CAPSTONE PROJECT- BATTLE OF NEIGHBOURHOODS

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INTRODUCTION

Gurgaon is a city just southwest of New Delhi in northern India. It's known as a financial and technology hub.

The Kingdom of Dreams is a large complex for theatrical shows. Sheetal Mata Mandir is an orange-and-white-striped

Hindu temple. The Vintage Camera Museum showcases cameras and prints spanning a century. West of the city, Sultanpur National Park is home to hundreds of bird species.

The official language of Gurgaon and the one that is most widely spoken is Hindi. However, English is also spoken as a formal language within businesses and government agencies. Over last decades it is continuously growing because of the city's important role in government and commercial business.

With it's diverse culture , comes diverse food items. There are many restaurants in Gurgaon City, each belonging to different categories like Chinese , Italian , French etc. So as part of this project , we will list and visualise all major parts of Gurgaon City and find which place is good for people so that can eat their favourite food of particular cuisine. **Target audience** will be people who like to eat in restaurants.

DATA SECTION

For this project we need the following data :

Gurgaon Restaurants data that contains list of Locality, Restaurant name, Rating along with their latitude and longitude.

Data source : Zomato Kaggle dataset

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

Data source : Foursquare API

Description : By using this API we will get all the venues in each neighbourhood.

METHODOLOGY SECTION

- Collect the Gurgaon city data from [Zomato Kaggle dataset]
- Using Foursquare API we will find all venues for each neighborhood.
- Filter out all venues that are nearby by locality.
- Using aggregative rating for each restaurant to find the best places.
- Visualize the Ranking of neighborhoods using folium library(python)

Data Collection:

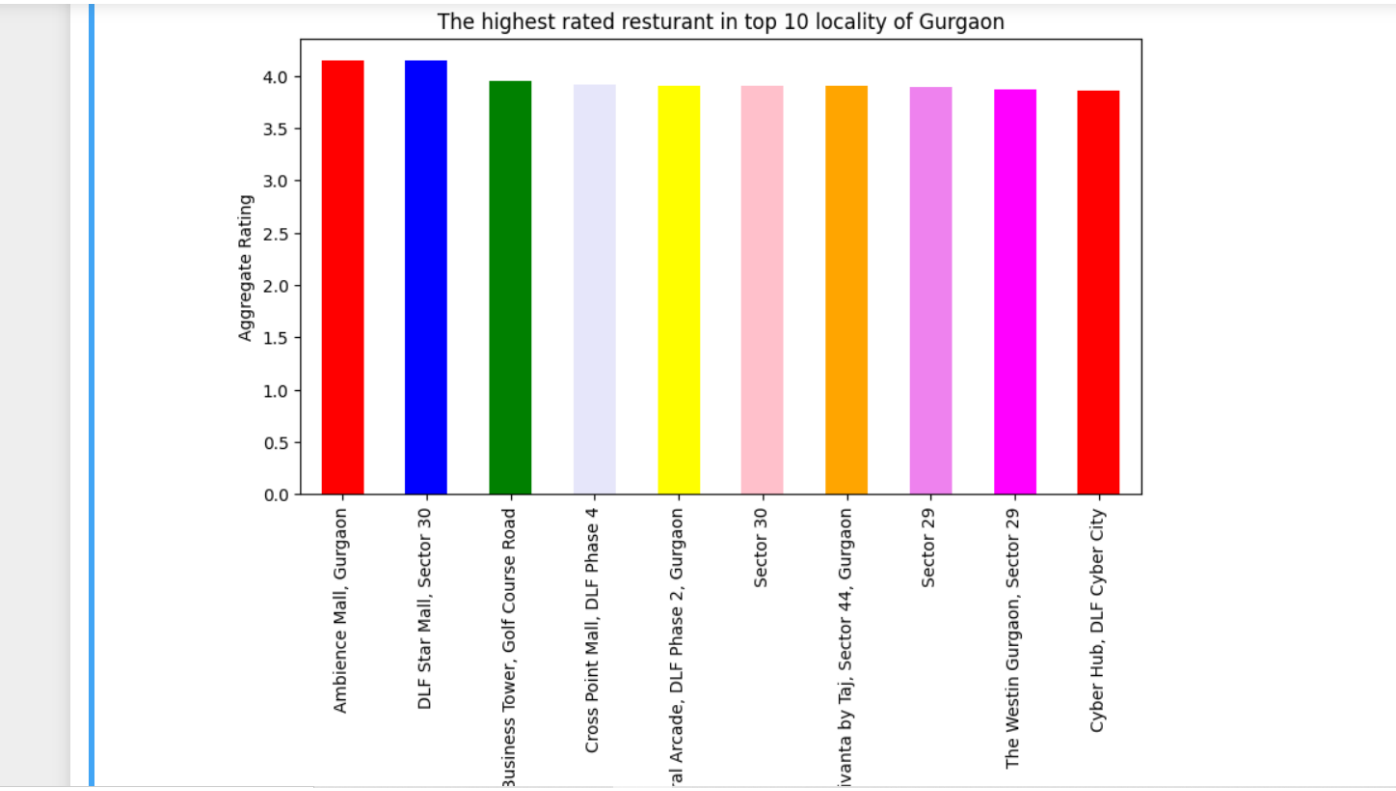
In [1]:
```
import pandas as pd
import numpy as np
import requests # library to handle requests
from pandas.io.json import json_normalize # tranform JSON file into a pandas dataframe
# Matplotlib and associated plotting modules
import matplotlib.cm as cm
import matplotlib.colors as colors
# import k-means from clustering stage
from sklearn.cluster import KMeans
import folium # map rendering library
#! pip install geocoder
import geocoder
```

