The Battle of Neighborhoods (Week 2)

Capstone project

The problem

- Bus stop:
 - latitude = 43.649815
 - longitude = -79.342163
 - Many places to practise exercise like lakes and gyms
 - Not many places to eat

- Only places to eat nearby are:
- Tim Hortons and MountainViewFare trade Coffee
- And they are still pretty far...
- 637m and 609m respectively



Data

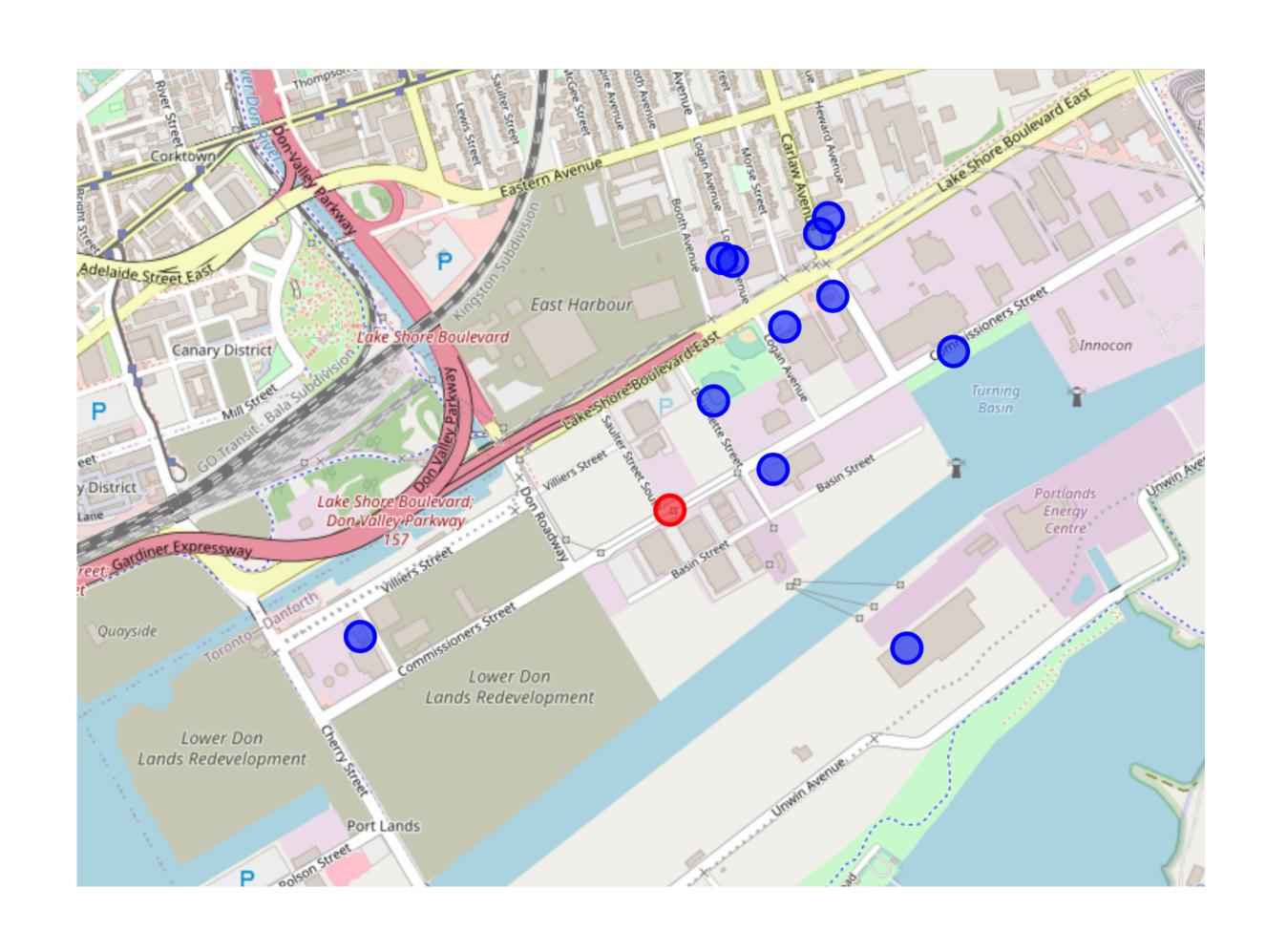
- The data used was provide by Foursquare's API
- Listing nearby locations

