

# Capstone Project - The Battle of Neighbourhood

## ***1. Introduction: COFFEE shop in Mumbai, India***

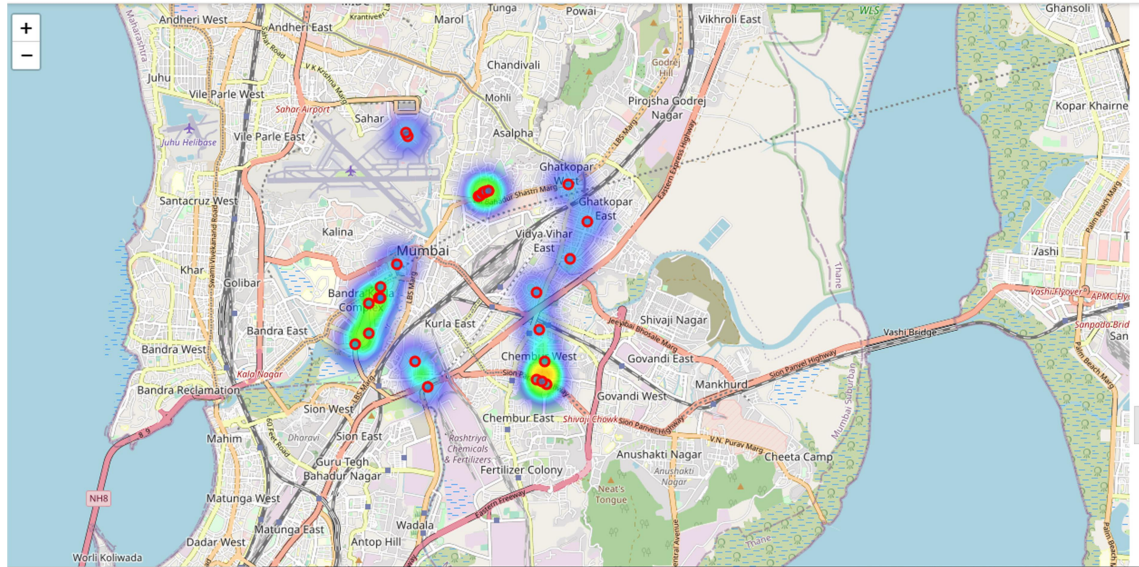
In such a large and rich city Mumbai, India. it will be competitive to start up coffee business. In this case my contractor, man who has contacted me to give advises and draw up essential lines of business prediction and back-up plans (but this part we will just discuss about predicting hot spot).

## ***2. Orientation***

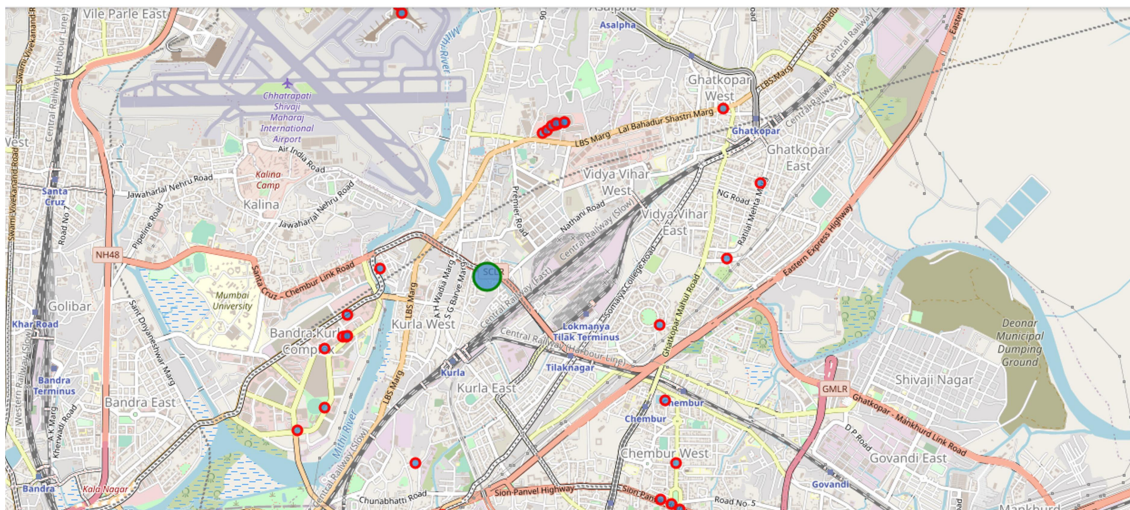
First of all we need to collect Data of all coffee shops in Mumbai including their name, id, location (address, latitude, longitude) then pick up the "hot" neighbour where locates most of the venue. In order to asset Data we use FourSquare and apply folium for visualizing a particular neighbour in which that we will observe customer "traffic" and predict an appropriate location of new coffee shop in town. In this case you will find its temporary name on the folium map, "Here It Is!"

## ***3. Execution steps***

- We import all the tools we need.
- *Apply your credential ID on [FourSquare]*
- *Transform data into json then request geocode.*
- *We start creating group including information which is recommended.*
- *Creating items of objects coffee shop and their attributes - id, address, name, etc*
- *Testing by calling an item*
- *From the output we can identify necessary factors of what we will use later to consider the probability of launching our up-to-coming location.*
- *Based on that we start to organize what we have got.*
- As we can see that there are many coffee shops without address we need to execute `hasattr()` to determine if each object (coffeeshop) has a attribute (address). Next step we will execute a very important part - get coordinates of Mumbai and create folium map which will help



- visualize what we have got from data.



- Above is our Mumbai with little red dots presenting different items. By spotting the clusters of items we can see which neighbourhood has density of coffee business.

#### 4. Conclusion

We will need a location where we can catch out customers from "hot" location we have picked up from the map and stay in a certain distance so as to lessen the captivity of business.