

NEW RAMEN RESTAURANT IN N.Y.C.

CAPSTONE PROJECT FOR IBM-COURSERA

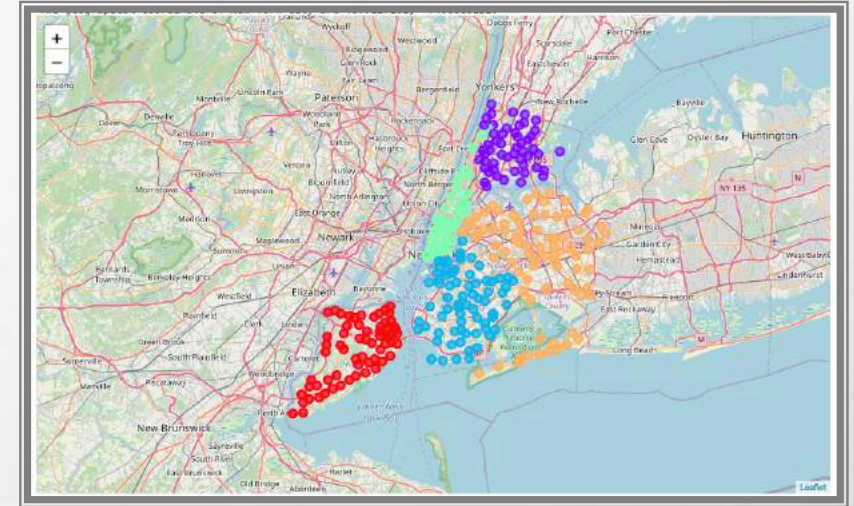


INTRODUCTION

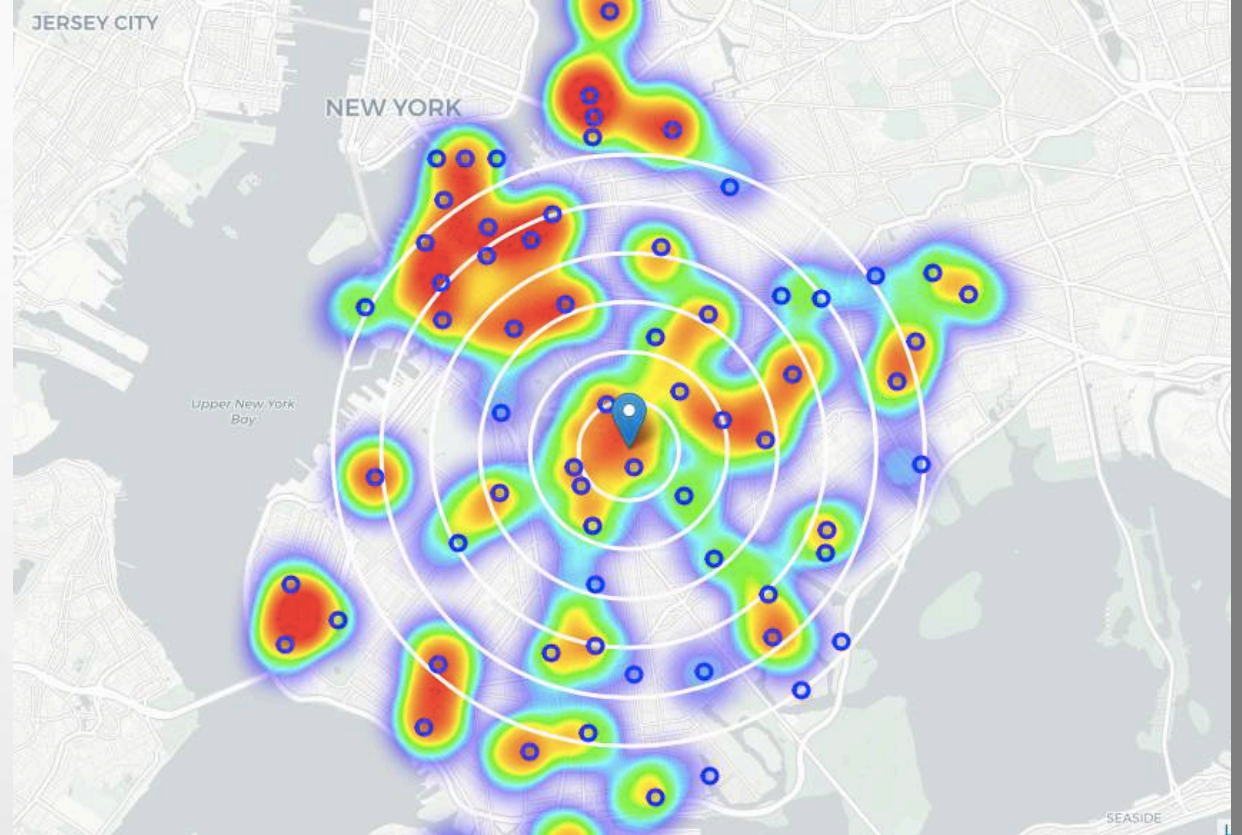
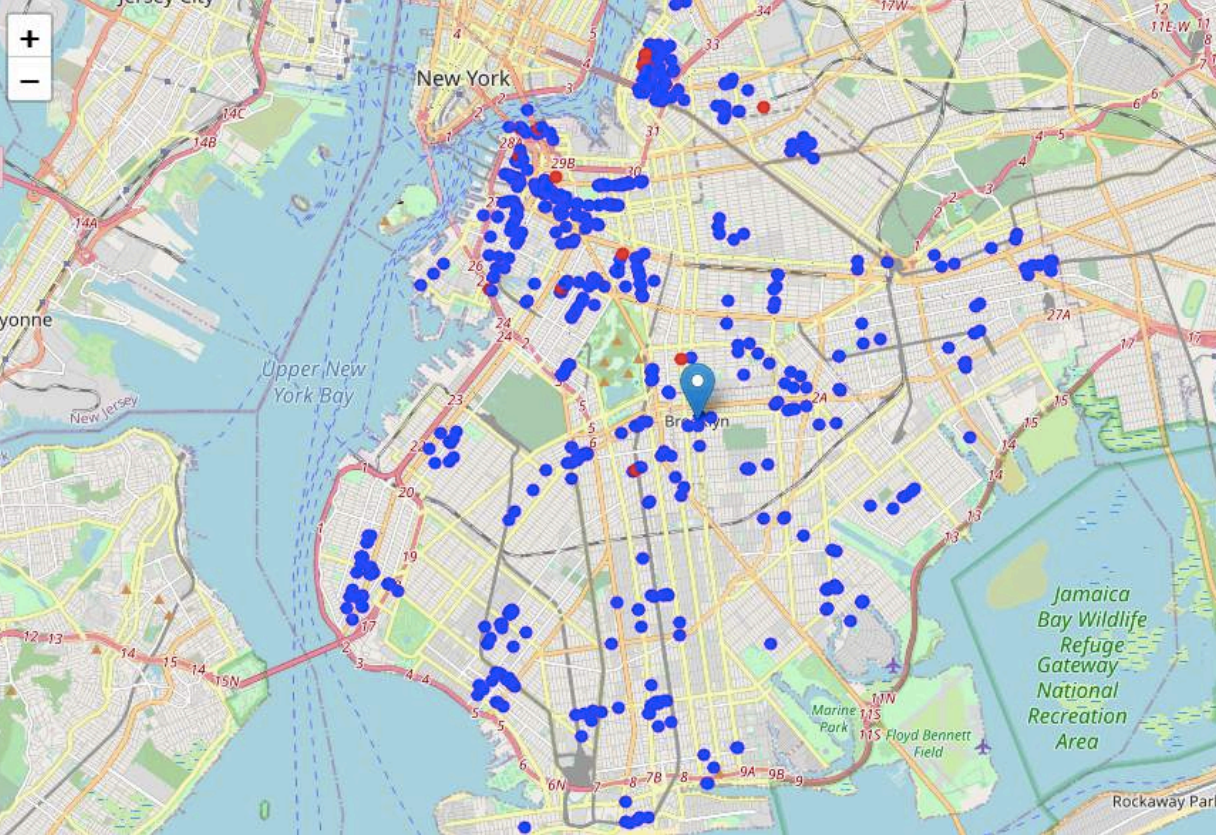
- **NOWADAYS THERE IS LESS AND LESS STABILITY IN BIG COMPANIES AND IT IS MORE COMMON TO BECOME FREELANCE AND OPEN YOUR OWN BUSINESS. IMAGINE THAT A PERSON DECIDE TO LEAVE HIS JOB IN ORDER TO FULFILL THE DREAM OF OPENING HIS OWN BUSINESS .**
- **IN THIS CASE, THE NEW BUSINESS WILL BE A → RAMEN RESTAURANT**
- **THE RESTAURANT WILL BE LOCATED IN A NEIGHBORHOOD IN THE CITY OF NEW YORK.**
- **THE TOOL WILL BE CENTERED TO FIND THE MOST SUITABLE NEIGHBORHOOD TO LOCATED IT.**

DATA

- It is important to have a reliable source that provides the tool with real information. mainly, the api used in this tool will be foursquare. it is a technology company that built a massive dataset of location data. its location data is the most comprehensive out there, and quite accurate that it powers location data for many popular services.



