

# Defining best location for new apartments

# Introduction

- Canada is a popular location for exchange students.
- In order to find a place to live students have to consider:
  - Living expenses
  - Amenities
  - Transportation
- Stakeholders of a construction project are interested on making a good investment → Choose the right neighborhood in Toronto.

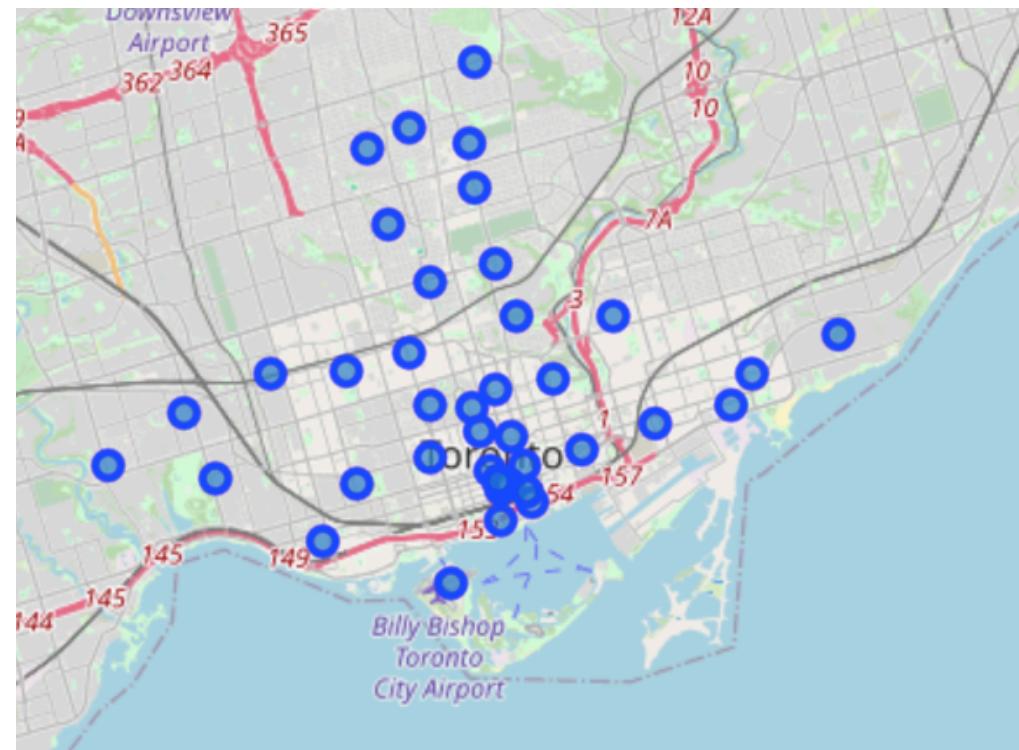
# Data Acquisition

- List of postal codes in Toronto.  
[https://en.wikipedia.org/wiki/  
List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)
- Foursquare location data.



# Methodology

1. Put data into dataframe.
2. Get Boroughs in Toronto only.



# Methodology

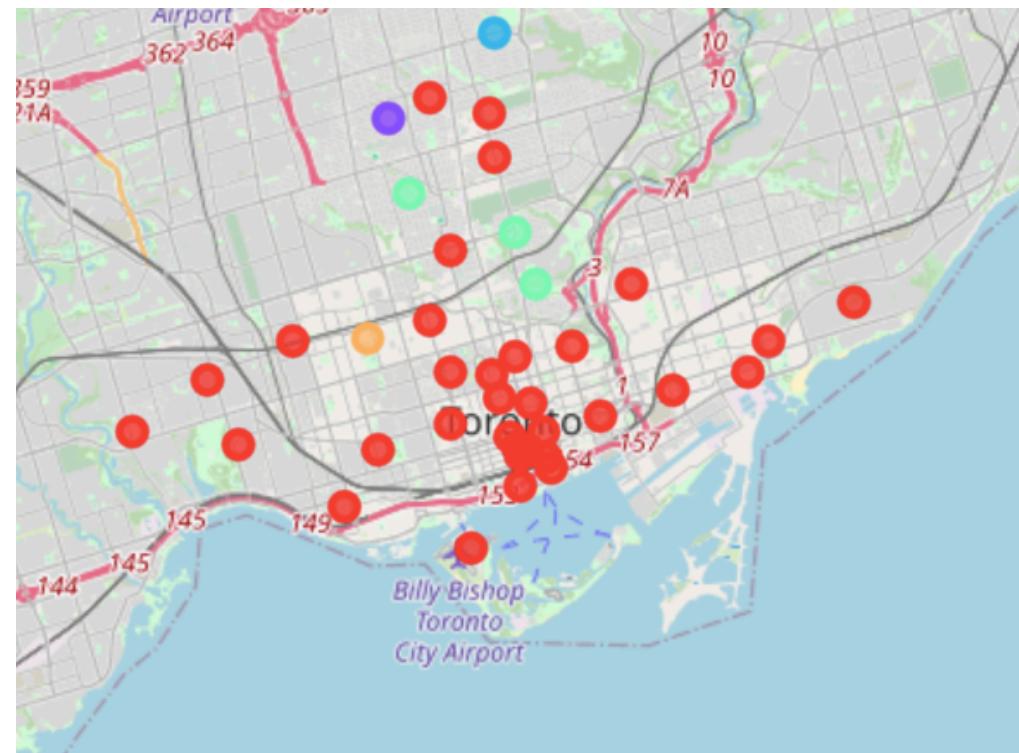
3. Look for top 10 venues on each neighborhood.

