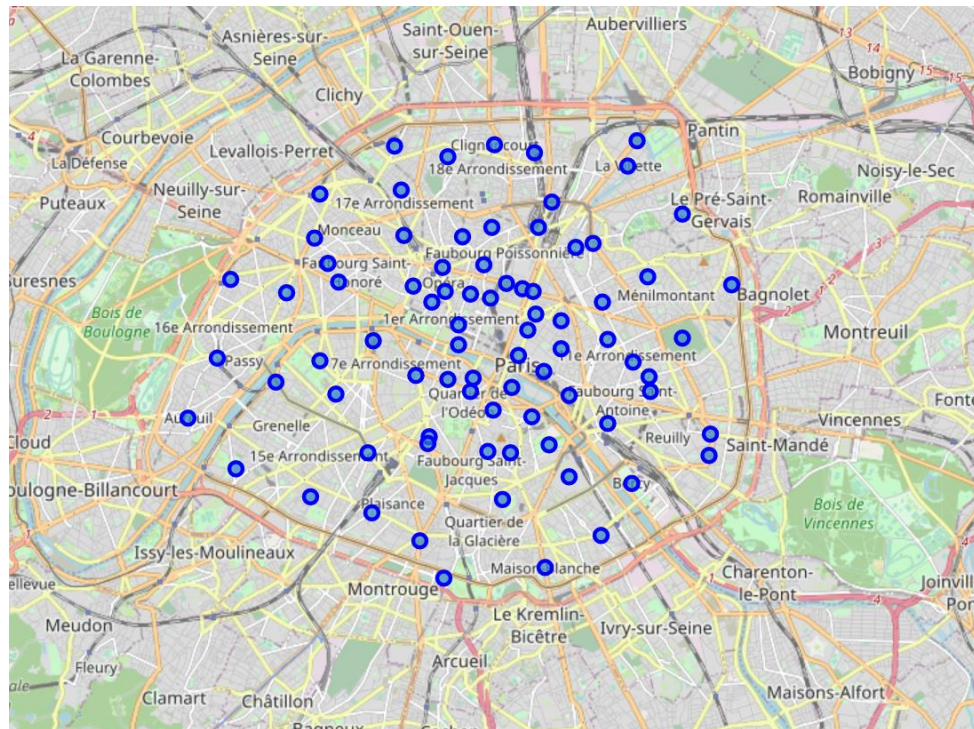


Coursera Capstone Project

The Battle of Neighborhoods

October 19th 2020

Recommendation of borough in Paris to open a Restaurant



1. INTRODUCTION

Find the location of a new business like a restaurant is a difficult choice and an important one. Paris already has a lot of restaurants and the choice of the place is not an easy task: the number of potential customers around should be high enough, the rivals should not be too abundant, ... A lot criterion should be examined to choose this place. Another point is the type of food which will be served.

Here we will focus on the choice of a borough of Paris taking into consideration the number of rivals in this borough and the density of residents in this area. For a 1st approach to the problem, we will not differentiate the kind of restaurant.

2. DATA

The first data used to solve this problem is the list of the borough of Paris that we find on Wikipedia with de Density of residents in each borough: Paris as 80 boroughs.

	Arrondissement[1],[n 1]	Quartiers	Quartiers.1	Population en1999 (hab.)[2]	Superficie(ha)[2]	Densitéhab/km2
0	1er arrondissementdit « du Louvre »	1er	Saint-Germain-l'Auxerrois	1 672	869	1 924
1	1er arrondissementdit « du Louvre »	2e	Halles	8 984	412	21 806
2	1er arrondissementdit « du Louvre »	3e	Palais-Royal	3 195	274	11 661
3	1er arrondissementdit « du Louvre »	4e	Place-Vendôme	3 044	269	11 316
4	2e arrondissementdit « de la Bourse »	5e	Gaillon	1 345	188	7 154
5	2e arrondissementdit « de la Bourse »	6e	Vivienne	2 917	244	11 955

Table 1-Borough of Paris (five first rows)

Then, our main data will be geolocation data collected from FourSquare. For each borough, we will request the 100 best venues in a 600m radius. After processing these data from FourSquare, we will obtain only the restaurants in this area and work on this data to analyze the area.

	Borough	Latitude	Longitude	VenueName	VenueLatitude	VenueLongitude	VenueCategory
17	Saint-Germain-l'Auxerrois	48.860211	2.336299	LouLou	48.862804	2.333500	Italian Restaurant
31	Saint-Germain-l'Auxerrois	48.860211	2.336299	Boutique yam'Tcha	48.861710	2.342380	Chinese Restaurant
40	Saint-Germain-l'Auxerrois	48.860211	2.336299	Sanukiya	48.864713	2.333805	Udon Restaurant
43	Saint-Germain-l'Auxerrois	48.860211	2.336299	Le Restaurant de L'Hôtel	48.856192	2.335133	French Restaurant
46	Saint-Germain-l'Auxerrois	48.860211	2.336299	Le Pot de Vins	48.864322	2.340193	Restaurant

Table 2 - Restaurants data