

Best Location for enjoying cuisine in Mumbai

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Introduction

Consider you are new in Mumbai and every one knows how large the Mumbai is. And you are much Foody and always try to eat something good. So, what you will find on google best place in Mumbai to eat but Mumbai is so large and you will get multiple options all over the Mumbai for the following results. But the problem is you can't just go to every area present in Mumbai as it is so large and time consuming to go from one area to another. So, what if we do clustering and show users if you go in this particular area you can find as much of option in the area which will make one easy to decide in which area to go and find multiple option for his/her cuisine.

Problem Statement

Prepare a group/cluster of restaurant (including café) using data science technique so that one can easily find best location with multiple option to have its cuisine.

Methodology

We will first create a link (url) with our required data like limit, radius, version, categoryID etc. to get the records of the following requirement. This record will be in JSON format but for our use we need to change the following JSON data to Data Frame. Once we get data Frame, we will just manipulate it and just take out our required attributes.

These records would contain the data of name, address, longitude, latitude of the restaurant all over Mumbai. We will map this on Mumbai map to understand and check that our data is correct.

We will now use 'Elbow Curve' to understand how much clusters to do and according to this we will implement the following K-means on the following records which will give us cluster labels and using this label we can map on Mumbai map different cluster with different color and also we can check what does the particular cluster contains.

Application Area

The following project can be used by people who are foody and always tries to eat something amazing. We can use this as search option for them and they can get multiple option for there search with how much Km, how many option and rating for the place.

Conclusion

The following project, We have implemented the analysis of the data of restaurant of Mumbai and found group of restaurant according to location where we can get multiple option in particular options.

Reference

- [1] <https://docs.python.org/3/tutorial/index.html>
- [2] <https://scikit-learn.org/stable/modules/generated/sklearn.cluster.KMeans.html>
- [3] <https://towardsdatascience.com/k-means-clustering-algorithm-applications-evaluation-methods-and-drawbacks-aa03e644b48a>