Methodology

Steps

- Import all the libraries necessary to run everything smoothly. Some of them are Pandas, Numpy, Request, Nominatim, Folium
- 2. Access Foursquare's API by putting information relating to Foursquare's account
- 3. Set the location we want to analyse. In the case of the project it was latitude = 43.649815 and longitude = -79.3421
- 4. Take the average between the distance of the bus stop and the spots near
- 5. Plotting map using Folium

Results Plotted map



Generated dataframe

name	categories	address	crossStreet	lat	Ing	labeledLatLngs	distance	postalCode	СС	city	state	country	fc
BATLgrounds	Athletics & Sports	33 Villiers St	Villiers St. & Cherry St.	43.647088	-79.351306	[{'label': 'display', 'lat': 43.64708818241131	796	M5A 1A9	CA	Toronto	ON	Canada	
District 28	Coworking Space	28 Logan Ave	NaN	43.655174	-79.340598	[{'label': 'display', 'lat': 43.65517388160507	609	NaN	CA	Toronto	ON	Canada	
Mayfair Racquet and Fitness Clubs	Gym	801 Lake Shore Blvd. E	NaN	43.653707	-79.338742	[{'label': 'display', 'lat': 43.65370736853231	513	NaN	CA	Toronto	ON	Canada	
Hearn Generating Station	Government Building	440 Unwin Ave.	Cherry St.	43.646847	-79.335144	[{'label': 'display', 'lat': 43.64684674617795	654	M4M 3B9	CA	Toronto	ON	Canada	
FedEx Ship Centre	Business Service	475 Commissioners St	NaN	43.650679	-79.339094	[{'label': 'display', 'lat': 43.65067908468494	265	M4M 1A5	CA	Toronto	ON	Canada	C
McCleary Park	Baseball Field	Lakeshore Blvd E	at Logan	43.652116	-79.340865	[{'label': 'display', 'lat': 43.65211581663814	276	NaN	CA	Toronto	ON	Canada	(
Tim Hortons	Coffee Shop	829 Lakeshore Blvd East	at Carlaw Ave.	43.654367	-79.337359	[{'label': 'display', 'lat': 43.6543669, 'lng'	637	M4M 1B2	CA	Toronto	ON	Canada	(
MountainView Fare trade Coffee	Coffee Shop	26 Logan Ave	Lakeshore Blvd	43.655125	-79.340321	[{'label': 'display', 'lat': 43.65512520233044	609	M4M 2M8	CA	Toronto	ON	Canada	Т
Habitat For Humanity ReStore	Department Store	3 Carlaw Avenue	NaN	43.655695	-79.337724	[{'label': 'display', 'lat': 43.65569451448676	745	NaN	CA	Toronto	ON	Canada	
Bayside Rowing Club	Lake	525 Commissioners St.	Carlaw Ave	43.653188	-79.333794	[{'label': 'display', 'lat': 43.653188, 'lng':	771	NaN	CA	Toronto	ON	Canada	C
Fortis Fitness	Gym	11 Carlaw Ave	Carlaw and Lakeshore	43.656052	-79.337474	[{'label': 'display', 'lat': 43.65605217441838	790	M4M 2R6	CA	Toronto	ON	Canada	
	BATLgrounds District 28 Mayfair Racquet and Fitness Clubs Hearn Generating Station FedEx Ship Centre McCleary Park Tim Hortons MountainView Fare trade Coffee Habitat For Humanity ReStore Bayside Rowing Club	BATLgrounds Sports District 28 Coworking Space Mayfair Racquet and Fitness Clubs Hearn Generating Station FedEx Ship Centre McCleary Park Tim Hortons MountainView Fare trade Coffee Shop Habitat For Humanity ReStore Bayside Rowing Club Athletics & Sports Goworking Space Gym Gym Business Service Baseball Field Coffee Shop Coffee Shop Department Store	BATLgrounds Athletics & Sports 28 Logan Ave Space 28 Logan Ave Space 28 Logan Ave Space 28 Logan Ave Space 301 Lake Shore Blvd. E Shore