**The Battle of Neighbourhoods**

**Introduction**

*CHENNAI is the capital of TamilNadu. It is one of the most important metros in India. The population of Chennai is around 70.9 lakhs. The region around Chennai has served as an important administrative, military, and economic centre for many centuries.Chennai is located on the south–eastern coast of India in the north–eastern part of Tamil Nadu on a flat coastal plain known as the Eastern Coastal Plains.attracts many visitors either as tourists or as part of its large workforce. The vast majority claim Chennai is one of the best cities in India.*

Its rich and vibrant culture is reflective of its varied food palate. The capital of Tamil Nadu has a wide array of street foods.There are many restaurants here, of varied cuisines (Chinese , Italian , French etc.,).

So as part of this project , we will list and visualise all major parts of Chennai .</i>

**Possible questions that can be asked are as follows:**

**WHAT ARE THE:**

*1.Highest rated resturants in top 10 locality of Chennai?*

*2.Worst rated resturants in top 10 locality of Chennai?*

*3.Top 10 most voted restaurant in Chennai?*

*4.Most lowest votes in top 10 locality of Chennai?*

*5.highest number of Restaurant available in a Locality - Chennai?*

*6.lowest number of Restaurant in a Locality - Chennai?*

*7.BEST places for North Indian Cuisine in Chennai?*

*8.WORST places for North Indian Cuisine in Chennai?*

**Data:**

**For this project we need the following data :**

*Chennai Resturants data that contains list Locality, Resturant name,Rating along with their latitude and longitude.*

*Data source : Zomato kaggel dataset*

*Description : This data set contains the required information. And we will use this data set to explore various locality of new delhi city. Nearby places in each locality of new delhi city.*

*Data source : Fousquare API*

*Description : By using this api we will get all the venues in each neighborhood.*

**STEP 1**

**IMPORT THE LIBRARIES**

**STEP 2**

**ADD BEAUTIFULSOUP PACKAGE TO SCRAPE THE DATA FROM THE KAGGLE DATASET**

**STEP 3**

**CREATE A DATAFRAME USING PANDAS LIBRARY**

**STEP 4**

**ADD THE LATITUDE AND LONGITUDE VALUES INTO THE DATAFRAME**

**STEP 5**

**CREATE A FOLIUM MAP**

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**STEP 6**

**PLOT THE VARIOUS BARPLOTS ACCORDING TO THE ATTRIBUTES IN THE DATAFRAME**

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**STEP 7**

**CREATE A FOURSQUARE API USING YOUR CREDENTIALS**

**STEP 8**

**FIND THE VENUES IN ALL LOCALITIES OF CHENNAI**

**STEP 9**

**ANALYZE EACH LOCALITY**

**STEP 10**

**PUT ALL THE LOCALITIES INTO A PANDA DATAFRAME**

**STEP 11**

**Create the new dataframe and display the top 10 venues for each Locality**

**STEP 12**

**CREATE CLUSTERS USING KMEANS ALGORITHM**

**STEP 13**

**CREATE THE MAP**

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**STEP 14**

**EXAMINE THE CLUSTERS**