In [3]:
```
df = pd.read_csv('https://raw.githubusercontent.com/Capstone-Project---The-Battle-of-Neighborhoods/master/zomato.csv',encoding='1
df.head()
```

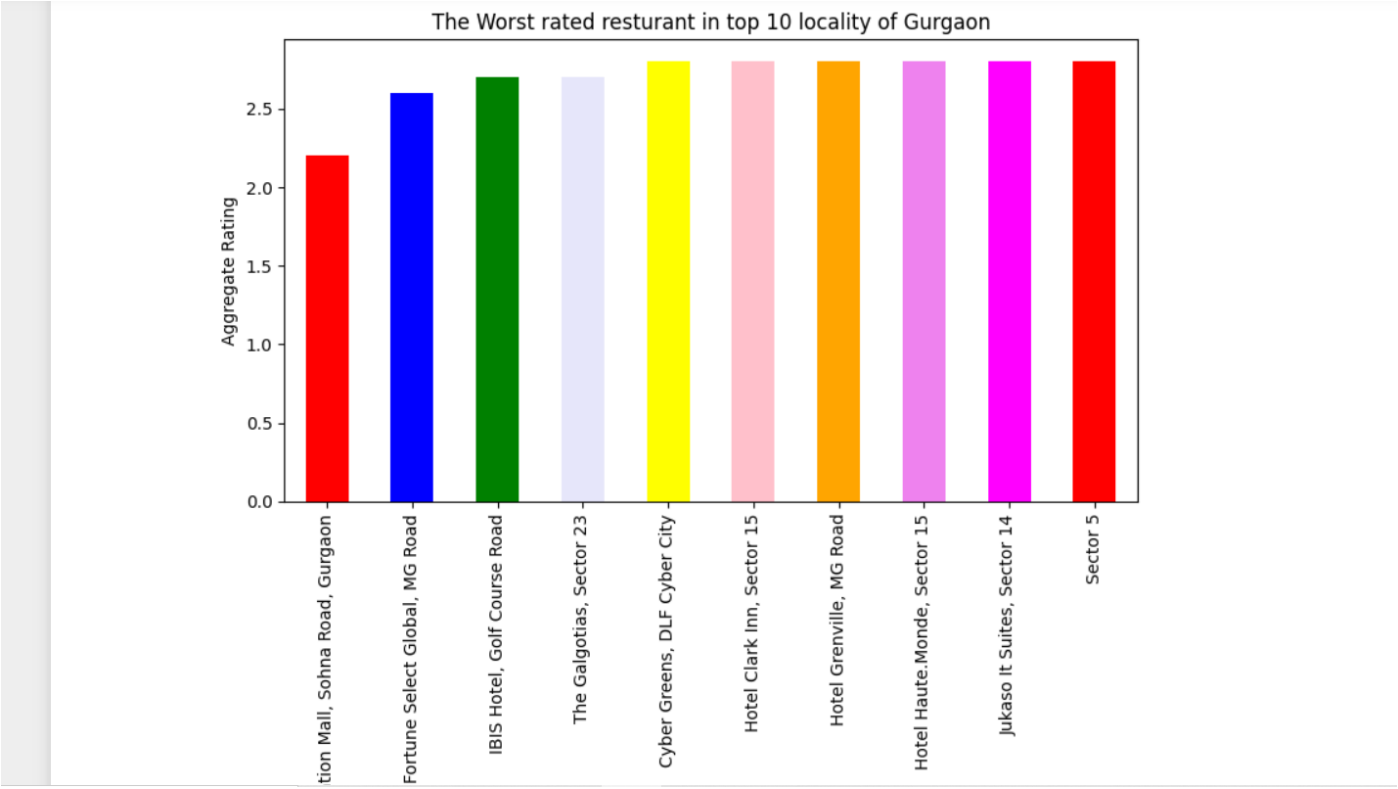
Out[3]:

