Zomato Restaurant Ratings

ABSTRACT

Zomato is one of the best online food delivery apps which gives the users the ratings and the reviews on restaurants all over india.These ratings and the Reviews are considered as one of the most important deciding factors which determine how good a restaurant is.

We will therefore use the real time Data set with variuos features a user would look into regarding a restaurant. We will be considering Banglore City in this analysis.

Content

The basic idea of analyzing the Zomato dataset is to get a fair idea about the factors affecting the establishment

of different types of restaurant at different places in Bengaluru, aggregate rating of each restaurant, Bengaluru

being one such city has more than 12,000 restaurants with restaurants serving dishes from all over the world.

With each day new restaurants opening the industry has’nt been saturated yet and the demand is increasing

day by day. Inspite of increasing demand it however has become difficult for new restaurants to compete with

established restaurants. Most of them serving the same food. Bengaluru being an IT capital of India. Most of the people here are dependent mainly on the restaurant food as they don’t have time to cook for themselves.

With such an overwhelming demand of restaurants it has therefore become important to study the demography

of a location. What kind of a food is more popular in a locality. Do the entire locality loves vegetarian food.

If yes then is that locality populated by a particular sect of people for eg. Jain, Marwaris, Gujaratis who are

mostly vegetarian. These kind of analysis can be done using the data, by studying the factors such as

- Location of the restaurant
- Approx Price of food

- Theme based restaurant or not
- Which locality of that city serves that cuisines with maximum number of restaurants
- The needs of people who are striving to get the best cuisine of the neighborhood
- Is a particular neighborhood famous for its own kind of food.

Main Objective

The main agenda of this project is:

>> Perform extensive Exploratory Data Analysis(EDA) on the Zomato Dataset.

>>Build an appropriate Machine Learning Model that will help various Zomato Restaurants to predict their respective Ratings based on certain features

Feature description

1. <b>url </B> contains the url of the restaurant in the zomato website
2. address contains the address of the restaurant in Bengaluru
3. name contains the name of the restaurant
4. online_order whether online ordering is available in the restaurant or not
5. book_table table book option available or not
6. rate contains the overall rating of the restaurant out of 5
7. votes contains total number of rating for the restaurant as of the above mentioned date
8. phone contains the phone number of the restaurant
9. location contains the neighborhood in which the restaurant is located
10. rest_type restaurant type
11. dish_liked dishes people liked in the restaurant
12. cuisines food styles, separated by comma
13. approx_cost (for two people) contains the approximate cost of meal for two people
14. reviews_list list of tuples containing reviews for the restaurant, each tuple
15. menu_item contains list of menus available in the restaurant
16. listed_in (type) type of meal
17. listed_in(city) contains the neighborhood in which the restaurant is listed

Conclusion

- From the analysis, 'Onesta' 'Empire Restaurant' & 'KFC' are the most famous restaurants in bangalore.
- Most Restaurants offer options for online order and delivery.
- Most restaurants don't offer table booking.
- From the analysis, most of the ratings are within 3.5 and 4.5.
- From the analysis. we can see that most of the restaurants located in 'Koramangala 5th Block', 'BTM ' & 'Indiranagar'. Then least restaurants are located 'KR Puram', 'Kanaka pura', 'Magadi Road'.
- 'Casual Dining', 'Quick Bites', 'Cafe','Dessert Parlor' are the most common types of restaurant And 'Food Court', 'Casual Dining', 'Dhaba' are the least common.
- From the analysis, pasta & Pizza most famous food in bangalore restaurants.
- From the analysis, we can see that North Indian Cuisines are most famous in bangalore restaurants.
- Two main service types are Delivery and Dine-out.
- From the analysis, we can see that 'Onesta',' Truffles'& 'Empire Restaurant' are highly voted restaurants.
- For the modelling part, i used Linear Regression , Decision Tree Regressor, Random Forest Regressor, Supprot vector Regressor & Extra Tree Regressor From all these models Extra Tree Regressor perform well compared to the other models. So i selected ExtraTree Regressor for model creation.