**Zomota restaurant clustering and sentiment analysis**

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**Introduction**

Zomato is an Indian restaurant aggregator and food delivery start-up founded by Deepinder Goyal and Pankaj Chaddah in 2008. Zomato provides information, menus and user-reviews of restaurants, and also has food delivery options from partner restaurants in select cities.

**Problem Statement**

The Project focuses on Customers and Company, you have to analyze the sentiments of the reviews given by the customer in the data and made some useful conclusion in the form of Visualizations. Also, cluster the zomato restaurants into different segments. The data is visualized as it becomes easy to analysis data at instant

**Steps Involved**

After loading the dataset we performed this method. This process helped us figuring out various aspects and relationships among the target and the independent variables. It gave us a better idea of which feature behaves in which manner compared to the target variable.

Our main motive through this step was to scale our data into a uniform format that would allow us to utilize the data in a better way while performing fitting and applying different algorithms to it. For modelling we tried various classification algorithms like:

**Support Vector Machine, Random Forest Classifier and XGB**

**K means clustering, Principle Component Analysis**

**Conclusion**

SVM and XGB both performed well and we can choose any one them,SVM and XGB are having 0.921 and 0.981 of testing accuracy respectively.  
We got best cluster as 5 in K-Means and Principal Component Analysis(PCA).

The most popular cuisines are the cuisines which most of the restaurants are willing to provide. The most popular cuisines in Hyderabad are North Indian, Chinese, Continental, and Hyderabadi. Sentiment Analysis was done on the reviews and a model was trained in order to identify negative and positive sentiments.

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| **GITHUB:** **https://github.com/Suryaa1309/Zomota-Restaurant-Clustering-and-sentiment-analysis.git** |