Introduction

Each year a considerable number of people travel either for vacation, for work or to visit friends and do not have accommodation or sleep.

A large part of them turn to AirBnB

we are not always satisfied and the time to find accommodation is sometimes quite long. ay in a certain comfort

This code is for anyone who plans to use the AirBnB platform to rent accommodation today or in the near future.

Data Sources

- Wikipedia, neaigborhood infromation

- FourSquare, venues information

- Inside AirBnB, Principal dataset of AirBnB Values.

Data presentation

	host_response_rate	host_listings_count	latitude	longitude	city	zipcode	state	accommodates	room_type	bedrooms	bathrooms	beds	price	cleaning_fee	security_deposit
0	1.00	1.0	48.83349	2.31852	Paris	75014	Île-de-France	2	Entire home/apt	0.0	1.0	0.0	75.0	50.0	0.0
1	1.00	1.0	48.85100	2.35869	Paris	75004	Île-de-France	2	Entire home/apt	0.0	1.0	1.0	115.0	36.0	0.0
2	1.00	2.0	48.85758	2.35275	Paris	75004	Île-de-France	4	Entire home/apt	2.0	1.0	2.0	115.0	50.0	200.0
3	1.00	1.0	48.86528	2.39326	Paris	75020	Île-de-France	3	Entire home/apt	1.0	1.0	1.0	90.0	NaN	NaN
4	0.67	3.0	48.85899	2.34735	Paris	75001	Île-de-France	2	Entire home/apt	1.0	1.0	1.0	75.0	200.0	1500.0

Data Presentation

|	arrondissement	Quartiers	Population	superficie
0	1er	Saint-Germain-l'Auxerrois	1 672	86,9
1	2e	Halles	8 984	41,2
2	3e	Palais-Royal	3 195	27,4
3	4e	Place-Vendôme	3 044	26,9
4	5e	Gaillon	1 345	18,8

Data Cleaning

	host_acceptance_rate	host_listings_count	latitude	longitude	accommodates	bedrooms	bathrooms	beds	minimum_nights	maximum_nights	number_of_reviews
count	0.0	7999.000000	8000.000000	8000.000000	8000.000000	7976.000000	7942.000000	7986.000000	8000.000000	8000.000000	8000.000000
mean	NaN	7.025878	48.864560	2.348739	3.198750	1.248370	1.128494	1.753068	8.759375	546.876000	44.874875
std	NaN	51.031588	0.017641	0.031611	1.569811	0.838492	0.439104	1.172800	36.234546	542.848736	69.075322
min	NaN	0.000000	48.816560	2.230810	1.000000	0.000000	0.000000	0.000000	1.000000	1.000000	0.000000
25%	NaN	1.000000	48.852230	2.331645	2.000000	1.000000	1.000000	1.000000	2.000000	30.000000	4.000000
50%	NaN	1.000000	48.865400	2.351130	3.000000	1.000000	1.000000	1.000000	3.000000	365.000000	19.000000
75%	NaN	2.000000	48.878740	2.372158	4.000000	2.000000	1.000000	2.000000	5.000000	1125.000000	54.000000
max	NaN	836.000000	48.901010	2.439460	16.000000	7.000000	7.000000	11.000000	1124.000000	10000.000000	783.000000

