APPLIED DATA SCIENCE CAPSTONE

DANDIGNA Jérôme

The problem

- If you had to open a sushi restaurant,what would be the best location (=> freest location)?

The data

○ To solve this problem, we will need different kinds of data :

- Geopy/ Google maps API: to get geographic coordinates

- Foursquare API : to explore venues in the city of Paris

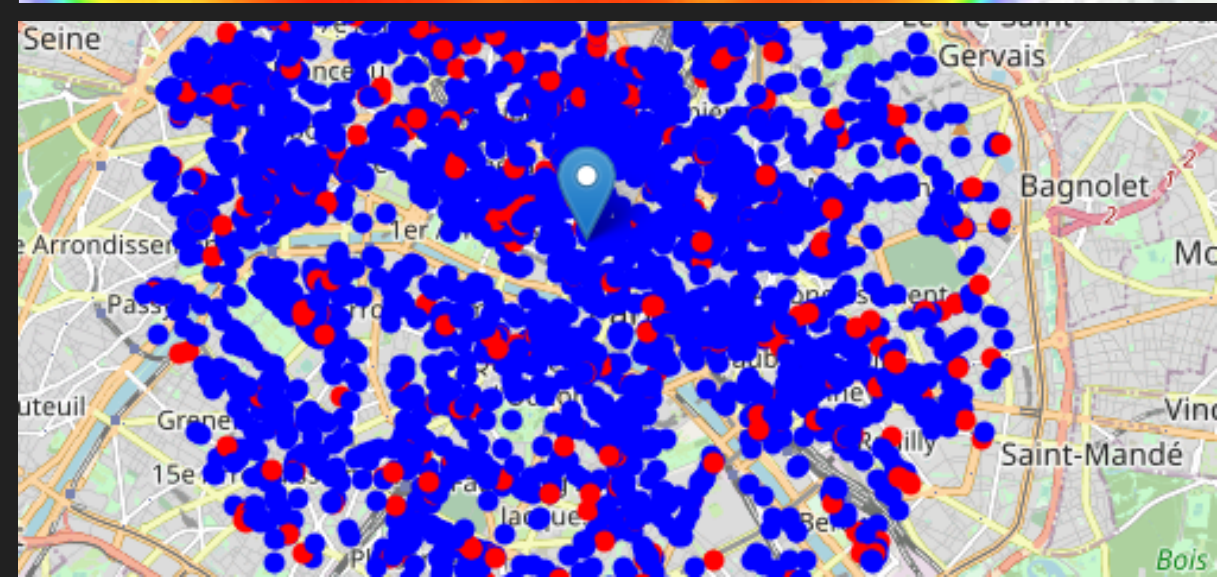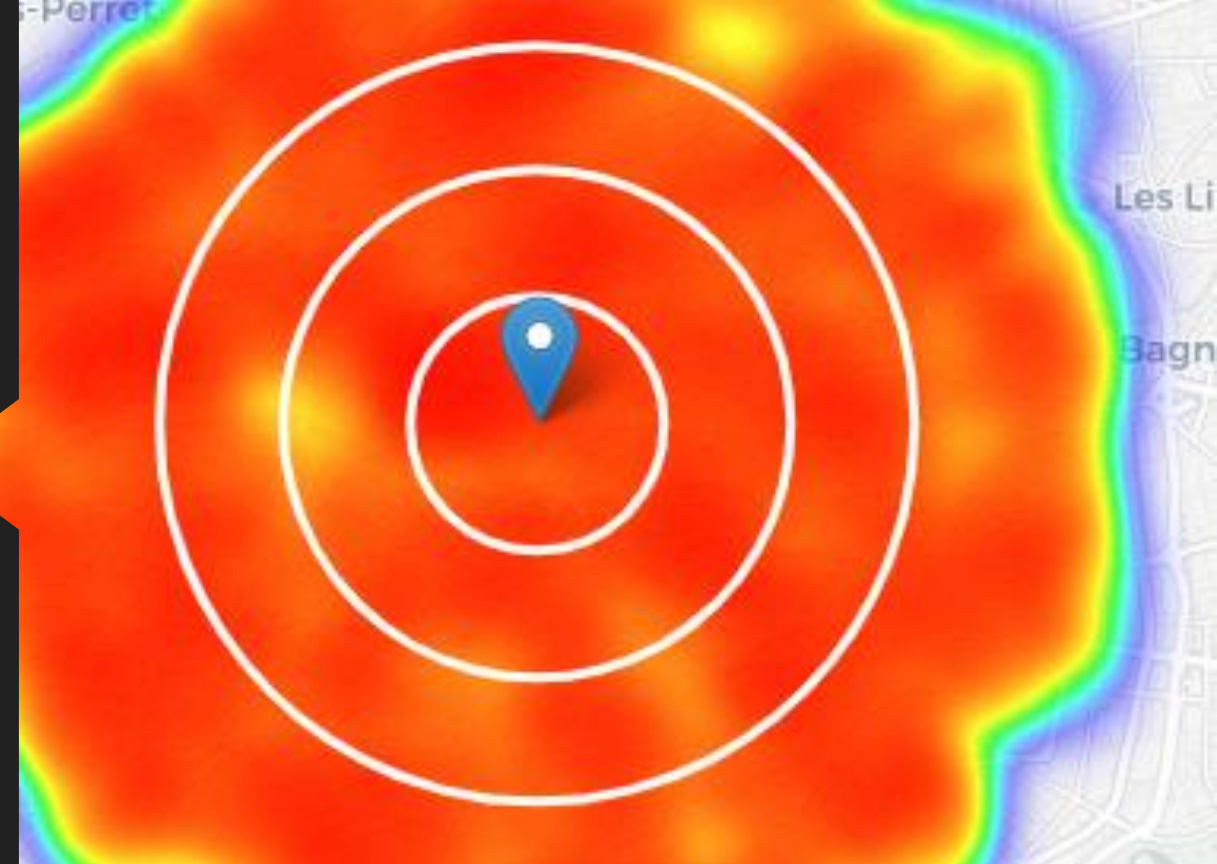|	Address	Latitude	Longitude	X	Y	Distance from center
0	Réservoir de Montsouris, Avenue René Coty, Qua...	48.824688	2.334530	-428573.621169	5.485813e+06	4419.275959
1	49, Rue Boussingault, Cité Florale, Quartier d...	48.825579	2.342506	-427973.621169	5.485813e+06	4253.234064
2	7, Rue Martin Bernard, Cité Florale, Quartier ...	48.826469	2.350482	-427373.621169	5.485813e+06	4167.733197
3	4, Rue Toussaint-Féron, Cité Florale, Paris 13...	48.827358	2.358458	-426773.621169	5.485813e+06	4167.733197
4	Crèche Collective Municipale, Rue Sthrau, Pari...	48.828247	2.366435	-426173.621169	5.485813e+06	4253.234064
5	Restaurant universitaire CROUS Tolbiac, Rue Le...	48.829135	2.374412	-425573.621169	5.485813e+06	4419.275959
6	45, Rue des Plantes, Quartier du Petit-Montrou...	48.827912	2.321398	-429473.621169	5.486333e+06	4357.751714
7	26, Rue du Commandeur, Quartier du Petit-Montr...	48.828803	2.329374	-428873.621169	5.486333e+06	4058.324778
8	GHU Paris Psychiatrie & neurosciences - site S...	48.829694	2.337350	-428273.621169	5.486333e+06	3830.143600
9	Quartier de Croulebarbe, Paris, Île-de-France,...	48.830584	2.345326	-427673.621169	5.486333e+06	3686.461718

