IBM Data Science Capstone Project

BATTLE OF NEIGHBORHOOD RESTAURANTS IN PARIS

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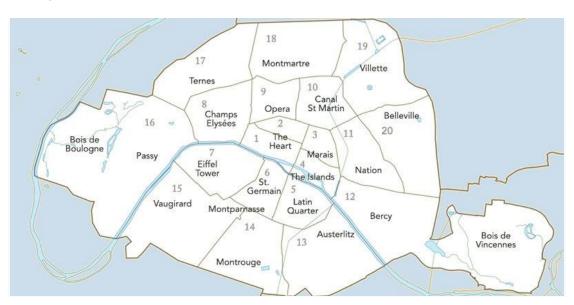
Introduction

Paris is the capital and most populous city of France, with an estimated population of 2,175,601 residents as of 2018, in an area of more than 105 square kilometres (41 square miles). Since the 17th century, Paris has been one of Europe's major centres of finance, diplomacy, commerce, fashion, science, arts and gastronomy

Paris received 38 million visitors in 2019, measured by hotel stays, with the largest numbers of foreign visitors coming from the United States, the United Kingdom, Germany, and China. It was ranked as the second most visited travel destination in the world in 2019, after Bangkok and just ahead of London.

The city of Paris is divided into twenty administrative districts called arrondissements. The twenty arrondissements are arranged in the form of a clockwise spiral (often likened to a snail shell), starting from the middle of the city, with the first on the Right Bank (north bank) of the Seine.

In French, notably on street signs, the number is often given in Roman numerals. For example, the Eiffel Tower belongs to the VIIe arrondissement while Gare de l'Est is in the Xe arrondissement.

Each Parisian arrondissement has four neighborhoods, so a total of 80, which constitute the highest level of public administration in Paris.

As a resident in a suburb near the capital, I chose the city of Paris to lead my project.

Indeed, with my wife, we often walk in the districts of Paris and each time, we wonder what types of restaurants we could find in the districts of our walks in order to have lunch or to dine there.

Using an unsupervised learning model, which groups neighborhoods according to the types of restaurants that are present there, could help us choose our walks.

Data

To carry out this project, I needed the following data :

- List of Parisian districts (arrondissements in French) as well as the list of Parisian neighborhoods

- Geo-coordinates of the districts in Paris

- Top venues of districts

List of Parisian districts and neighborhoods will be imported from the Open Data site of the city of Paris (https://fr.wikipedia.org/wiki/Liste_des_quartiers_administratifs_de_Paris)

Geo-coordinates of districts will be obtained with the help of the geocoder tool in the notebook.

Top venues data will be obtained from Foursquare through an API.

Methodology
Results
Discussion
Conclusion
References Acknowledgement & Sources

REFERENCES

Source : https://en.wikipedia.org/wiki/Arrondissements_of_Paris

Source : https://www.parisinsidersguide.com/paris-neighborhoods.html

Source : https://fr.wikipedia.org/wiki/Liste_des_quartiers_administratifs_de_Paris

LINKS:

The notebook with the code for this project, as well as the report, can be found in my github repository.