Restaurants from all over the world can be found here in Bengaluru. From United States to Japan, Russia to Antarctica, you get all type of cuisines here. Delivery, Dine-out, Pubs, Bars, Drinks,Buffet, Desserts you name it and Bengaluru has it. Bengaluru is best place for foodies. The number of restaurant are increasing day by day. Currently which stands at approximately 12,000 restaurants. With such an high number of restaurants. This industry hasn't been saturated yet. And new restaurants are opening every day. However it has become difficult for them to compete with already established restaurants. The key issues that continue to pose a challenge to them include high real estate costs, rising food costs, shortage of quality manpower, fragmented supply chain and over-licensing. This Zomato data aims at analysing demography of the location. Most importantly it will help new restaurants in deciding their theme, menus, cuisine, cost etc for a particular location. It also aims at finding similarity between neighborhoods of Bengaluru on the basis of food. The dataset also contains reviews for each of the restaurant which will help in finding overall rating for the place.

Analyze the Buisness Problem of Zomato and create a practical recommendation system for users.

**What is Recommendation System?**

The rapid growth of data collection has led to a new era of information. Data is being used to create more efficient systems and this is where Recommendation Systems come into play. Recommendation Systems are a type of information filtering systems as they improve the quality of search results and provides items that are more relevant to the search item or are realted to the search history of the user. They are active information filtering systems which personalize the information coming to a user based on his interests, relevance of the information etc. Recommender systems are used widely for recommending movies, articles, restaurants, places to visit, items to buy etc.

There are basically three types of recommender systems:-

* Demographic Filtering- They offer generalized recommendations to every user, based on movie popularity and/or genre. The System recommends the same movies to users with similar demographic features.
* Content Based Filtering- They suggest similar items based on a particular item. This system uses item metadata, such as genre, director, description, actors, etc. for movies, to make these recommendations.
* Collaborative Filtering- This system matches persons with similar interests and provides recommendations based on this matching. Collaborative filters do not require item metadata like its content-based counterparts.

Here I will be using Content Based Filtering

Content-Based Filtering: This method uses only information about the description and attributes of the items users has previously consumed to model user's preferences. In other words, these algorithms try to recommend items that are similar to those that a user liked in the past (or is examining in the present). In particular, various candidate items are compared with items previously rated by the user and the best-matching items are recommended.

This data set consists of restaurants of Bangalore,India collected from Zomato.

aim is to create a content based recommender system in which when I will write a restaurant name, Recommender system will look at the reviews of other restaurants, and System will recommend us other restaurants with similar reviews and sort them from the highest rated.