The methodology

1ST STEP : define potential candidates/ areas in a grid of cells centered

The methodology

○ **2ND STEP** : Use the Foursquare API to collect and analyze data dealing with Paris. Visualize restaurants and jap restaurant in paris and try to determine a first answer
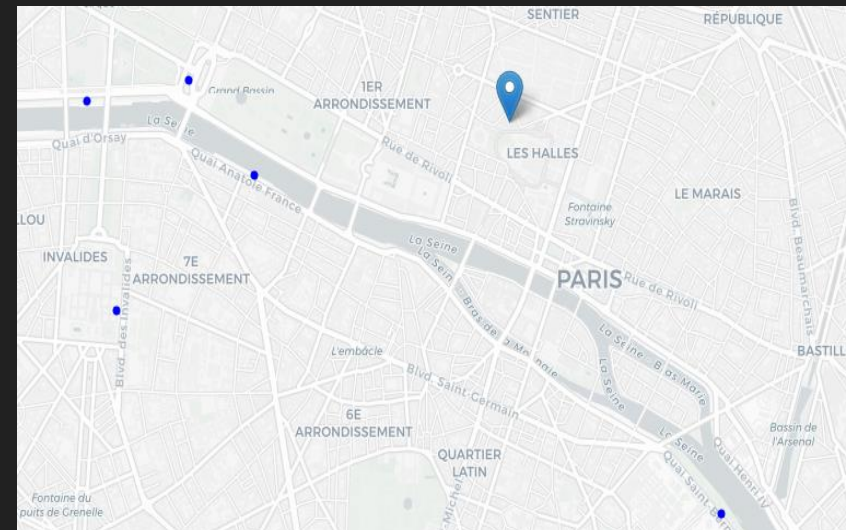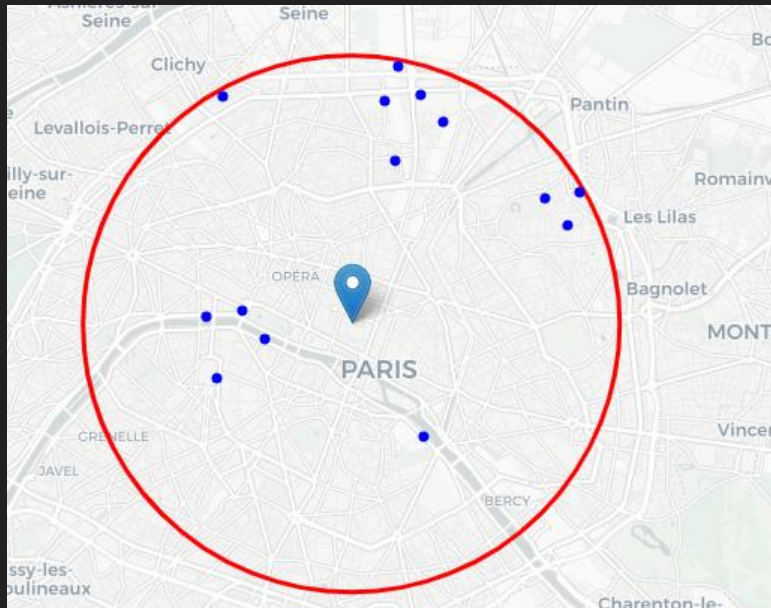
The methodology

- **3RD STEP** : Finally, take into consideration locations with no more than two restaurants in
- radius of 250 meters, and locations without Japanease restaurants in radius of 400 meters.

We will get only few candidates and after a zoom analyze we determine one ideal place. Indeed, we eliminate areas unpleasant near « periphérique parisien» and « quartier de la goutte d'or ».

Conclusion

- Following our study, we have defined 5 ideal areas to set up a sushi restaurants located around the center of paris

- A map of Paris showing these different places is also proposed to them in order to better situate them