Capstone Project - The Battle of Neighborhoods

(WEEK 2)

Introduction

- Starting a new business is not an easy task, especially in metropolitan cities such as Moscow. The biggest problem is choosing a location for your establishment. Using this example, we will consider the problem of opening a coffee shop in the center of Moscow. Using modern methods of data analysis and visualization, we will find the most popular points in the city and using this information we will try to find the perfect place to discover.

Data

- Latitude and Longitude values are obtained by using "geocoder".

- All data related to locations are obtained by using Foursquare API and Python Libraries.

Methodology

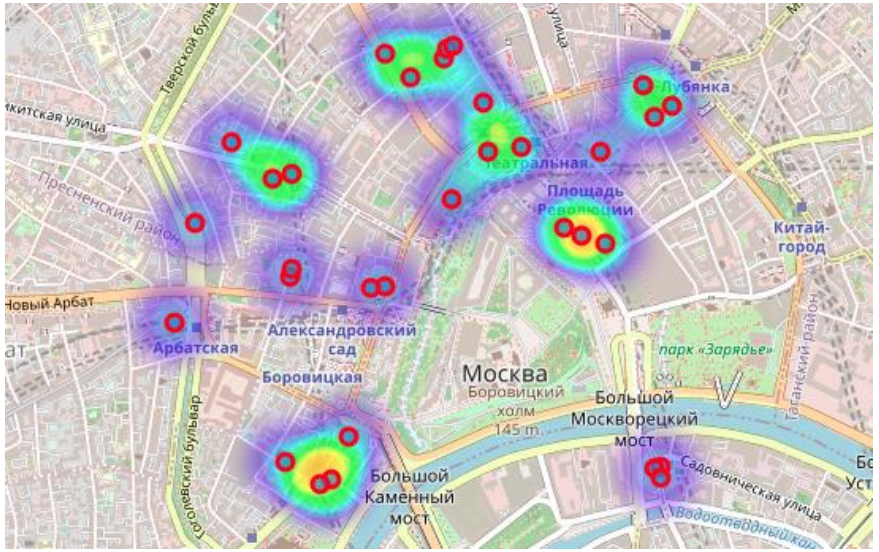
- Master data which includes uid, name, shortname, address, postalcode information of Moscow cafes.

:

	uid	name	shortname	address	postalcode	lat	lng
0	4f3b52bfe4b0ce0258fcafd4	Starbucks	Coffee Shop		127159	55.757229	37.616586
1	59d1ea22d4cc9807e348e1a9	Surf Coffee	Coffee Shop		109012	55.757233	37.622688
2	5e30114d13749b00085e7900	Антипа	Coffee Shop		119019	55.747743	37.605589
3	5e5e5e7195d041000803469e	Fine Coffee	Coffee Shop		119019	55.747208	37.608055
4	505ec2cbe4b0a06084de3bb0	Кофемания	Coffee Shop		109012	55.754636	37.621629

Methodology

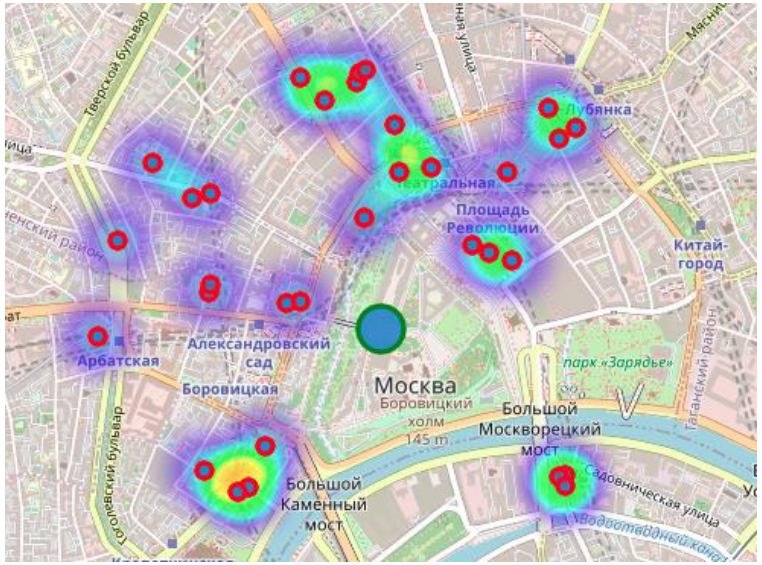
We then used Python Folium library to visualize the resulting information as clustered groups on the map. We managed to get the following data:



Results

- In order to determine the "ideal" distribution of a new point, let us take as an example the distance (radius) 15 from other points.

- The clustered map is given below.



Discussion and Conclusion

- As a result, we were able to find a suitable place for our new establishment. As we can see, the place is close enough to the metro station, the park area and the main roads. The place is also advantageous in that there is no need to cross the river.
- **References**
- [1] https://developer.foursquare.com/