

## **Battle of the Neighborhoods**

### **Problem Statement**

In this project, we are required to pick the best location to open a new coffee shop among all the communities in both New York and Paris. We determine the best location using the following criteria -

1. The coffee shop needs to operate in a location without too much competition.
2. The owner of the shop needs to maximize profit and hence wants places with maximum possible population of the results from condition 1.

To solve this problem, we would need to first get information about the neighborhoods, populations, and locations (longitude and latitude) of both New York and Paris.

We would then collect information about the number of coffee shops in each of the neighborhoods using the foursquare API and the coordinates collected initially, while also calculating the population of the neighborhood is being served by each coffee shop.

Finally, we compare the maximum possible profit for each neighborhood and decide to open the coffee shop in the one promising the maximum profit.

For this project, we assume both neighborhoods are similar in terms of spending power and other necessary demographics. We also assume the population listed in the table all get the same amount of coffee daily.

This project would prove useful in choosing the area to cite a business venture.