	Borough	Neighborhood	Latitude	Longitude
0	Bronx	Wakefield	40.894705	-73.847201
1	Bronx	Co-op City	40.874294	-73.829939
2	Bronx	Eastchester	40.887556	-73.827806
3	Bronx	Fieldston	40.895437	-73.905643
4	Bronx	Riverdale	40.890834	-73.912585



METHODOLOGY

Main criteria to select the best neighborhood in brooklyn:

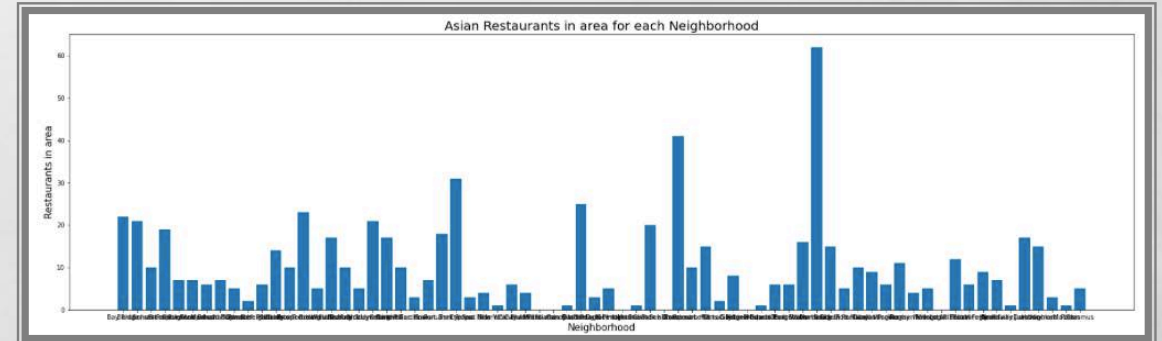
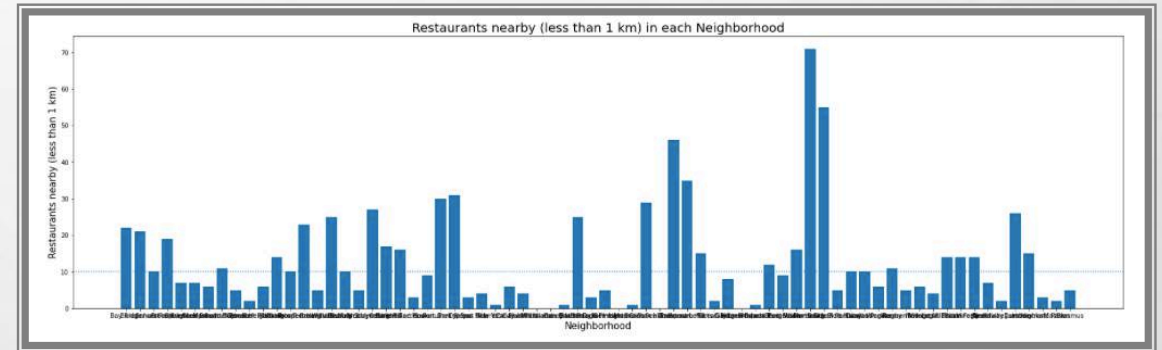
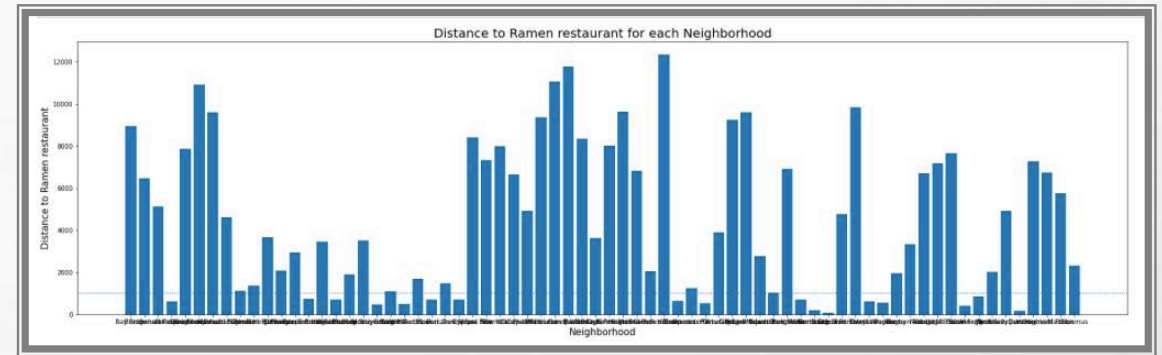
In the selected areas there must be more than 10 restaurants. It means that this neighborhood is where the customer is hoping a great variety of restaurants to choose which they feel like. And also if they go to their typical asian restautant they could see your new one and go other day. The distance to count the restaurants in the area will be 1 km.

