



Coffee place in Manhattan

Analysis for a business start-up

Coffee@manhattan

manhattan has an ever increasing demand for coffee shops despite the large number of cafes. Primary reason being the huge population density



Background

- ◆ Manhattan is one of the original Boroughs of New York County
- ◆ Land area - 59.13 sq.km
- ◆ Population density - 27,826 persons / sq.km



Problem description

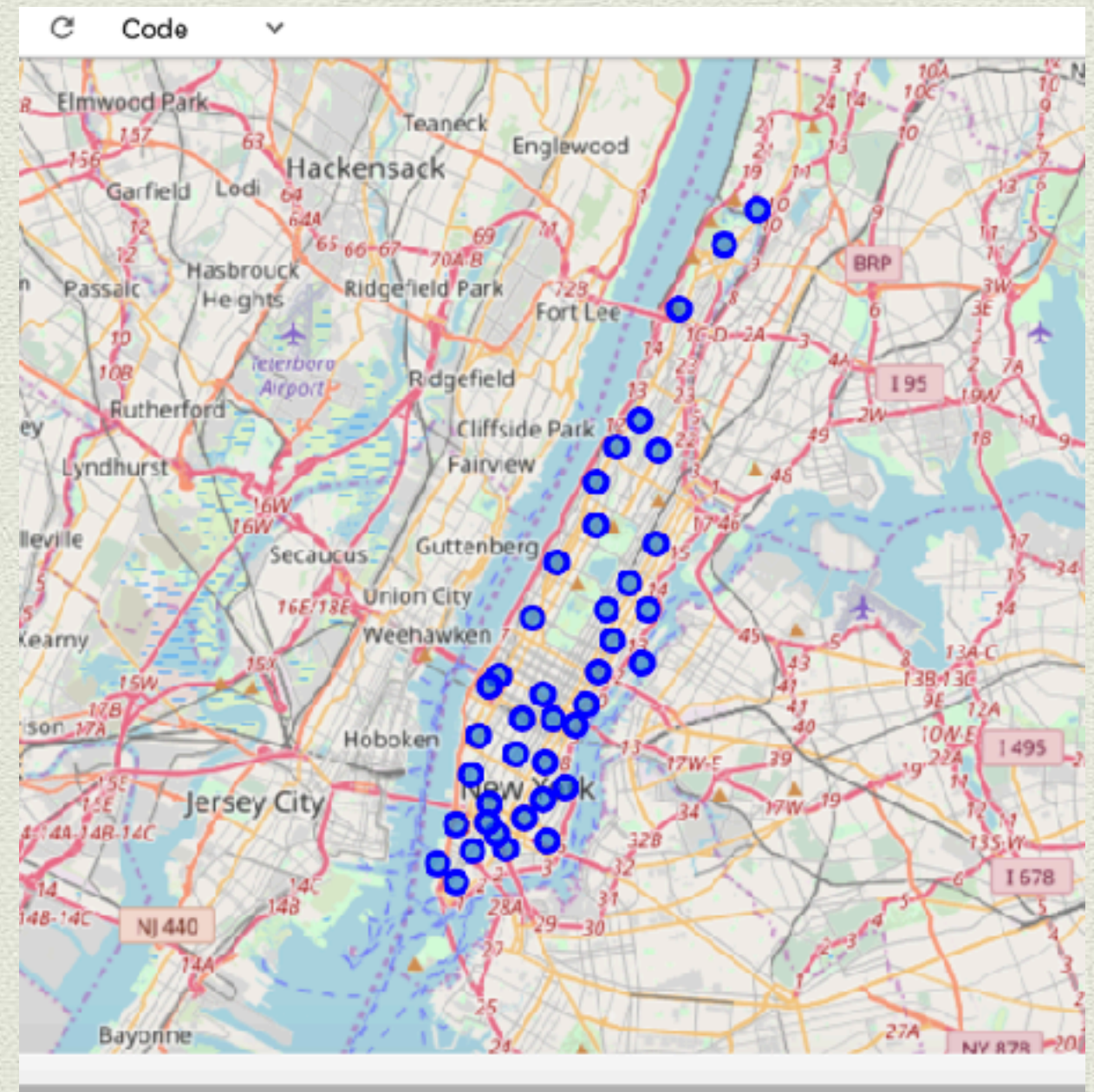
- ◆ From available data identify the appropriate location to start a new cafe in Manhattan.
- ◆ Factors to consider- number of existing cafes in different locality, popularity of the region in terms of population density

