



Find the Best Location for a new coffee shop in New York





Overview

America's love affair with coffee and coffee shops has made joining the ranks of coffee shop owners a highly attractive proposition.

Problem #1: Lack of identity and a dull competitive edge

Problem #2: The “wrong” menu

Problem #3: Inventory and pricing snafus

Problem #4: Overall management and customer service headaches

However, they are not as important as the coffee shop does not have a good location.



Since there are 137 coffee shops, I will use coffee shops for this project. I am going to decide where would be the best location to open a new coffee shop in N.Y.



Goal

1. I am going to decide where would be the best location to open a new coffee shop in N.Y.
2. Apply machine learning that I have learned and using Foursquare API

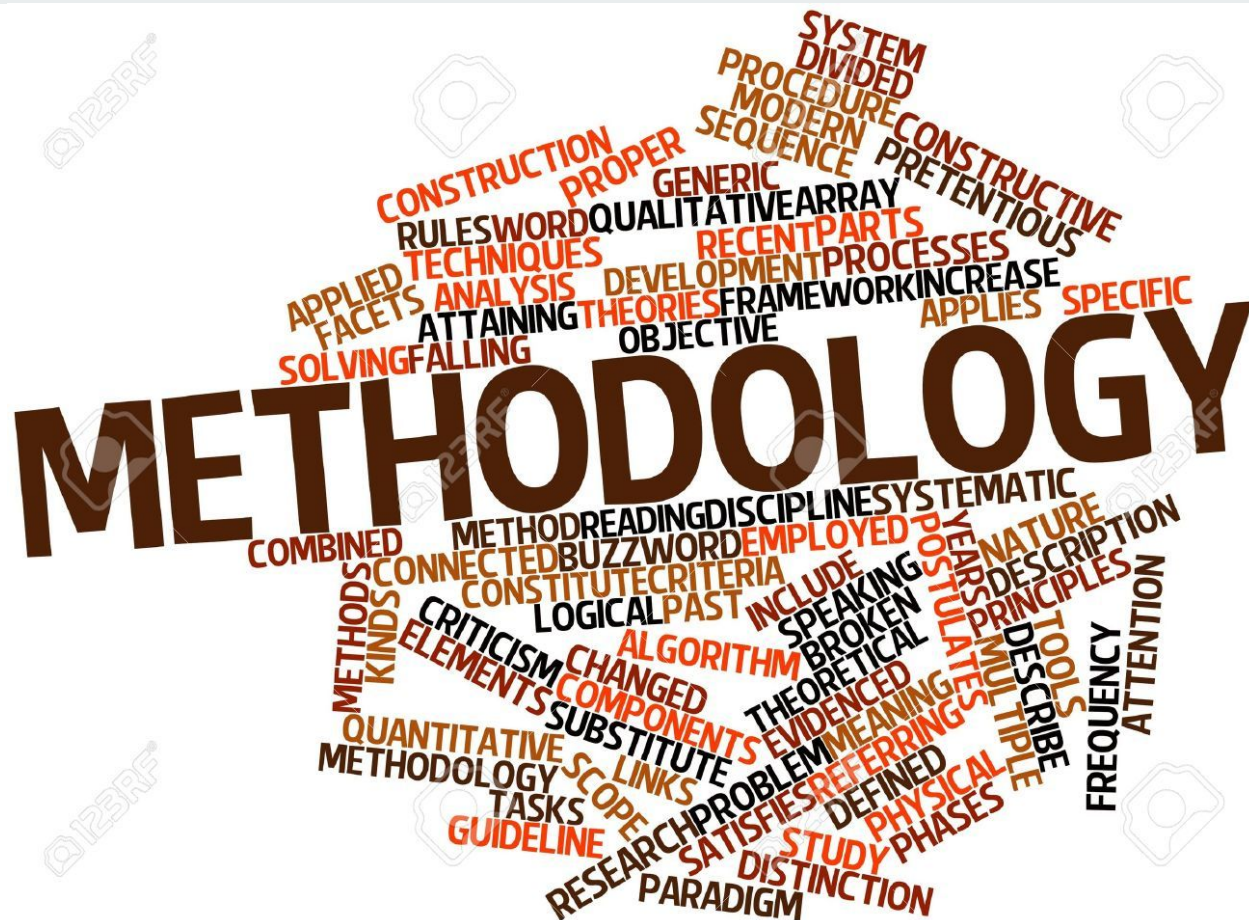
Data





Data

- List of neighborhoods in New York
- Latitude and Longitude of these neighborhood
- Venue data related to coffee shop





