

# **The Battle of Neighborhoods: Capstone Project**

## **Opening a bakery in a convenient neighborhood in New York City**

### **Data Section**

Data used in any case under study is directly related with how deep someone considers in needed to go.

In this case, a dataset that contains Borough, Neighborhoods of New York City with their latitudes and longitudes will be use. The source of this dataset is [https://cocl.us/new\\_york\\_dataset](https://cocl.us/new_york_dataset). This dataset will help to explore the neighborhoods and start to answer the question: What is the best neighborhood should be considered to open a bakery.

The output of the exploring is:

First, latitude and longitude of every neighborhood.

Second, the borough with more neighborhood

Third, The map-visualization of neighborhoods in the borough with more neighborhood.

Other dataset that will be explored is one that helps to analyze the population, the Gross Domestic Product, and the density of people in every borough. It is supposed that a borough with more population, a higher GDP, and a higher density is a good option to open the business considering the approach chosen.

The source of this dataset is

[https://en.wikipedia.org/wiki/Demographics\\_of\\_New\\_York\\_City](https://en.wikipedia.org/wiki/Demographics_of_New_York_City)

The output of the exploring is: Population, GDP, and density of every borough in New York City. It will help to analyze this indicator and make the best choice.

After chose the best borough, Foursquare API will be used to get all venues in that borough and filter the neighborhoods with bakeries.

To make the filter, Foursquare Categories for developers will be used:  
<https://developer.foursquare.com/docs/resources/categories>.

The output of this link is:

First, the code to filter businesses by classification using the foursquare methods  
`getNearbyVenues()`

Second, the map-visualization of bakeries and other businesses in the  
neighborhoods of the borough chosen.

Finally, number of neighborhoods, population, GDP, density, the average of  
bakery in a neighborhood and residential areas will be the indicator to choice the  
most convenient neighborhood to open a bakery.