



NYC QUEST FOR A GOOD GOOD PLACE TO STAY

Using FourSquare API

THE PROBLEM AND THE BACKGROUND

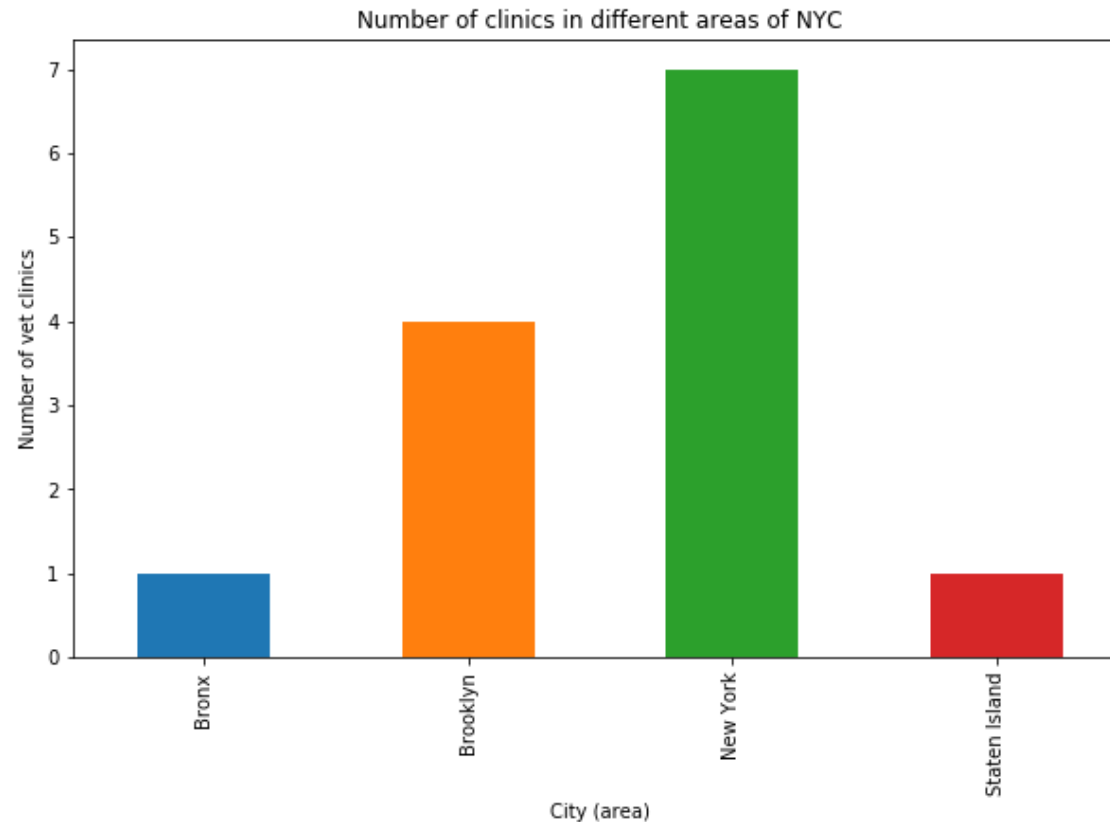
I will visit NY city this summer for a business trip. I will take with me my mini pig Sammy with me. I am afraid that because of stress and jet lag Sammy may catch a cold or some kind of “mal de mer”.

So, I need to make a list of vet clinics in the areas (boroughs) of NYC and put them on a map to help me to identify the best place for a room rent, where I will stay for the trip.

DATA ACQUISITION AND CLEANING

1. Get the coordinates of NYC centre. According to <https://www.latlong.net> the latitude of New York City, NY, USA is 40.730610, and the longitude is -73.935242.
2. According to Wikipedia (https://en.wikipedia.org/wiki/New_York_City#Geography) the area of NYC is 1213.37 square km, so if we assume that 1213.37 is the square of the circle, we can easily count its radius - 8.921 km.
3. Of course NYC is not circular by its shape, so we will need to make sure that vet clinics are situated in NYC, but not in New Jersey or other places.
4. Using Foursquare API collect the data frame of vet clinics.
5. Prepare the data for the research, clean unnecessary and irrelevant data.
6. Put all the clinics on the map and obtain a list of hotels near the place.

