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public-sentiment-analysis-based-on-twitter-hashtags

OVERVIEW

This project is based on sentiment analysis of the twitter hashtags to categorise the tweets made by certain twitter users into three types, namely, positive, negative or neutral. The scores for all the three types of sentiments, Subjectivity and Polarity were calculated by the usage of various Python libraries. Data visualisation was also done to help get a clear idea of the scores and their relative comparisons.

GOALS:

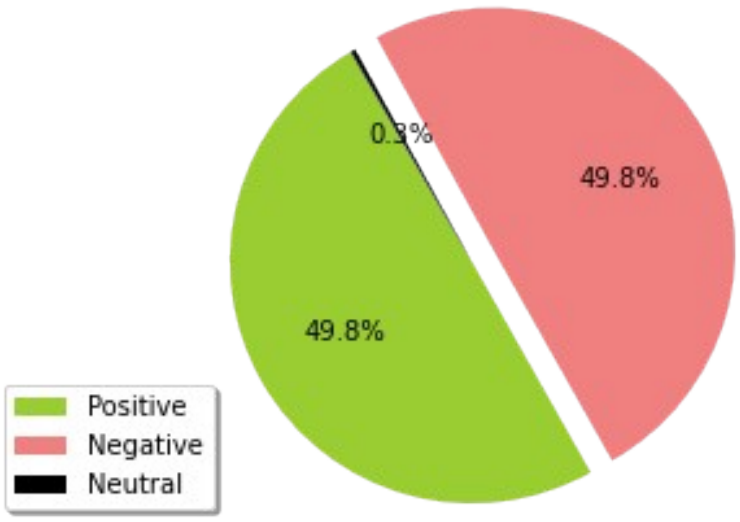
Application of NLP or the Natural Language Toolkit to detect the sense of the tweets and then predict the required score using appropriate ML algorithms

LIBRARIES:

TextBlob, Pandas, Numpy, Matplotlib, Seaborn, Wordcloud, NLTK, Scikit Learn

PLOTS:

Here's a pie-plot representation of the scores of positive vs negative vs neutral sentiments of the tweets



DISCUSSIONS:

1. From the above visual representation of the sentiments, we can draw many inferences.

2. Data pre-processing of the tweets was also done in the project incase the tweets had mixture of emoticons, URLs, symbols etc.

3. The percentage of neutral tweets is the least(a mere 0.3%) while the percentage of positive and negative tweets is almost the same(49.8%) thus suggesting it as a balanced dataset with chance baseline of 50%.

4. We used sentiment.polarity method of TextBlob class to get the polarity of tweet between -1 to 1 and also used sentiment.subjectivity method of TextBlob to get the subjectivity in a similar manner too.

5. Accordingly, if the polarity score>0, it is termed as positive sentiment.

6. If polarity score<0, it is termed as negative sentiment and when it is equal to zero, it is termed as neutral score.

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