

# Exploring and Clustering Restaurants in Bangalore

--IBM Applied Data Science Capstone Course by Coursera

## Introduction

- Bangalore, officially known as Bengaluru, is the capital of the Indian state of Karnataka. It has a population of over ten million, making it a megacity and the third-most populous city and fifth-most populous urban agglomeration in India. It is located in southern India, on the Deccan Plateau at an elevation of over 900 m (3,000 ft) above sea level. Its multi-ethnic, multi-religious, and cosmopolitan character is reflected by its more than 1000 Hindu temples, 400 mosques, 100 churches, 40 Jain Basadis, three Sikh gurdwaras, two Buddhist viharas and one Parsi fire temple located in an area of 741 km<sup>2</sup> of the metropolis. The religious places are further represented by the proposed Chabad of the Jewish community. The numerous Bahá'ís have a society called the Bahá'í Centre.
- Bangalore is also the IT hub of India which brings in a lot of visitors and migrants from within the country and from across the world.
- This project aims at the identifying and classifying restaurants across the city and also for the opportunist, this can give ideas on what possibly be the next venture

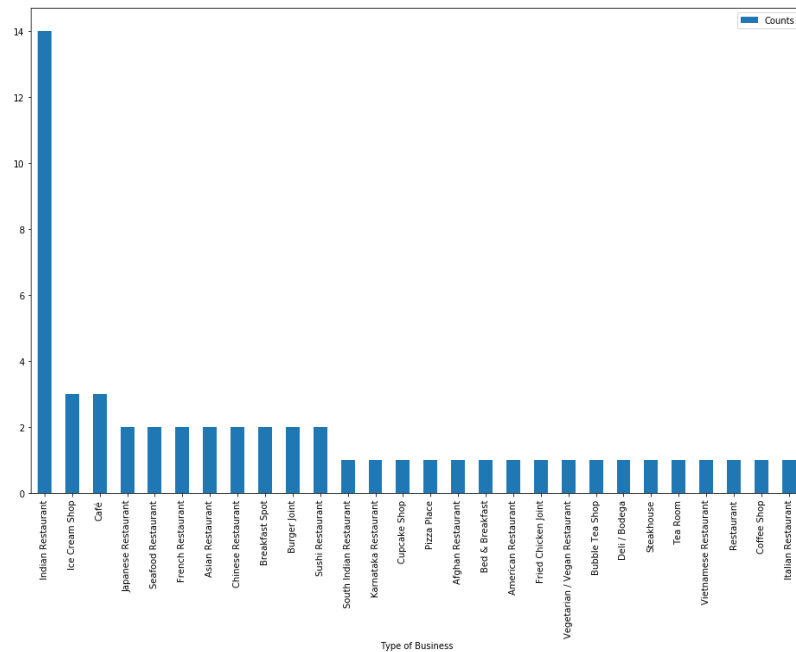
## Data

- The primary source of data was the FourSquare API
- All data was acquired only FourSquare
- Data Cleansing
  - Locations which are not related to restaurants were removed.
  - Unmapable locations were also removed
- Data Acquired
  - Name and type of the restaurant with the geographical coordinates
  - Ratings from the FourSquare API

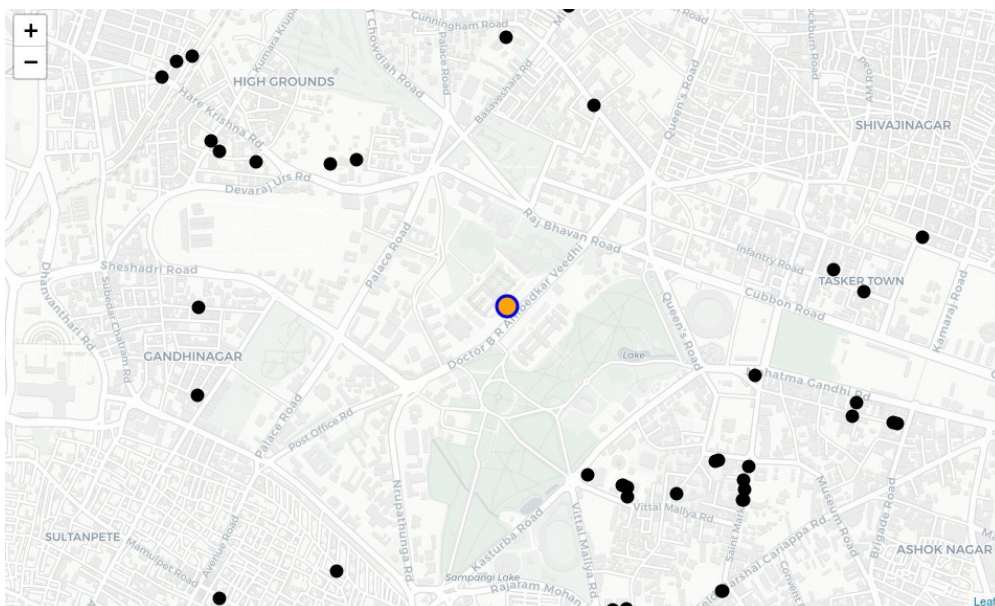
## Methodology and Exploratory Data Analysis (EDA)