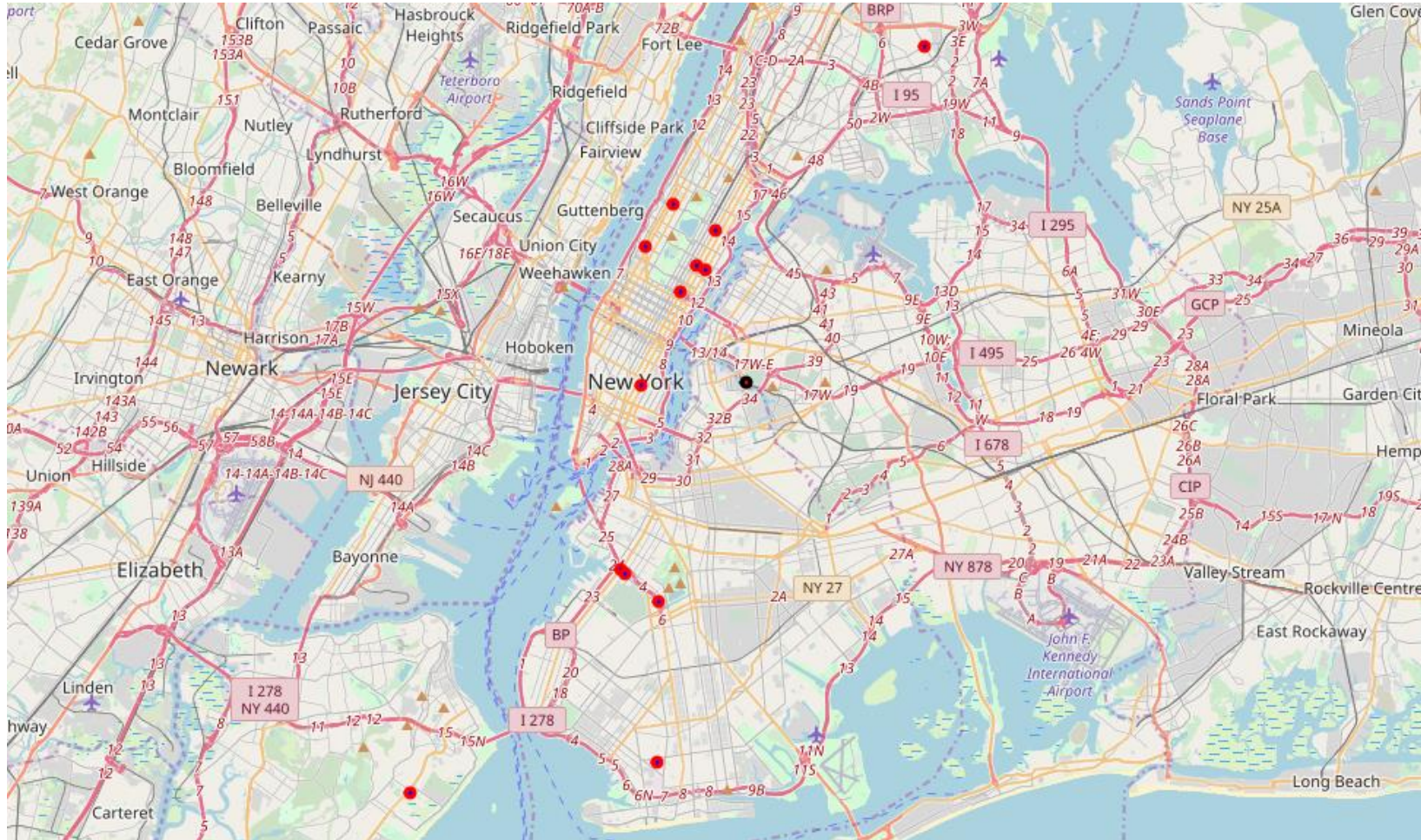
NUMBER OF CLINICS IN DIFFERENT AREAS OF NYC



CLEANED DATA FRAME, READY FOR RESEARCH

	name	categories	address	city	lat	lng	id
0	The Village Veterinarian	Veterinarian	340 E 11th St	New York	40.729614	-73.984522	4c3c83e04bc9a5932fbc271
1	Dr. Cindy Bressler House Call Veterinarian NYC...	Veterinarian	170 East 66th Street	New York	40.762975	-73.966141	54e1f61c498eee7bd0893ee5
2	City Veterinarian	Veterinarian	220 West ZEnd	New York	40.779000	-73.982633	4b8abb03f964a520107d32e3
3	Symphony Vet Center	Veterinarian	170 W 96th St	New York	40.793844	-73.969912	4e2af41da809f1b1640a346b
4	Park Slope Veterinary Center	Veterinarian	639 4th Ave	Brooklyn	40.663775	-73.994416	4d948000af67370459027d09
5	Lenox Hill Veterinarians	Veterinarian	204 E 76th St	New York	40.771973	-73.958382	4bc08ba9920eb713e10b192c
6	VetPronto - Mobile Veterinarians	Veterinarian	1461 1st Ave	New York	40.770706	-73.954305	5ab6c4ac9411f2343fa8168f
7	MVA Veterinarian	Veterinarian	NaN	Brooklyn	40.595377	-73.977255	50c360bbe4b0e0fa34731cf9
8	Carnegie Hill Veterinarians	Veterinarian	1707 3rd Ave	New York	40.784921	-73.949326	53c54703498efa2cc64107e7
9	Call Ahead Vet	Veterinarian	654 5th Ave	Brooklyn	40.662501	-73.992441	4ea88fe46c253859bb057061
10	Animal Hospital of Morris Park	Veterinarian	1135 Morris Park Avenue	Bronx	40.850245	-73.851805	4ca63f8ef47ea143bec25e21
11	Windsor Terrace Veterinarians	Veterinarian	1252 Prospect A	Brooklyn	40.652579	-73.976160	4b2112e9f964a5209e3624e3
12	Dongan Hills Veterinary Practice	Veterinarian	289 Dongan Hills Ave	Staten Island	40.584474	-74.093292	4c34d4594308b7136589c430

