

# Capstone project final Assignment: Battle of Neighborhoods

## New York City vs Toronto vs Paris

For week #1, you will required to submit the following:

### A description of the problem and a discussion of the background. (15 marks)

**\*\*>\*\*** Compare the neighborhoods of the three multicultural cities and determine how similar or dissimilar they are. Is New York City more like Toronto or Paris?  
**\*\*>\*\*** Discover the cities and their neighborhoods for planning travel

### A description of the data and how it will be used to solve the problem. (15 marks)

**(1)** The data for the three cities include neighborhoods, Borough, Geographical Latitude and Longitude; Foursquare is used for exploring cities and neighborhoods.  
>> **New York City:** 'newyork\_data.json' downloaded from [https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-DS0701EN-SkillsNetwork/labs/newyork\\_data.json](https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBMDeveloperSkillsNetwork-DS0701EN-SkillsNetwork/labs/newyork_data.json)  
>> **Toronto:** url '[https://en.wikipedia.org/wiki/List\\_of\\_postal\\_codes\\_of\\_Canada:\\_M](https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M)' and 'Geospatial\_Coordinates.csv'  
>> **Paris:** correspondances-code-insee-code-postal.json downloaded from <https://www.data.gouv.fr/fr/datasets/r/e88c6fda-1d09-42a0-a069-606d3259114e>

**(2)** Data Analysis:  
>> Wrangler the data of the neighborhood data with Pandas Dataframe  
>> Explore neighborhoods with Foursqure  
>> Visualize using folium map rendering library  
>> Combine data of all three cities for clustering analysis  
>> Cluster and segmentation the neighborhoods of all the three cities together using K-Means method  
>> Examine the cluster and show the similarities/disimilarities</font>

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