# THE BATTLE OF NEIGHBOURHOODS

FRENCH RESTAURANTS IN NEW YORK

By, Piyush Sambhi

# INTRODUCTION:

New York City's demographics show that it is a large and ethnically diverse metropolis. It is the largest city in the United States.

New York City has also been a major point of entry for immigrants.

800 languages are spoken in New York, making it the most linguistically diverse city in the world.

#### French Population in New York

- The French Embassy estimates that about 75,000 French citizens live in the New York metropolitan area.
- 60,000 French citizens and over 81,000 French speakers live in New York, but have no such hub.
- French is the fourth most spoken language in New York.
- New Yorkers are extreme francophiles: they love French culture, food, cinema.
- The French presence is felt through the hundreds of French shops and restaurants.

### **PROBLEM:**

The objective is to locate and recommend which neighbourhood in New York City will be best choice to start a new French restaurant.

- List and visualize all major parts of New York City that has great French restaurants.
- What is best location in New York City for French Cuisine?
- Which areas have potential French Restaurant Market?
- Which all areas lack French Restaurants?
- Which is the best place to stay if you prefer French Cuisine?

# **DATA SECTION:**

#### For this project we need the following data:

- 1. New York City data contains list Boroughs, Neighbourhoods along with their latitudes and longitudes.
- Data source : <a href="https://cocl.us/new\_york\_dataset">https://cocl.us/new\_york\_dataset</a>
- Description: This data set contains the required information. we will use this data set to explore various neighbourhoods of New York City.

#### 2. French 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, then filter these venues to get only French restaurants.

#### 3. GeoSpace data

Data source: <a href="https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm">https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-j8zm</a>
Description: By using this geo space data we will get the New York Borough boundaries that will help us visualize choropleth map.

### **METHODOLOGY:**

- We begin by collecting the New York city data from the following link "https://cocl.us/new\_york\_dataset"
- Find all venues for each neighbourhood using Foursquare API.
- Filter out all venues with Indian restaurant for further analysis.
- Next using Foursquare API, we will find the Ratings, Tips, and Number of Likes for all the French Restaurants.
- Sort Neighbourhoods and Borough data keeping Ratings as the constraint.
- Next we will consider all the neighbourhoods with average rating greater or equal 8.0 to visualize on map.
- We will join this dataset to original New York data to get longitude and latitude.
  - Finally, we will visualize the Neighbourhoods and Borough based on average Rating using python's Folium library.

## **CONCLUSION:**

The following location in New York City has great French restaurants.

88	Borough	Neighborhood	Latitude	Longitude	Average Rating
26	Brooklyn	South Side	40.710861	-73.958001	9.00
16	Manhattan	Greenwich Village	40.726933	-73.999914	9.00
21	Manhattan	Midtown	40.754691	-73.981669	8.90
13	Manhattan	East Harlem	40.792249	-73.944182	8.90
7	Staten Island	Chelsea	40.594726	-74.189560	8.90
6	Manhattan	Chelsea	40.744035	-74.003116	8.90
19	Manhattan	Lower East Side	40.717807	-73.980890	8.85
29	Manhattan	Yorkville	40.775930	-73.947118	8.80
28	Brooklyn	Windsor Terrace	40.656946	-73.980073	8.80
24	Brooklyn	North Side	40.714823	-73.958809	8.70

- 1. Manhattan, Brooklyn and Bronx are the best Borough for French cuisine.
- 2. Manhattan have the best potential for French Restaurant Market.
- 3. Brooklyn has the best likes and ratings for French Restaurants.
- 4. Both Manhattan and Brooklyn are the best place to stay if you prefer French Cuisine.