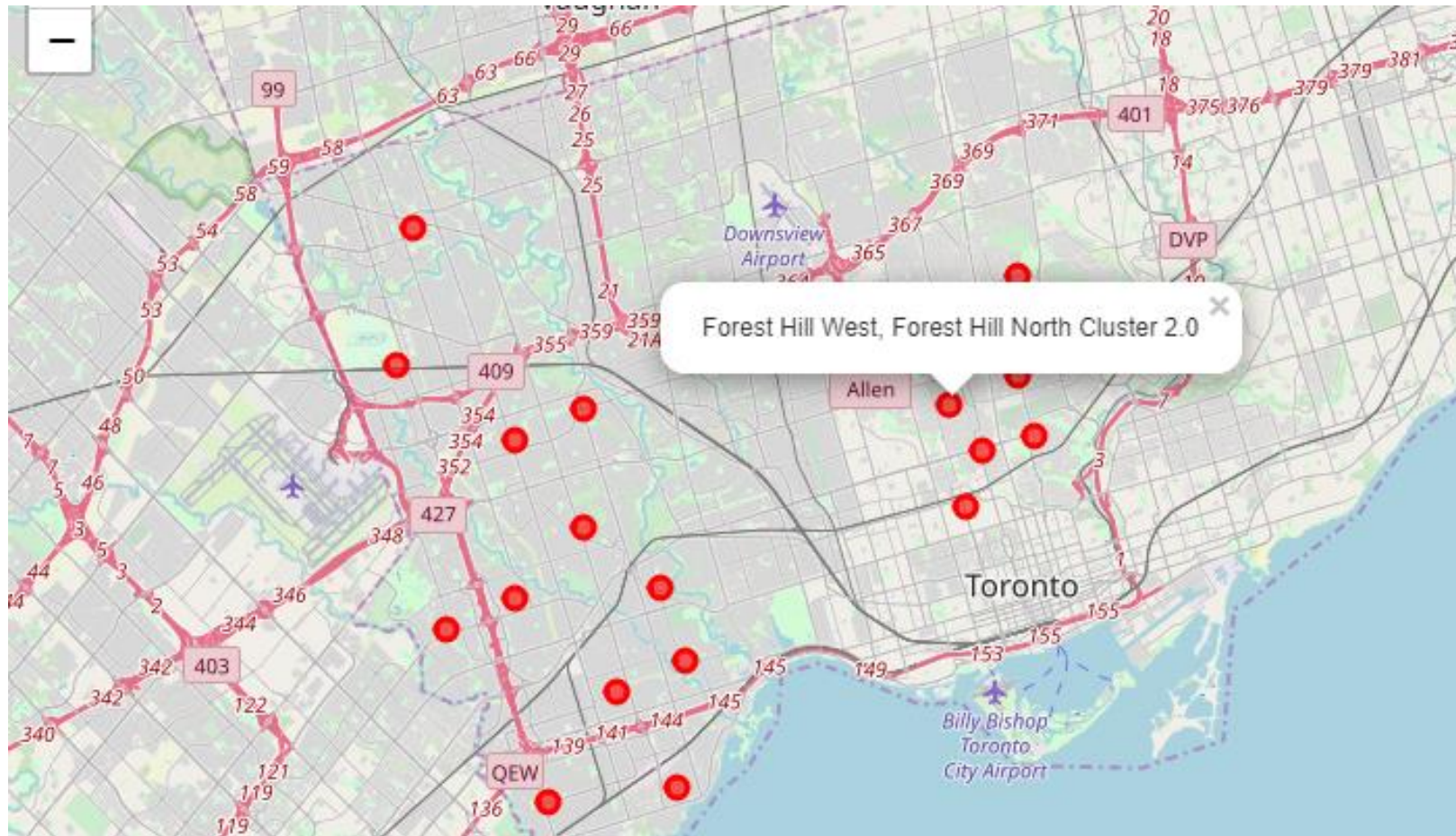
Data Acquisition

- ▶ Toronto boroughs and post codes were obtained by scrapping Wikipedia page:
- ▶ https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M
- ▶ Total of 211 post codes in 12 boroughs were obtained
- ▶ Location data of places in the boroughs were obtained from foursquare

Creating clusters

- ▶ The neighbourhoods in central Toronto and Etobicoke were filtered and extracted from the dataframe
- ▶ The filtered neighbourhoods were segmented into four clusters using kmeans
- ▶ Forest Hill West is in cluster 2