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
Park	Coffee Shop	Cocktail Bar	Beer Bar	Bakery	Seafood Restaurant	Cheese Shop	Italian Restaurant	Pub	Bar	Gas Station
Uptown, Midtown, Downtown Place	Café	Coffee Shop	Breakfast Spot	Nightclub	Gym / Fitness Center	Furniture / Home Store	Int'l Market	Bookstore	Laundromat	Gas Station
Highway Business Centre	Smoke Shop	Pizza Place	Skate Park	Brewery	Burrito Place	Farmers Market	Food Court	Gas Station	Laundromat	Gas Station
Power, Land Dina, Inds, Har...	Airport Service	Airport Terminal	Airport Lounge	Sculpture Garden	Rental Car Location	Plane	Gas Station	Laundromat	Gas Station	Gas Station

# Methodology

- Cluster neighborhoods into 5 clusters.

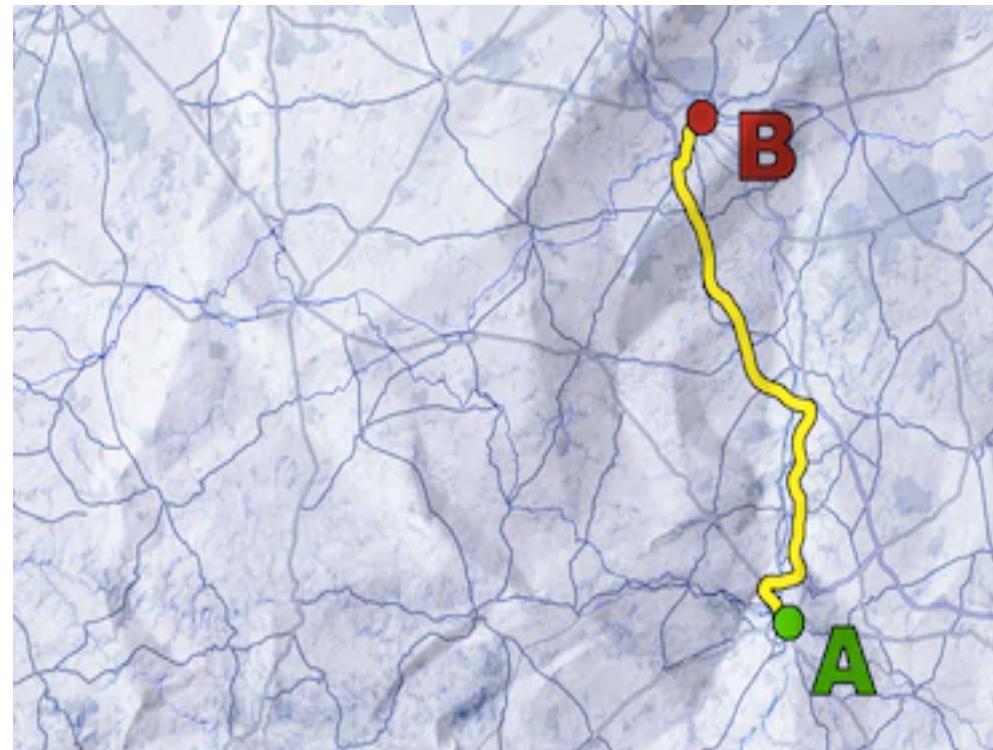
Each cluster is represented by a color.



# Methodology

4. Verify most common venues in each cluster and drop clusters with venues that are not of interest or really important for students.
5. Compute distance from University of Toronto to each neighborhood in chosen cluster.

NOTE: Only University of Toronto is taken into consideration as it has the highest amount of students.



# Results

- The cluster with more venues of interest for students is cluster 0.
- Only cluster 2 has "Bus line" as most common venues.
- The nearest neighborhood to University of Toronto in cluster 0 is Business reply mail Processing Centre.
- The furthest neighborhood to University of Toronto in cluster 0 is North Toronto West.



# Conclusion

- The top 3 neighborhoods to build apartments for students considering distance to University of Toronto and venues are:
  - University of Toronto, Harbord
  - Regent Park, Harbourfront
  - St. James Town, Cabbagetown

