Where to open my Distribution of Coffee Grains?

By Eduardo Mendes

Introduction

Using the Foursquare location data, I will analyse all the coffee houses of Manhattan and decide where would be the best place to open my company of distribution of coffe grains

Data

This notebook will use the following datasets:

- Extract the neighborhoods of New York from https://geo.nyu.edu/catalog/nyu_2451_34572

- Get the geographical cordinates of Manhattan from geolocator

- Get the venues of Manhattan from Foursquare API

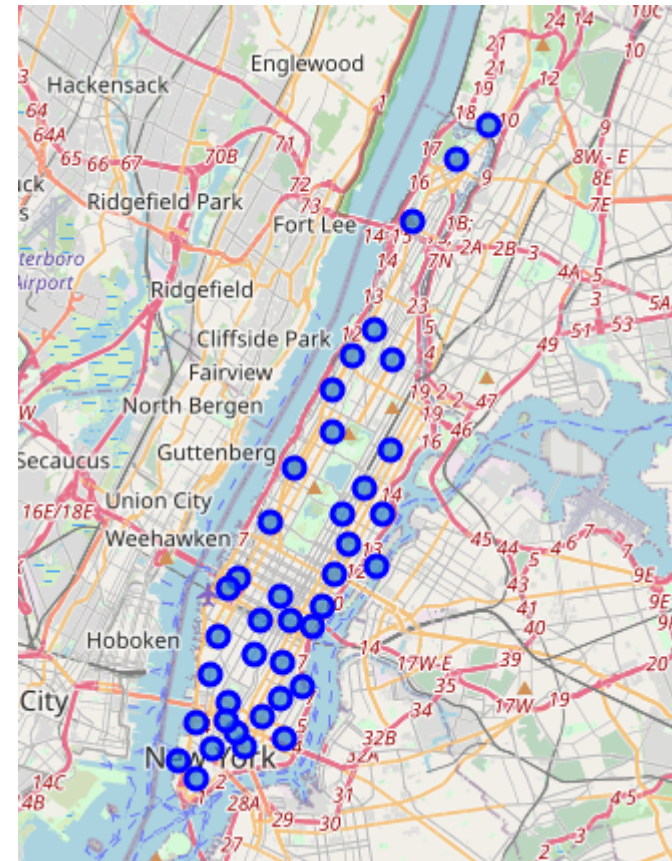- Get categories from Foursquare lab

After all this, comes the clustering part, where I will find the centroid of the coffee houses in Manhattan to know the location of the company

Methodology

For this project we are going to use Foursquare API and geolocator to geographycaly explore Manhattan.

Results

Getting Manhattan Neighborhoods:

Results

Getting data:

	Borough	Neighborhood	Latitude	Longitude	Cluster Labels	Cafeteria	Café	Coffee Shop	Sum
0	Manhattan	Marble Hill	40.876551	-73.910660	0	0.0	0.000000	0.086957	0.086957
1	Manhattan	Chinatown	40.715618	-73.994279	0	0.0	0.000000	0.020000	0.020000
2	Manhattan	Washington Heights	40.851903	-73.936900	0	0.0	0.070588	0.023529	0.094118
3	Manhattan	Inwood	40.867684	-73.921210	0	0.0	0.051724	0.017241	0.068966
4	Manhattan	Hamilton Heights	40.823604	-73.949688	0	0.0	0.063492	0.063492	0.126984

Results

Getting the position of the company:
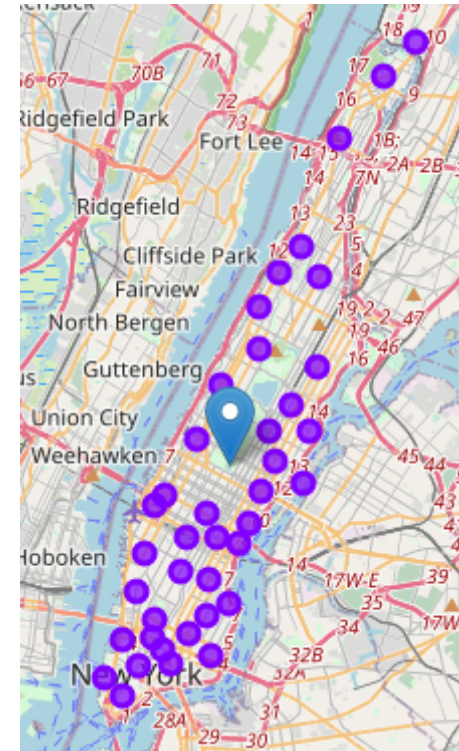
Discussion

Of course it does not make sense to create a company of distibution of grains in Manhattan, would be cheapper to open that companie a feel miles from there and supply the island. But, our propouse here is to create a analisys that can be applied to many different situations

Conclusion

With this exercise we learned how to use the many tools to develop a data analysis. Although the result is just a simulation, we can use this knowledge to develop other project and make studies that can be used in the real world

Thank You!

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