In addition, as we can see in the previews information of the restaurants in brooklyn there are only 19 ramen restaurants so we will be required that there be any ramen restaurant within 1 km.

And last, we will decide the three restaurants that fulfills this 2 conditions but the 3 with the best rating and the greates amount of likes.

ANALYSIS

- **LOCATIONS WITH MORE THAN 9 RESTAURANTS NEARBY: 32**
- **LOCATIONS WITH NO RAMEN RESTAURANTS WITHIN 1 KM: 53**
- **LOCATIONS WITH BOTH CONDITIONS MET: 17**
- **NUMBER OF RESTAURANTS TO ANALYZE: 270**



ANALYSIS

	Neighborhood	Average Tips
6	Cobble Hill	45.846154
9	Fort Greene	33.555556
5	Clinton Hill	23.307692
7	Ditmas Park	21.750000
12	Kensington	20.750000
17	Windsor Terrace	15.400000
8	Downtown	15.266667
3	Boerum Hill	12.333333
1	Bay Ridge	10.222222
10	Fort Hamilton	9.285714
2	Bensonhurst	8.800000
11	Homecrest	8.142857
4	Bushwick	7.000000
15	Rugby	7.000000
14	Mill Basin	6.666667
13	Manhattan Terrace	6.000000
0	Bath Beach	3.625000
16	Sunset Park	3.000000

	Neighborhood	Average Rating
12	Kensington	8.175000
5	Clinton Hill	7.523077
9	Fort Greene	7.455556
8	Downtown	7.333333
14	Mill Basin	7.333333
6	Cobble Hill	7.246154
3	Boerum Hill	7.216667
7	Ditmas Park	7.150000
1	Bay Ridge	7.066667
10	Fort Hamilton	6.914286
17	Windsor Terrace	6.880000
16	Sunset Park	6.850000
2	Bensonhurst	6.640000
11	Homecrest	6.628571
13	Manhattan Terrace	6.500000
0	Bath Beach	6.200000
15	Rugby	5.800000
4	Bushwick	5.600000

	Neighborhood	Average Likes
6	Cobble Hill	110.923077
9	Fort Greene	106.777778
8	Downtown	88.800000
5	Clinton Hill	44.153846
7	Ditmas Park	36.750000
17	Windsor Terrace	34.800000
3	Boerum Hill	34.666667
12	Kensington	26.000000
10	Fort Hamilton	16.857143
2	Bensonhurst	15.600000
1	Bay Ridge	14.222222
11	Homecrest	14.142857
15	Rugby	14.000000
0	Bath Beach	8.125000
4	Bushwick	7.333333
13	Manhattan Terrace	6.000000
14	Mill Basin	5.333333
16	Sunset Park	3.500000

	Clasification	Neighborhood	Name	Likes	Rating	Tips
0	Max Ratings	Downtown	DeKalb Market Hall	778.0	9.2	106.0
1	Max Likes	Downtown	DeKalb Market Hall	778.0	9.2	106.0
2	Max Tips	Cobble Hill	Joya	318.0	8.3	159.0

RESULTS AND DISCUSSION

- With the analysis done, it could be say that there are a few neighborhoods to stablish a new ramen restaurant. It has been decided to obtain the best three areas that fulfill all the requirements imposed. These requirements were:
- The neighborhood should have the nearest ramen restaurant 1 km away.
- This area should have at least 10 restaurants within an area with a radius of 1 km.
- Aplying the requirements there are 17 neighborhoods in which we could open the desire restaurant. But in order to give a better area we have compared the evaluation of the restaurants that there are in the neighborhood previously selected. The criteria used in the evaluations was the rating, the amount of likes and the amount of tips of each restaurant.

CONCLUSION

- The restaurant which has the best rating is 'Dekalb Darket Hall' which in fact has the most likes also. This restaurant is located in the downtown neighborhood, so this area will be selected as a proper space to open it. Besides, the neighborhood which has the most average rating is Kensington so it will be also selected. The same with Cobble Hill that has the best average likes and tips. In Cobble Hill there is also the restaurant which has the best amount of tips, called 'joya'. Finally, the neighborhoods selected are:
 - Downtown
 - Kensington
 - Cobble Hill