Data preprocessing
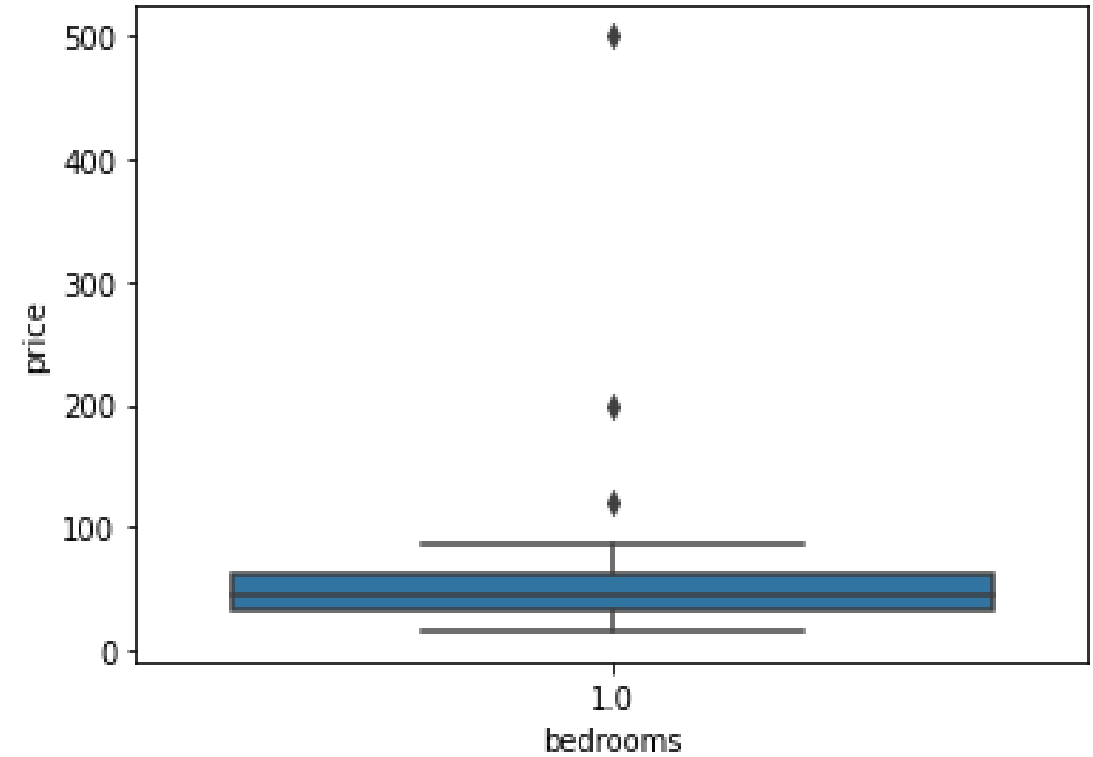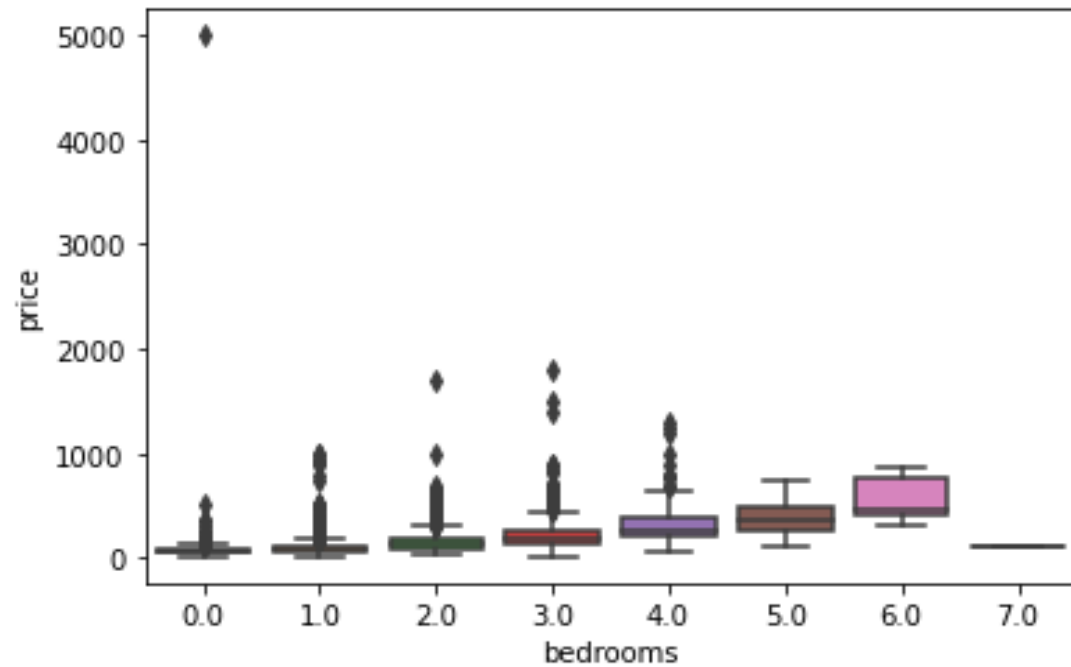
Data visualization
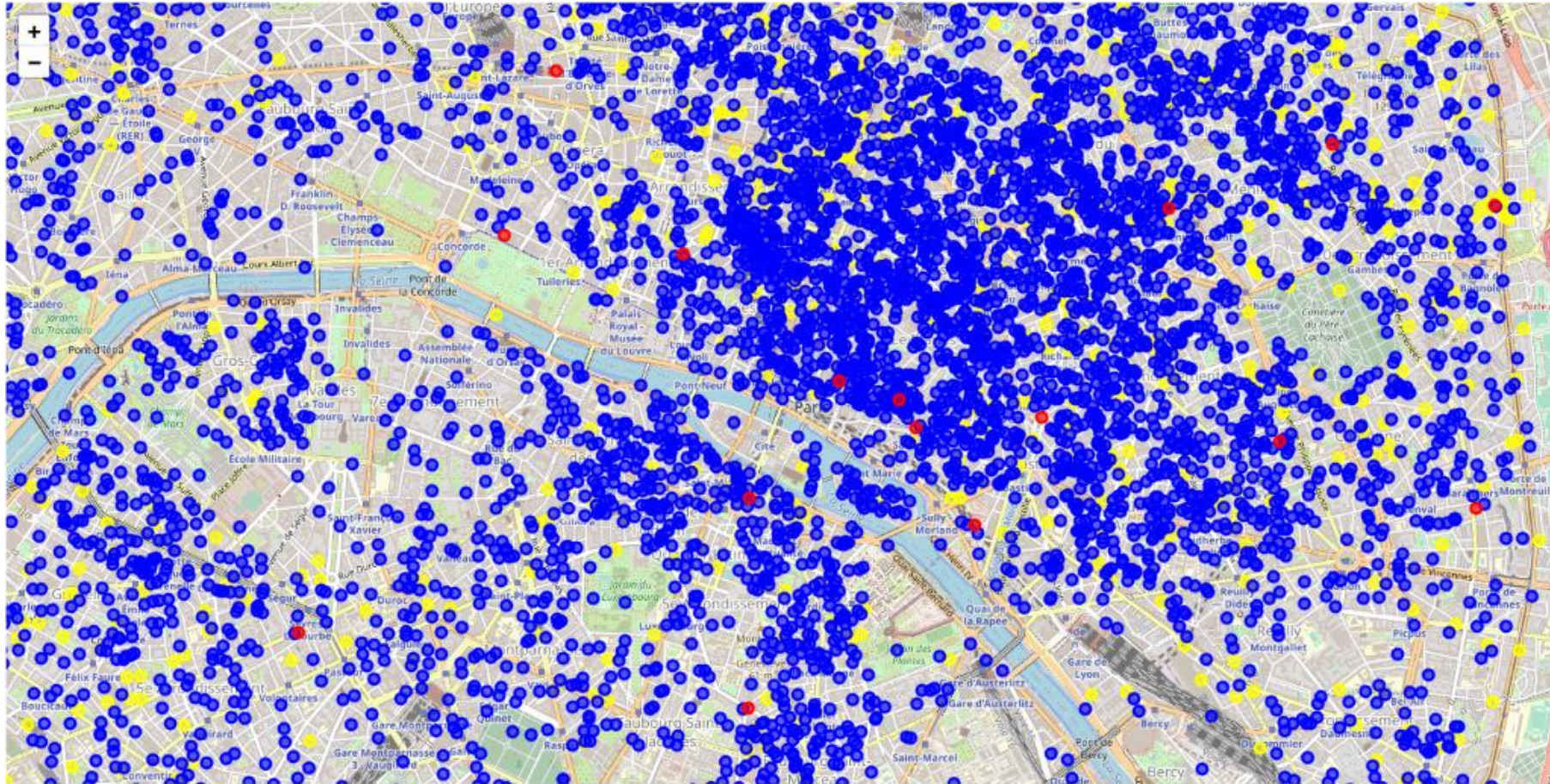
Result and discution

