

# **Capstone Project - The Battle of Neighbourhoods**

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### **Data**

For this project we need the following data :

- New York City data that contains list Boroughs, Neighbourhoods along with their latitude and longitude.
  - Data source : [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)
  - Description : This data set contains the required information. And we will use this data set to explore various neighbourhoods of New York city.
- Indian restaurants in each neighbourhood of new york city.
  - Data source : Foursquare API
  - Description : By using this api we will get all the venues in each neighbourhood. We can filter these venues to get only Indian restaurants.
- GeoSpace data
  - Data source : <https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm>
  - Description : By using this geo space data we will get the New York Borough boundaries that will help us visualize choropleth map.

### **Approach**

- Collect the New York city data from [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset)
- Using FourSquare API we will find all venues for each neighbourhood.
- Filter out all venues that are Indian Restaurants.
- Find rating , tips and like count for each Indian Restaurants using FourSquare API.
- Using rating for each restaurant, we will sort that data.
- Visualize the Ranking of neighbourhoods using folium library(python)

We will import the required libraries for python.

- pandas and numpy for handling data.
- request module for using FourSquare API.
- geopy to get co-ordinates of City of New York.
- folium to visualize the results on a map