**FINAL REPORT ON BATTLE OF NEIGHBOURHOOD**

1. **Introduction/Business Problem**

Clearly define a problem or an idea of your choice, where you would need to leverage the Foursquare location data to solve or execute. Remember that data science problems always target an audience and are meant to help a group of stakeholders solve a problem, so make sure that you explicitly describe your audience and why they would care about your problem.

**My idea is to help people who wants to open a new restaurant in the city of Kolkata, India.**

**My project defines the number of resturants in the available area within 500m and the type of restaurant they want to open in a particular area. My project also defines the particular place in Kolkata where it will be suitable to open the restaurant of any particular type**.

## Downloading and Prepping Data

## Describe the data that you will be using to solve the problem or execute your idea. Remember that you will need to use the Foursquare location data to solve the problem or execute your idea. You can absolutely use other datasets in combination with the Foursquare location data. So make sure that you provide adequate explanation and discussion, with examples, of the data that you will be using, even if it is only Foursquare location data.

## I have spent several hours on the data collection and availability of the data. I found out that there is no such website from where we can directly web scrap the data to be used for analysis.

## Although there are several website which gave the name of the lok sabha constituents in Kolkata district from where I made the list of neighbourhood and the restaurants nearby to come up to a conclusion.

## The list of website I referred are:

## <https://en.wikipedia.org/wiki/Kolkata_district>

## <https://en.wikipedia.org/wiki/Neighbourhoods_in_Kolkata_Metropolitan_Area>

## <https://en.wikipedia.org/wiki/Category:Neighbourhoods_in_Kolkata>

1. **Methodology**

Methodology section which represents the main component of the report where you discuss and describe any exploratory data analysis that you did, any inferential statistical testing that you performed, and what machine learnings were used and why.

**For this report I have used few different maps for the analysis to open a restaurant in Kolkata with its neighbourhood . I have used folium to create those maps. I have collected the list of venues and the type of venues by using foursquare API. I have used geopy to obtain the precise latitude and longitude of the neighbourhood. I obtained the result and made analysis and segregated the result to obtain the best possible type of restaurant to open in the neighbourhood of that place**.

1. **Results**

Results section where you discuss the results**.**

**Clustering all the results and comparing all results we found out that it is best to open a Indian restaurant especially Bengali restaurant in the central Kolkata**.

1. **Conclusion**

Conclusion section where you conclude the report.

**The report may be helpful to the people who wants to open a shop in Kolkata. However there is a huge fallacy in the report. I have collected the latitude, longitude, type of venue of the restaurants from the neighbourhood of Kolkata by using foursquare API. But the foursquare API did not give me the satisfied amount of name of restaurants. The foursquare API did not work properly on Indian cities unlike on other foreign cities where it works perfectly. Since I have not been allowed to use any other API and neither I am aware about so the report is satisfactory with regards of the use of foursquare API.**