We will be using the rating data from the FourSquare API to start our analysis

Here we are checking which type of restaurants are mostly present:-



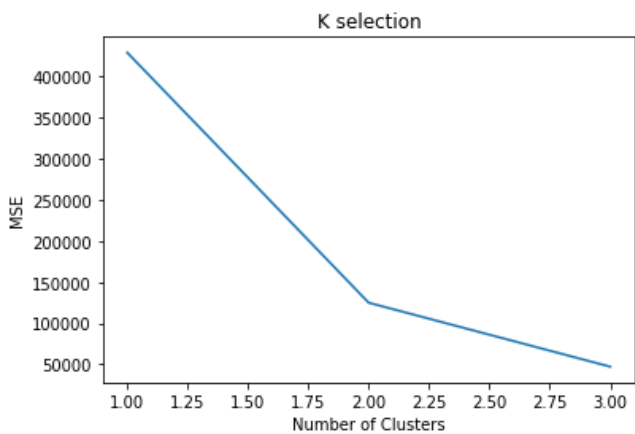
Plotting the points on the map



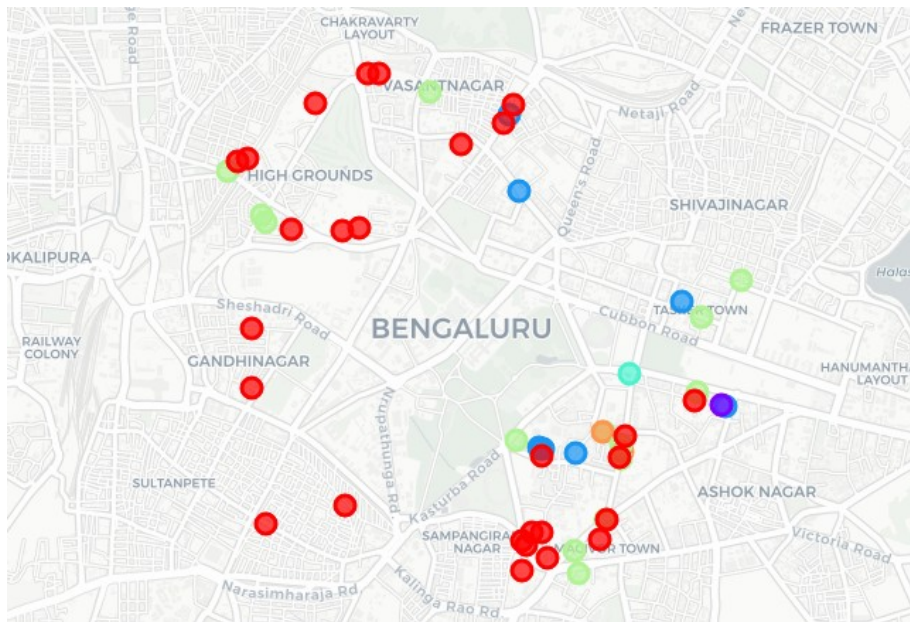
# Clustering

Clustering based on the number of likes the restaurant has received

	name	likes	Adarsh Hamilton	Airlines Hotel	Aromas Of South	Big Straw	Bliss Luxe Chocolate Lounge	Blue Ginger	Brik Oven	Café Noir	Chai Point	Chikkana Tiffin Room	Chowmein	Coast 2 Coast	Corner House	Desserted	Dum Pukht Jolly Nabobs	El
3	Infinita	126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	Toscana	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	Café Noir	163	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
9	Shiro	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	J W Kitchen	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



Final Clustering with the 5 points



There are 5 clusters with different colors

1 being the category of restaurants with less rating/ likes

4 and 5 being the category of restaurants with high rating/ likes