Methodology

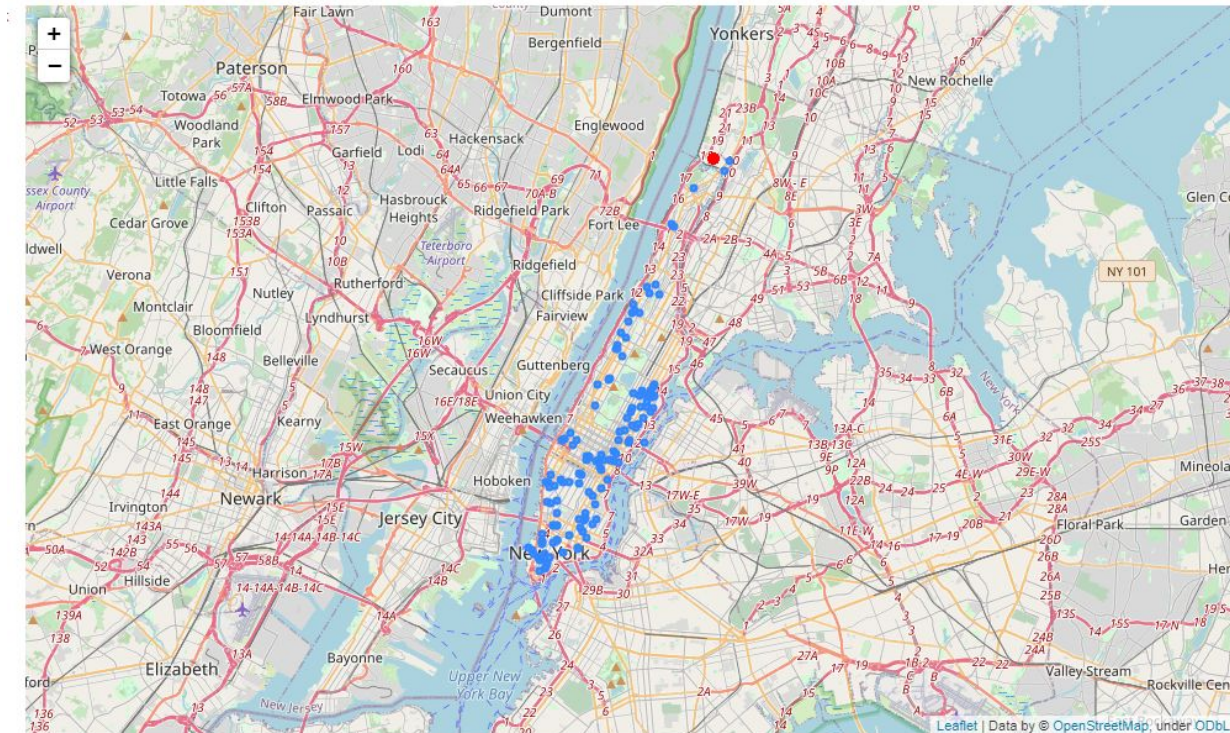
1. I got the gps location of New York
2. I found out all the neighborhood of New York
3. I found out all business information and GPS data of the big neighborhood of NewYork using Foursquare
4. I applied the concept of KNN neighbor, but the further distance from the current existing coffee shops is the better this time. Inverse relation of the distance is applied in the algorithm

A wooden desk with a laptop, a glass of orange juice, and a notebook with a blue pen.

RESULTS

Result

The blue dots are the current coffee shops locations. The red dot is the suggested location for the new coffee shop.





Discuss

The suggested location is very good because there are the least competitors.

In this project, I have an assumption which is the further away from the existing coffee shop the better location. However, it may not be true in the real world. For example, people may also need to consider the traffic and people density at the location.



Conclusion

In this project, Foursquare data and machine learning concepts are applied to find the best location for a new coffee shop location.