	host_response_rate	host_listings_count	latitude	longitude	city	zipcode	state	accommodates	room_type	bedrooms	security_deposit	minimum_nights	maximum_nights	number_of_reviews	count
790	1.0	1.0	48.86939	2.37471	Paris	75011	Île-de-France	4	Entire home/apt	2.0	200.0	3	14	41	1.0
1046	1.0	1.0	48.87254	2.38944	Paris	75020	Île-de-France	4	Entire home/apt	2.0	0.0	3	365	15	1.0
1758	1.0	1.0	48.83401	2.37115	Paris	75013	Île-de-France	3	Entire home/apt	1.0	0.0	2	1125	18	1.0
4451	1.0	1.0	48.86705	2.34558	Paris	75002	Île-de-France	4	Entire home/apt	2.0	150.0	3	1125	8	1.0
5421	1.0	1.0	48.88185	2.36795	Paris	75010	Île-de-France	4	Entire home/apt	1.0	100.0	1	7	4	1.0
6764	1.0	1.0	48.87043	2.35880	Paris	75010	Île-de-France	4	Entire home/apt	1.0	0.0	8	1125	0	1.0
7992	1.0	1.0	48.87822	2.35769	Paris	75010	Île-de-France	2	Entire home/apt	1.0	200.0	4	60	45	2.0

Conclusion

- The idea of this project is to help people choose their ideal AirBnB accommodation among all those available in Paris. Here we are targeting those who do not have the time to make the choice and filter the values for themselves.

- Our approach has the drawback of not introducing a certain amount of information such as criminality? The consumption of drugs or the proximity to certain historic buildings in Paris. The future of the project is therefore to add these properties to our predictions to obtain more efficient models