



AMRITA
VISHWA VIDYAPEETHAM
DEEMED TO BE UNIVERSITY

School of
Engineering

SENTIMENT ANALYSIS



NEGATIVE

Totally dissatisfied with the service. Worst customer care ever.



NEUTRAL

Good Job but I will expect a lot more in future.



POSITIVE

Brilliant effort guys! Loved Your Work.

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1.Problem Definition:

The problem statement which we are dealing with is **Sentiment analysis**. We want to analyze huge volumes of data and want to detect the sentiment of it whether it is positive or negative

TASK(T): To classify if a given text/sentence is positive or negative

EXPERIENCE(E): Corpus files having both positives and negatives

PERFORMANCE(P): Accuracy score. Accuracy is used as a score of performance.

2.Datasets:

Restaurant Reviews: Dataset having reviews from restaurants.

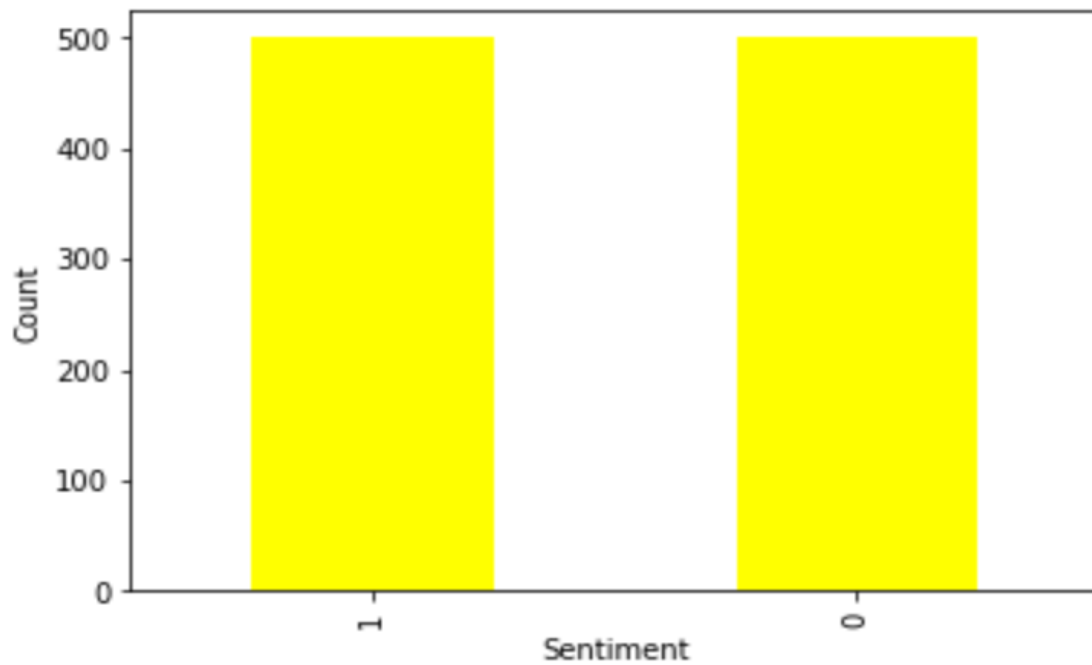
The training set contains reviews as well as their labels, whereas the testing set only reviews.

3.Prepare Data:

- As our input data is text, we used text related preprocessing.
- In the preprocessing step we have done: Removal of stopwords, wild characters, converting uppercase to lowercase letters. Stemming, Tf-IDF/ bag-of-words.
- “Stop words” are commonly used words that are unlikely to have any benefit in natural language processing. So remove them and wild characters.
- TF-IDF is a statistical measure that evaluates how relevant a word is to a document in the collection of documents.
- Removed null values from the dataset.
- Removed duplicates.
- Applied standardization.

Data Visualisation:

Number of positive and negative reviews



Frequency of the reviews

