

The Battle of the Neighborhoods - Week 1

Data:

In this project, *New York City* will be analyzed. We will be using the below datasets for analyzing New York City.

Data 1: Neighborhood has a total of 5 boroughs and 306 neighborhoods. In order to segment the neighborhoods and explore them, we will essentially need a dataset that contains the five boroughs and the neighborhoods that exist in each borough as well as the latitude and longitude coordinates of each neighborhood. This dataset exists free on the web. Link to the dataset is:

https://geo.nyu.edu/catalog/nyu_2451_34572

Table below shows some data attracted from the above link:

Table 1: Some Boroughs & Neighborhoods of New York City

	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585
5	Bronx	Kingsbridge	40.881687	-73.902818
6	Manhattan	Marble Hill	40.876551	-73.910660
7	Bronx	Woodlawn	40.898273	-73.867315
8	Bronx	Norwood	40.877224	-73.879391
9	Bronx	Williamsbridge	40.881039	-73.857446

Data 2: New York City geographical coordinates data will be utilized as input for the Foursquare API that will be leveraged to provision venues information for each neighborhood. We will use the Foursquare API to explore neighborhoods in New York City. The below is image of the Foursquare API data.

Each data point in this project is presented for the City's 306 neighborhoods, as well as for the City of Toronto as a whole. The data is sourced from several Census tables released by Statistics. For mapping the New York City neighborhoods shapes, we will use GeoJSON File

Table 2: Some Venues & Their Categories of New York City

	name	categories	lat	lng
0	Fish & Ting	Caribbean Restaurant	40.885539	-73.829151
1	Cozy Cottage Restaurant	Diner	40.886332	-73.827616
2	Mario's Pizza	Pizza Place	40.888628	-73.831260
3	Dyre Fish Market	Seafood Restaurant	40.889318	-73.831453
4	Taco Bell	Fast Food Restaurant	40.883029	-73.824901
5	Dyre Deli Grocery	Deli / Bodega	40.888235	-73.831282
6	HomeGoods	Furniture / Home Store	40.890814	-73.820849
7	Smashburger	Burger Joint	40.890172	-73.820584
8	St. Paul's Church National Historic Site	Historic Site	40.893482	-73.825328
9	Dunkin'	Donut Shop	40.885384	-73.828099

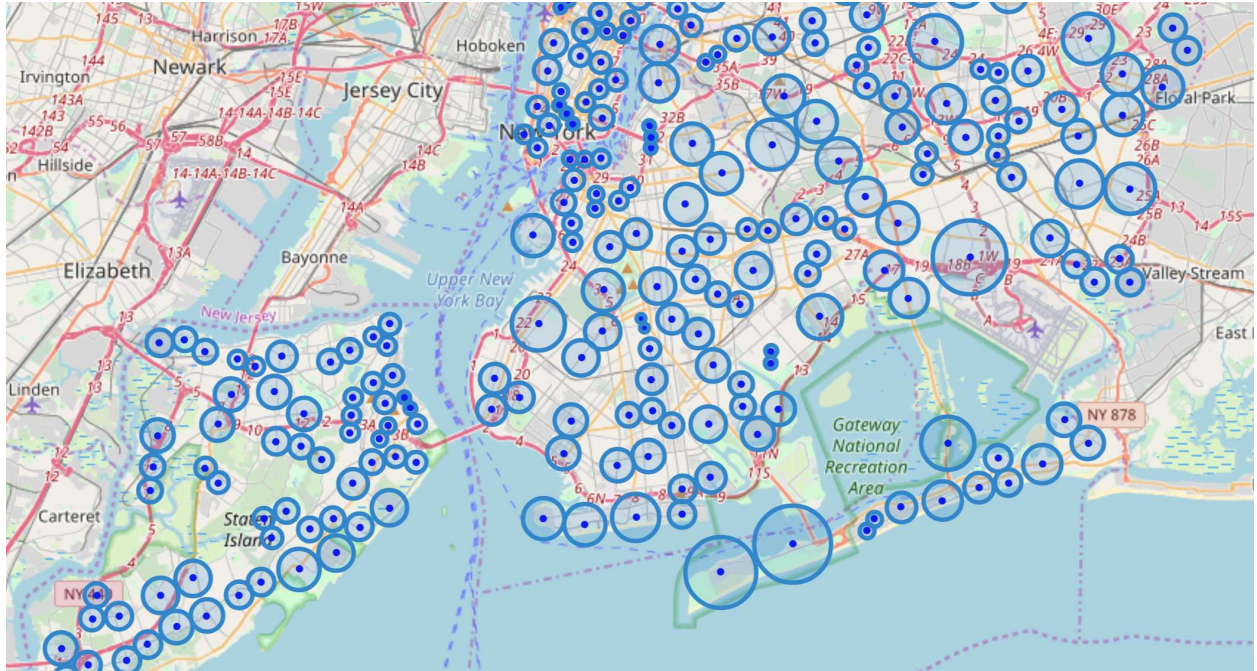


Figure 1: Some Neighborhoods of New York City with Their Distances