

Finding the most promising candidates for a new Bubble Tea Shop in Paris

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CAPSTONE PROJECT FOR COURSERA

Introduction

- Bubble Tea Shops are getting more and more popular for the last few years in big cities like Paris
 - Good variety of drinks
 - Customizable features (toppings, quantity of sugar, hot or cold, etc.)
 - → Everybody can find their perfect drink!
- New and popular → Potential for a new business, but in which
 Neighbourhood it is the most promising?

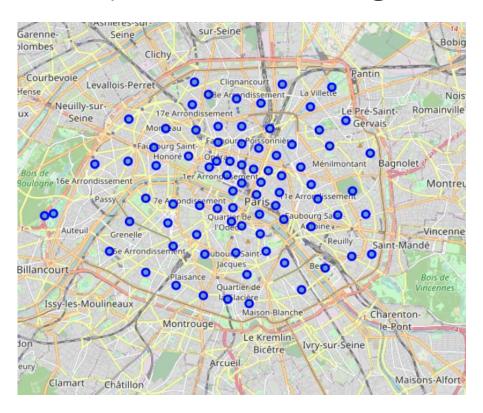


Data Acquisition

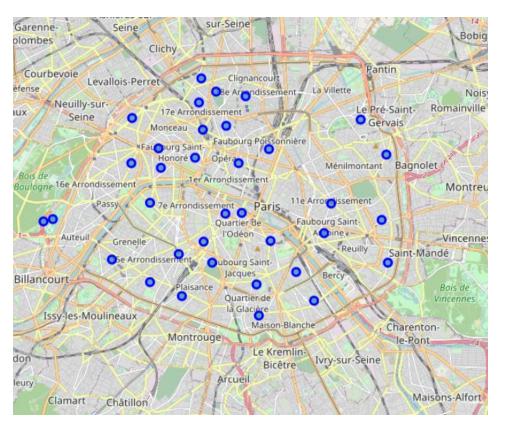
- Name of neighbourhoods (Web Scraping on Wikipedia)
- GPS coordinates of neighbourhoods (Web Scraping on Wikipedia, example here)
- The venues of interest of each neighbourhood using the Foursquare API
- The coordinate of Paris centre will be retrieved using the **geocoder library** to generate Folium maps

- Step 1 : Remove all neighbourhoods with high density of drink places
 - → They represent the competition for the new business
- Step 2 : Only include neighbourhoods with a strong influence of the eastern Asian culture
 - → They represent the market target for the new business
- Step 3: Find the most attractive neighbourhood among the remaining candidates

As a starting point, let's see a map of Paris with all the neighbourhood pinpointed

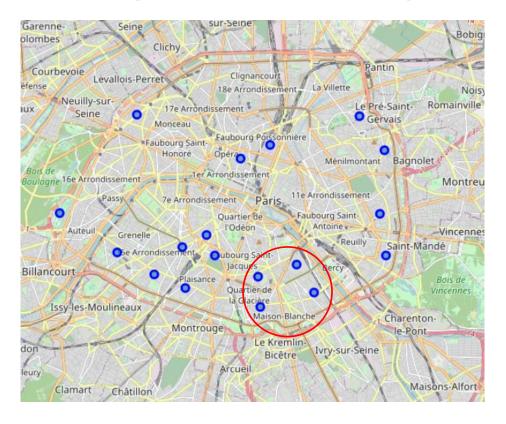


- Step 1: Remove all neighbourhoods with high density of drink places



More than a half of the candidates eliminated: Paris a lot of drink places as it is one of the largest city in Europe

- Step 2: Only include neighbourhoods with a strong influence of the eastern Asian culture



A majority of candidates are located in the South area of Paris. All four neighbourhoods of XIII District are still in, this district happens to be heavily influenced by the Asian culture

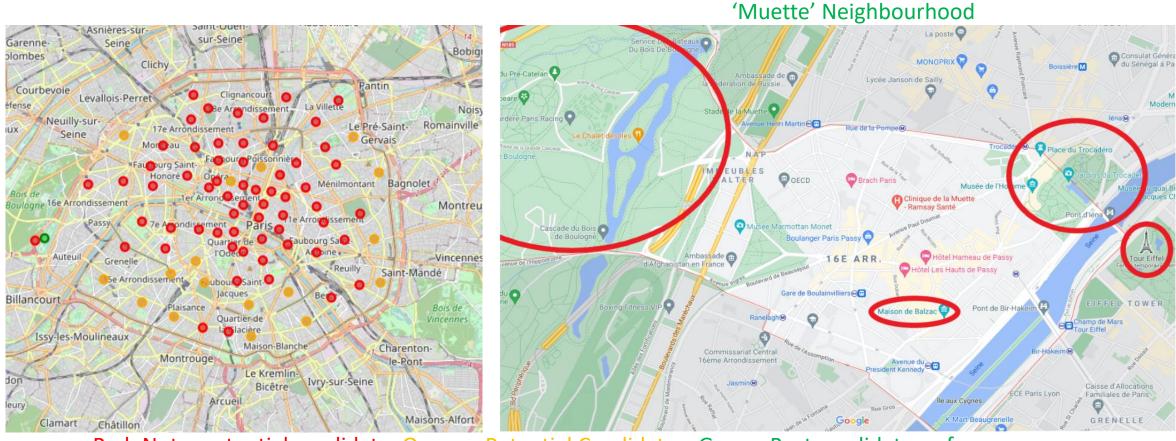
- Step 3: Find the most attractive neighbourhood among the remaining candidates

Let's look at candidates where we can find a park, a garden, shopping places or monument nearby (value > 0)

	Neighborhood	Park	Garden	Shopping Mall	Shopping Plaza	Monument / Landmark
0	Amérique	0.022222	0.000000	0.00	0.000000	0.0
6	Bel-Air	0.020000	0.000000	0.00	0.000000	0.0
13	Charonne	0.010000	0.010000	0.00	0.000000	0.0
17	Croulebarbe	0.020000	0.000000	0.00	0.000000	0.0
24	Gare	0.020000	0.010000	0.00	0.000000	0.0
33	Javel	0.020000	0.000000	0.01	0.000000	0.0
36	Maison-Blanche	0.040000	0.000000	0.00	0.000000	0.0
38	Montparnasse	0.000000	0.010000	0.00	0.000000	0.0
39	Muette	0.011111	0.033333	0.00	0.011111	0.0
40	Necker	0.000000	0.000000	0.00	0.000000	0.0
42	Notre-Dame-des-Champs	0.000000	0.020000	0.00	0.000000	0.0
50	Plaisance	0.010000	0.000000	0.00	0.000000	0.0
53	Porte-Saint-Denis	0.000000	0.000000	0.00	0.000000	0.0
60	Saint-Fargeau	0.010417	0.010417	0.00	0.000000	0.0
65	Saint-Lambert	0.030000	0.000000	0.00	0.000000	0.0
72	Salpêtrière	0.000000	0.040000	0.00	0.000000	0.0
74	Ternes	0.010000	0.000000	0.00	0.000000	0.0
77	Vivienne	0.010000	0.010000	0.00	0.000000	0.0

'Muette' is the only neighbourhood that has three of the features mentioned → The most promising candidate

Recap



Red: Not a potential candidate; Orange: Potential Candidates; Green: Best candidate so far

Conclusion and future directions

- We found several neighbourhoods defined as potential candidates for the opening of a new bubble tea shop business
- This study should only be used as a starting point as the following parameters should be taken into consideration:
- Availability and price of the real-estate
- Social and economics dynamics
- The business strategy: the recommendation might change whether the future shop will do delivery or not