**Zomato Restaurant Clustering & Sentiment Analysis**

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| **Team Member’s Name, Email and Contribution:** |
| Name: Debanjan Ganguly  Email: [officialdeba10@gmail.com](mailto:officialdeba10@gmail.com)  Project Contribution:   * Data Exploration * Exploratory Data Analysis * Clustering (Kmeans, Agglomerative, DBScan) * Topic Modelling using LDA * Sentiment Analysis with BernoulliNB, Decision Tree, Logistic Regression, LinearSVC, K Nearest Neighbors |
| **GitHub Repo & Drive Link:** |
| GitHub Link: -  <https://github.com/awesomedeba10/Zomato-Restaurant-Clustering-Sentiment-Analysis----AlmaBetter-Capstone-Project>  Drive Link: -  <https://drive.google.com/drive/folders/1VHah41RuQD1AOv2GP7K16SGCrZPKA4OC?usp=sharing>  Colab Notebook Link: -  <https://colab.research.google.com/drive/1HOMQRjHZNeoBwSbdMh8TnQeQipXNwWBX?usp=sharing> |
| **Project Summary:** |
| Zomato is an Indian multinational restaurant aggregator and food delivery company founded by Deepinder Goyal, Pankaj Chaddah, and Gunjan Patidar in 2008. Zomato provides information, menus, and user reviews of restaurants as well as food delivery options from partner restaurants in select cities. Zomato had also made a name for itself for its prowess in digital marketing.  Like most other startups, India’s pioneering food tech unicorn Zomato has seen many peaks and troughs in its journey. While there were some illustrious moments and accomplishments, there were troubled times too, some that even brought the very existence of the company into question. While Zomato competes with Swiggy, UberEats, and Ola-Foodpanda among others, the company continues to innovate offerings and expand in the manner it has been doing since the day it all started.  Food apps like Zomato provide a secular part where users can rate their experience of the visited restaurant or café. Zomato also provides columns for writing classified user reviews. Sharing on the internet is something we usually do. Giving a review is also a useful activity so that other people on the internet can find out something else and see opinions about things. Food apps like Zomato provide a secular part where users can rate their experience of the visited restaurant or café. Zomato also provides columns for writing classified user reviews. Sharing on the internet is something we usually do. Giving a review is also a useful activity so that other people on the internet can find out something else and see opinions about things.  So, in this article, we will be analyzing the Zomato restaurant data to identify the unique food culture and cuisines of Hyderabad, we will try to solve business cases that can directly help the customers find the best affordable restaurant in their locality. We will be grouping restaurant data on the basis of cost, ratings and cuisines served, will perform topic modelling on reviews and perform sentiment analysis on review data. |
| **Reference:**  *Declaration: The references mentioned below are not the direct copy of code but used for learning purpose of various techniques or metrics or ideas that have been adapted in this project after learning and understanding the concepts thoroughly from these mentioned articles.*   * <https://towardsdatascience.com/how-to-create-dynamic-3d-scatter-plots-with-plotly-6371adafd14> * <https://www.datatechnotes.com/2020/11/tsne-visualization-example-in-python.htmlhttps://www.datatechnotes.com/2020/11/tsne-visualization-example-in-python.html> * <http://www.sefidian.com/2020/12/18/how-to-determine-epsilon-and-minpts-parameters-of-dbscan-clustering/> * <https://highdemandskills.com/topic-model-evaluation/> |