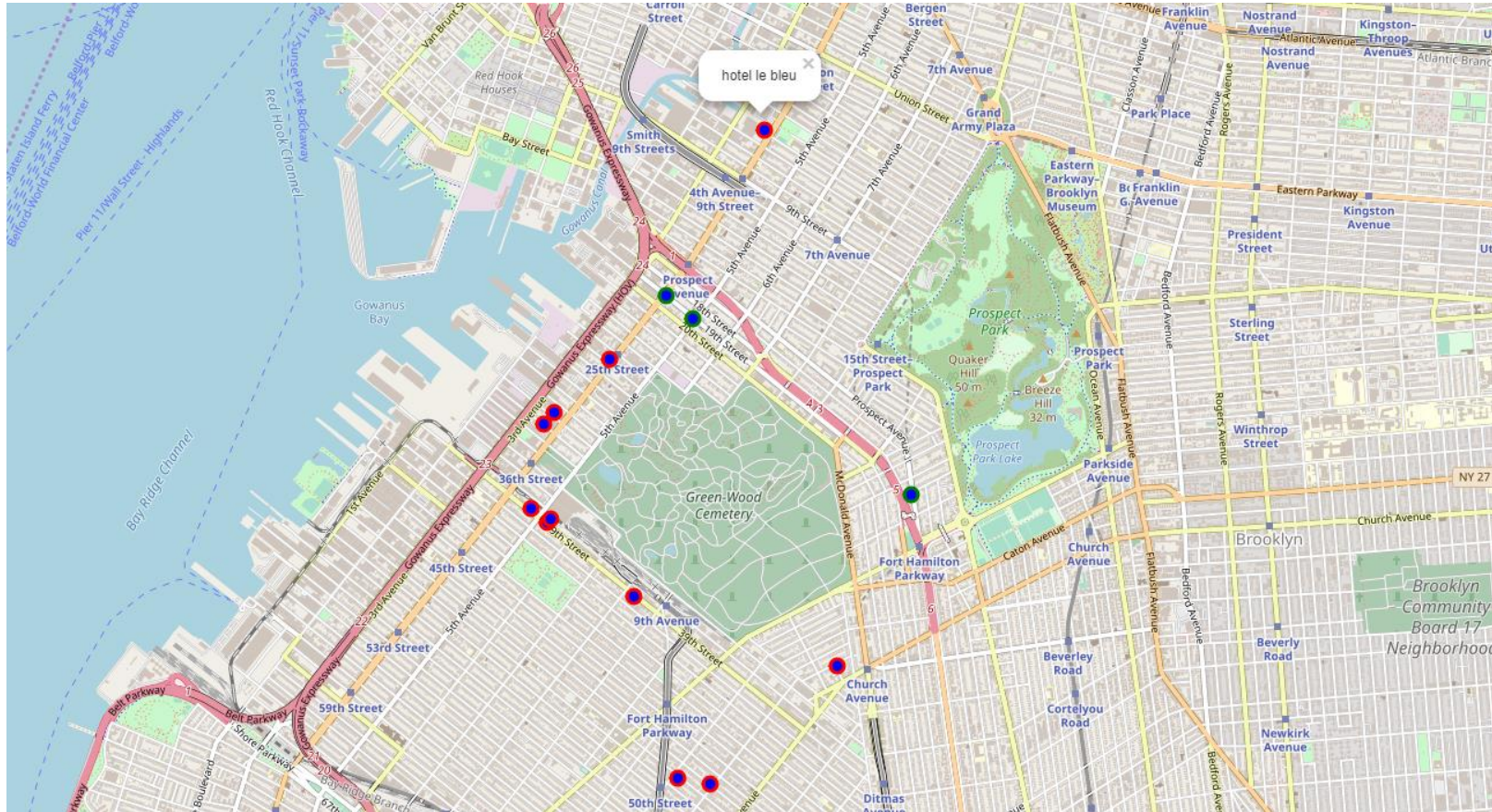
MAP CENTERED AROUND THE NYC SEARCH AREA



LETS FETCH ALL THE HOTELS AROUND GREENWOOD CEMETERY, BROOKLYN

	name	categories	address	city	lat	lng	id
0	Brooklyn Way Hotel, BW Premier Collection	Hotel	764 4th Ave	Brooklyn	40.660209	-73.998572	4cf3c1946195721e6e904ec1
1	hotel le bleu	Hotel	370 4th Ave	Brooklyn	40.673079	-73.987098	49c3c85df964a52076561fe3
2	Hotel BPM Brooklyn	Hotel	139 33rd St	Brooklyn	40.656518	-74.003472	4fd6211a7b0c4fe0bedb171d
3	Park House Hotel	Hotel	1206 48th St	Brooklyn	40.636591	-73.993497	50ef0efb3950be41c0dc99ce
4	Wyndham Garden Hotel	Hotel	457 39th St	Brooklyn	40.651801	-74.004461	55fd42dd498e4df93558ce8e
5	Phoenix Hotel	Hotel	517 39th St	New York	40.651031	-74.003220	57e05d18498ec840d74f88d1
6	Sunny 39 Hotel	Hotel	NaN	Brooklyn	40.651231	-74.002937	4ec84ede6c251306cc7d9d0f
7	Kings Hotel	Hotel	820 39th St	Brooklyn	40.646834	-73.996779	4bc3b306dce4eee15db7719d
8	Mosaic Hotel	Hotel	1579 44th St	Brooklyn	40.642920	-73.981703	4e89c1c2775b4a1123ad9320
9	Industry City Hotel, an Ascend Hotel Collectio...	Hotel	135 32nd St	Brooklyn	40.657199	-74.002746	5c4bf2492db4a9002c6a342c
10	Avenue Plaza Hotel	Hotel	4624 13th Ave	Brooklyn	40.636302	-73.991144	4c252adc905a0f478a0a6160

THE RESULT



CONCLUSION AND FUTURE DIRECTIONS

“Hotel le bleu” with 6.8 rating is the best choice for the case.