Four clusters covering Central Toronto and Etobicoke

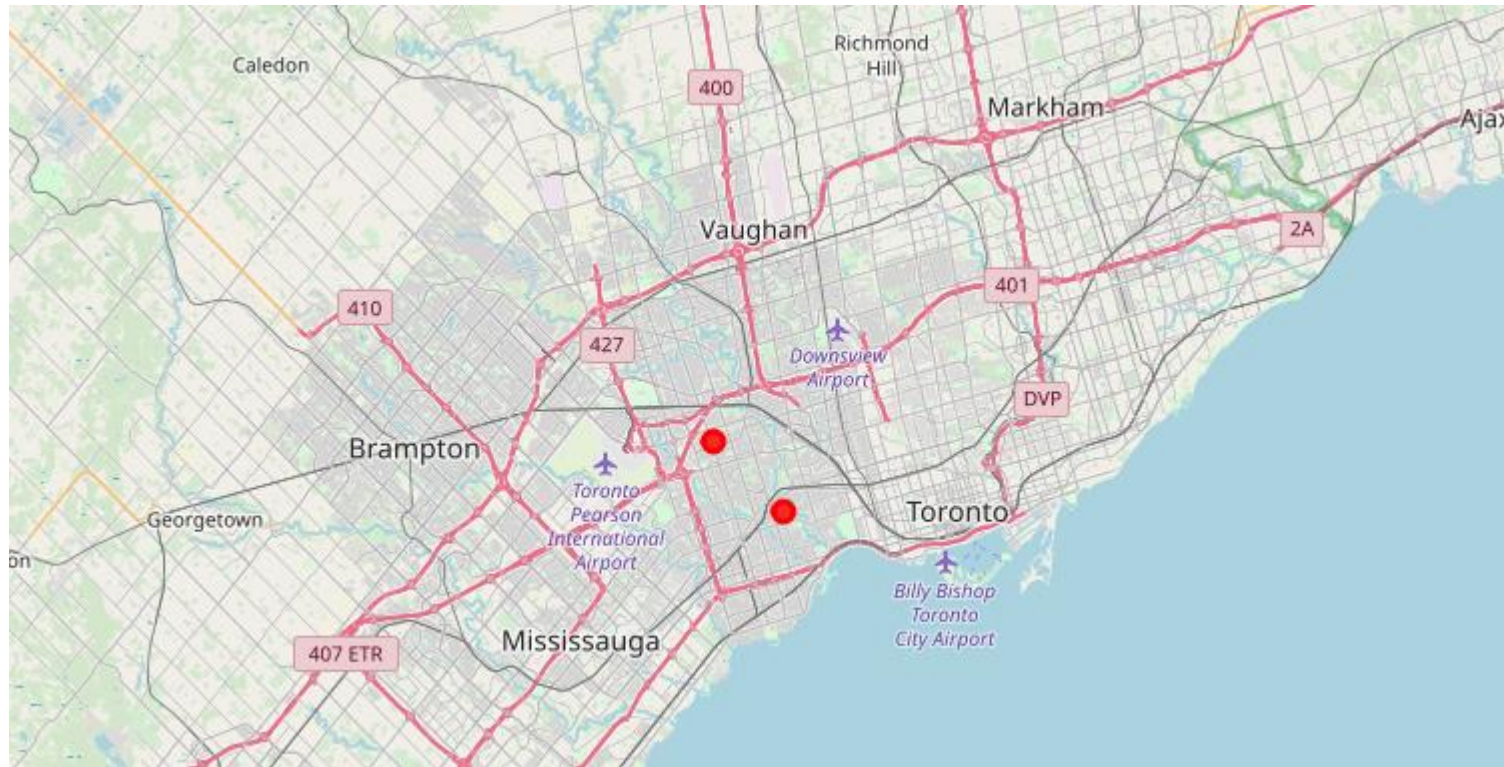


Potential Neighbourhoods

- ▶ A shortlist of potential neighbourhoods was obtained by searching for Etobicoke neighbourhoods in cluster 2
- ▶ Two postcodes fit this criteria: **M8X** and **M9R**

| | Postcode | Borough | Neighbourhood | Latitude | Longitude | Cluster Labels | 1st Most Common Venue |
|----|----------|-----------|---|-----------|------------|----------------|-----------------------|
| 11 | M8X | Etobicoke | The Kingsway, Montgomery Road, Old Mill North | 43.653654 | -79.506944 | 2.0 | Park |
| 18 | M9R | Etobicoke | Richview Gardens, Kingsview Village, St. Phill... | 43.688905 | -79.554724 | 2.0 | Park |

Cluster 2 neighbourhoods in Etobicoke



Italian Restaurant in M8X

| | name | categories | address | cc | city | country | crossStreet | distance | formattedAddress | labeledLatLngs | lat | lng | postalCode |
|---|--------------------------------|--------------------|---------------------|----|-----------|---------|---------------|----------|--|---|-----------|------------|------------|
| 0 | Big Slice Express Italian Food | Italian Restaurant | 8/9-3391 Bloor St W | CA | Etobicoke | Canada | Islington Ave | 1683 | [8/9-3391 Bloor St W (Islington Ave), Etobicoke] | [{'label': 'display', 'lat': 43.644466, 'lng': -79.523542}] | 43.644466 | -79.523542 | M8X 1B3 |

Italian restaurant in M9R

| | name | categories | address | cc | city | country | crossStreet | distance | formattedAddress | labeledLatLngs | lat | lng | postal |
|---|-----------------------------|--------------------|-------------|----|---------|---------|-------------|----------|---|---|-----------|-----------|--------|
| 0 | Jolly II Italian Restaurant | Italian Restaurant | 2625 Weston | CA | Toronto | Canada | 401 | 3173 | [2625 Weston (401), Toronto ON, Canada] | [{'label': 'display', 'lat': 43.71194605276710... | 43.711946 | -79.53151 | |

Conclusion

- From the result, the recommended neighbourhood are neighbourhoods within M8X post code. These are: The Kingsway, Montgomery Road and Old Mill North. The client may also consider M9R neighbourhoods if he does not mind travelling out of the borough since the closest Italian restaurant is outside the borough but about 3.1km away.