	Restaurant ID	Restaurant Name	Country Code	City	Address	Locality	Locality Verbose	Longitude	Latitude	Cuisines	...	Currency	Has Table booking	Has Online delivery	del
0	6317637	Le Petit Souffle	162	Makati City	Third Floor, Century City Mall, Kalayaan Avenu...	Century City Mall, Poblacion, Makati City	Century City Mall, Poblacion, Makati City, Mak...	121.027535	14.565443	French, Japanese, Desserts	...	Botswana Pula(P)	Yes	No	
1	6304287	Izakaya Kikufuji	162	Makati City	Little Tokyo, 2277 Chino Roces Avenue, Legaspi...	Little Tokyo, Legaspi Village, Makati City	Little Tokyo, Legaspi Village, Makati City, Ma...	121.014101	14.553708	Japanese	...	Botswana Pula(P)	Yes	No	

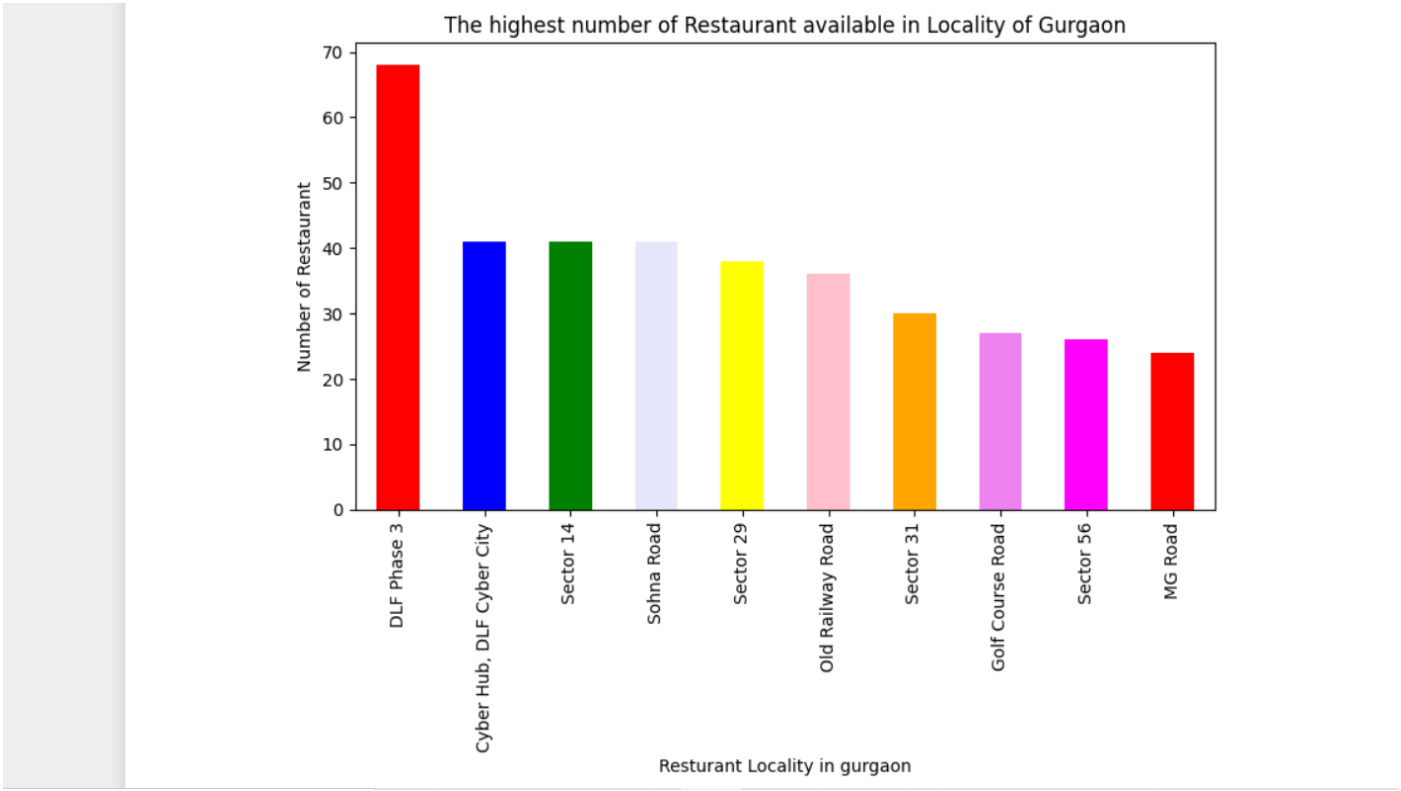
RESULTS



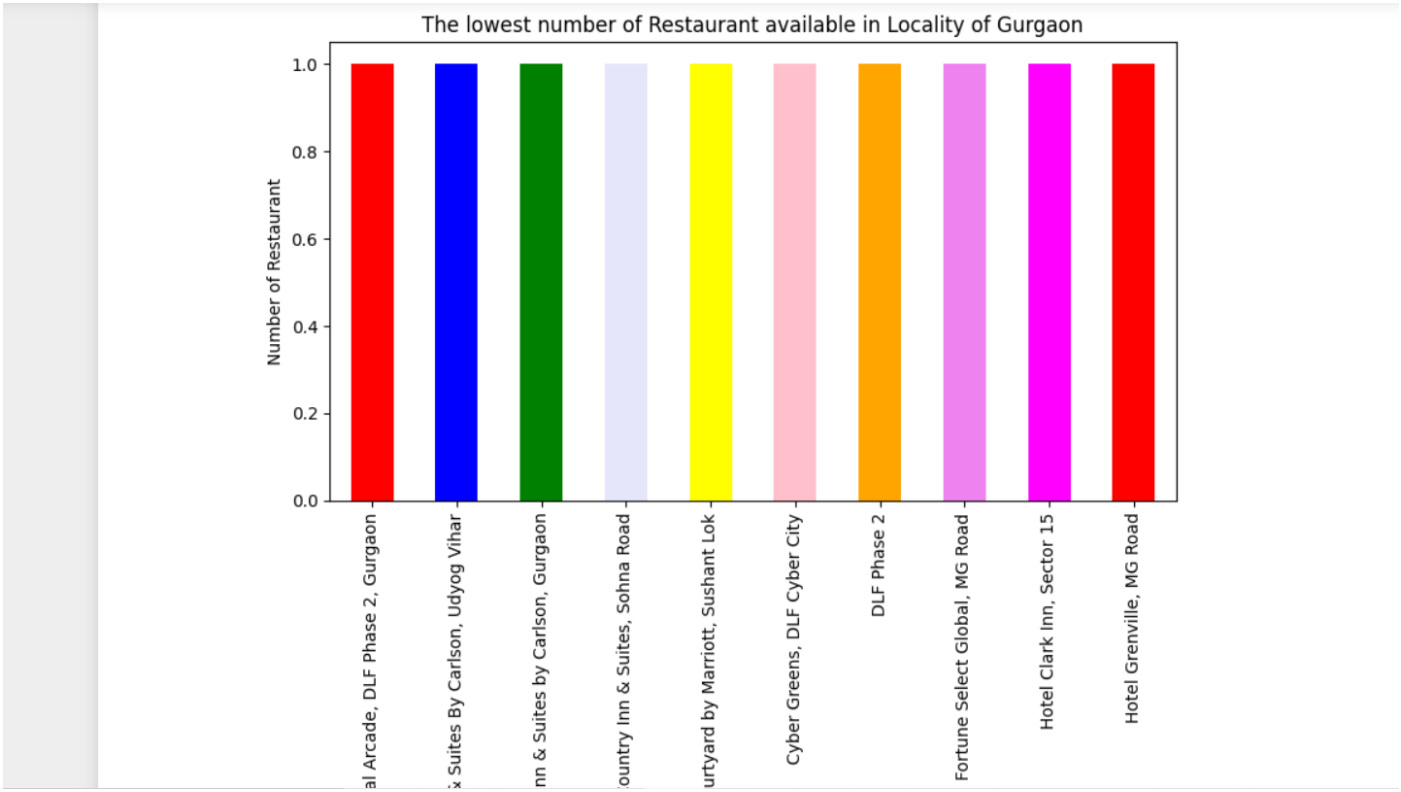
The best restaurants are available in Ambience Mall and DLF Star Mall, Sector 30.