Target group of clients

- ◆ Small and large cafe chain franchises who are looking to start a new cafe / branch but unsure about the appropriate location for business.
- ◆ Custom analysis is possible for independent entrepreneurs as well. But that is not in the scope of this project.



Location data for the city of New York is collected from the available JSON file



Manhattan and its neighbourhoods

Population density distribution

Manhattan CB 1	4.45	34,420	7,735	Battery Park City, Financial District, TriBeCa
Manhattan CB 10	3.63	107,109	29,507	Harlem, Polo Grounds
Manhattan CB 11	5.75	117,743	20,477	East Harlem, Randall's Island, Spanish Harlem, Wards Island
Manhattan CB 12	7.64	208,414	27,279	Inwood, Washington Heights
Manhattan CB 2	4.01	93,119	23,222	Chinatown, Greenwich Village, Little Italy, Lower East Side, NoHo, SoHo, West Village
Manhattan CB 3	4.56	164,407	36,054	Alphabet City, Chinatown, East Village, Lower East Side, Two Bridges
Manhattan CB 4	5.41	87,479	16,170	Chelsea, Clinton
Manhattan CB 5	4.25	44,028	10,360	Midtown
Manhattan CB 6	3.55	136,152	38,353	Gramercy Park, Kips Bay, Murray Hill, Peter Cooper Village, Stuyvesant Town, Sutton Place, Tudor City, Turtle Bay, Waterside Plaza
Manhattan CB 7	5.46	207,699	38,040	Lincoln Square, Manhattan Valley, Upper West Side
Manhattan CB 8	5.13	217,063	42,312	Lenox Hill, Roosevelt Island, Upper East Side, Yorkville
Manhattan CB 9	3.91	111,724	28,574	Hamilton Heights, Manhattanville, Morningside Height

- ◆ Example data of the distribution of cafes retrieved from FourSquare.

	name	lat	lng	postalCode	id
0	Cafe 3	40.783157	-73.958845	10128	513a4e2fe4b06cdafa77f245
1	Cafe D'Alsace	40.779152	-73.951069	10128	467ffefcf964a520194811e3
2	Hard Rock Cafe New York	40.757109	-73.986697	10036	428a0500f964a520632311e3
3	American Wing Cafe	40.780246	-73.963507	10028	4a8450e1f964a52041fc11e3
4	Café Sabarsky	40.781445	-73.960385	10028	49fa2837f964a520cf6d11e3

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(73):				
	name	lat	lng	id
postalCode				
	10001	1	1	1 1
	10010	1	1	1 1
	10016	1	1	1 1
	10017	1	1	1 1
	10019	3	3	3 3
	10020	2	2	2 2
	10021	4	4	4 4
	10022	2	2	2 2
	10023	5	5	5 5
	10024	6	6	6 6
	10025	7	7	7 7
	10026	1	1	1 1
	10027	1	1	1 1
	10028	4	4	4 4
	10029	1	1	1 1
	10036	2	2	2 2
	10065	2	2	2 2

Results and suggestion

- ◆ Using k-means the locations are clusters and our analysis shows that the neighbourhood Upper West Side is best suited for the starting of a new shop. This corresponds to the zip codes 10023, 10024, and 10025.

Conclusion

- ◆ The neighbourhoods of Manhattan are analysed to identify the most suitable location for starting a new cafe. Our analysis points that Upper West Side is one of the favourable places.



Thanks for your time and see you in Manhattan!