Blvd. E Station Building 440 Unwin Ave. Station Station Service Commissioners St McCleary Park Field Lakeshore Blvd Field Tim Hortons Coffee Shop Blvd East MountainView Fare trade Coffee Shop Coffee Shop Store Blvd East Avenue ReStore Bayside Rowing Club Lake Commissioners St Store Store Shop Store Shop Store Shop Store Shop Store Store Shop Store Shop Store Store Shop Shop Store Shop Store Shop Store Shop Shop Store Shop Shop Shop Shop Shop Shop Shop Shop	BATLgrounds Athletics & Sports 33 Villiers St. & Cherry St. District 28 Coworking Space 28 Logan Ave NaN Mayfair Racquet and Fitness Clubs Government Building Station Generating Station Building 440 Unwin Ave. Cherry St. FedEx Ship Centre Business Service Commissioners St NaN McCleary Baseball Lakeshore Blvd E at Logan E at Carlaw Ave. MountainView Fare trade Coffee Shop Coffee Shop Blvd East Ave. MountainView Fare trade Coffee Shop Coffee Shop Coffee Shop Shop Shop Shop Shop Shop Shop Shop	BATLgrounds Athletics & Sports 33 Villiers St. Villiers St. & 43.647088 District 28 Coworking Space 28 Logan Ave NaN 43.655174 Mayfair Racquet and Fitness Clubs Space Shore Blvd. E NaN 43.653707 Bear Station Sta	BATLgrounds Athletics & Sports 33 Villiers St. Cherry St. 43.647088 -79.351306 District 28 Coworking Space 28 Logan Ave Space NaN 43.655174 -79.340598 Mayfair Racquet and Fitness Clubs Gym Space 801 Lake Shore Blvd. E NaN 43.653707 -79.338742 Hearn Generating Station Government Building 440 Unwin Ave. Cherry St. 43.646847 -79.335144 FedEx Ship Centre Business Service Commissioners St NaN 43.650679 -79.339094 McCleary Park Baseball Field Lakeshore Blvd E at Logan 43.652116 -79.340865 Tim Hortons Coffee Shop 829 Lakeshore Blvd East at Carlaw Ave. 43.654367 -79.337359 MountainView Fare trade Coffee Coffee Coffee Shop 26 Logan Ave Lakeshore Blvd Ave. 43.655125 -79.340321 Habitat For Humanity ReStore Department Store Avenue NaN 43.655185 -79.337724 Fortis Eitness Carlaw Ave. Carlaw Ave. 43.653188 -79.3337744	BATLgrounds Athletics & Sports 33 Villiers St. Cherry St. Cherry St. Cherry St. Cherry St. 43.647088 -79.351306 [['label': 'display', 'lat': 43.64708818241131] District 28 Coworking Space 28 Logan Ave Shore Blvd. E NaN 43.655174 -79.340598 [['label': 'display', 'lat': 43.65517388160507] Mayfair Racquet and Fitness Clubs Gym Shore Blvd. E NaN 43.653707 -79.338742 [['label': 'display', 'lat': 43.656370736853231] Hearn Generating Station Government Building 440 Unwin Ave. Cherry St. 43.646847 -79.335144 [['label': 'display', 'lat': 43.65067908468494] FedEx Ship Centre Business Service Commissioners St NaN 43.650679 -79.339094 [['label': 'display', 'lat': 43.65067908468494] MCCleary Park Park Field Lakeshore Blvd E at Logan 43.652116 -79.340865 [['label': 'display', 'lat': 43.65367908468494] MountainView Fare trade Coffee Shop Coffee S	BATLgrounds	BATLgrounds	BATLgrounds	BATLgrounds	BATLgrounds	BATLgrounds

Conclusion

- The location studied does not have many places to eat
- A restaurant near the bus stop at around 100m would be ideal since there are many gyms, a lake and a Baseball field