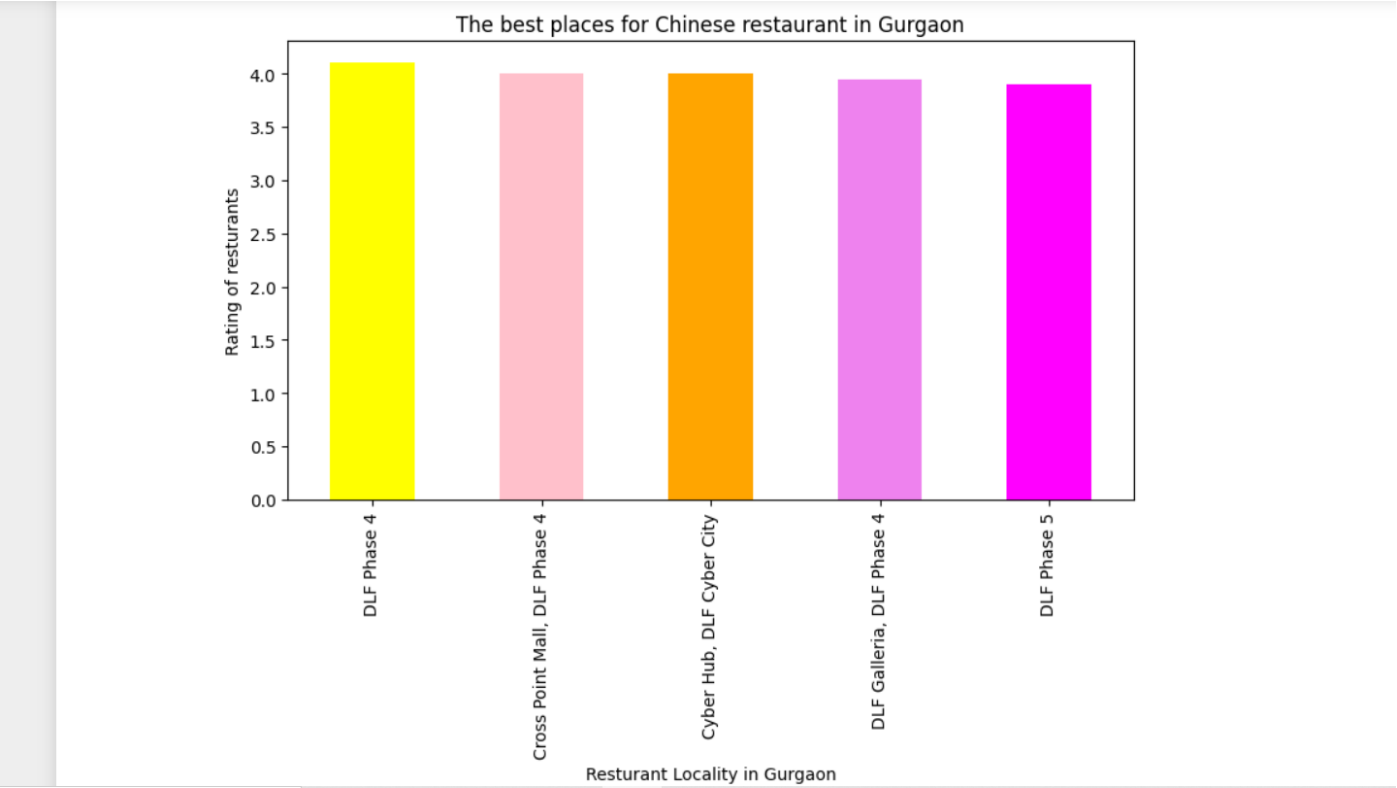


The worst restaurants are in Omaxe Celebration Mall, Sohna Road.



DLF Phase3 is the best place for edible person to stay.





Sector56 is best place for Chinese restaurant.

CONCLUSION

- Sector56 has the best Chinese Restaurant.
- DLF Phase3 is the best place for edible person.
- The worst restaurants is in Omaxe Celebration Mall, Sohna Road.
- Ambience Mall and DLF Star Mall, Sector30 have best restaurants.