Sentiment Analysis and Twitter Sentiments

Report

Sentiment Analysis:-

Sentiment Analysis is the process of determining whether a piece of writing is positive, negative or neutral. It is also known as Opinion Mining refers to the use of natural language processing, text analysis to systematically identify, extract, quantify, and study affective states and subjective information. Sentiment analysis is widely applied to reviews and survey responses, online and social media, and healthcare materials for applications that range from marketing to customer service to clinical medicine.

Sentimental Analysis is a kind of text classification based on Sentimental Orientation (SO) of opinion they contain. Sentiment analysis of product reviews has recently become very popular in text mining and computational linguistics research.
Firstly, evaluative terms expressing opinions must be extracted from the review.
Secondly, the SO, or the polarity, of the opinions must be determined.
Thirdly, the opinion strength, or the intensity, of an opinion should also be determined.
Finally, the review is classified with respect to sentiment classes, such as Positive and Negative, based on the SO of the opinions it contains.

In Sentiment Analysis, we use four methods for predicting whether the message is positive or negative. Those four methods are 1.Support Vector Classifier, 2. SVC pipeline method, 3.Multinomial Naïve Bayes, 4. Multinomial NB Pipeline.
Hence sentiment analysis has a very bright scope of development in future.

Twitter Sentiments:-

Nowadays, the age of Internet has changed the way people express their views, opinions. It is now mainly done through blog posts, online forums, product review websites, social media ,etc. Nowadays, millions of people are using social network sites like Facebook, Twitter, Google Plus, etc. to express their emotions, opinion and share views about their daily lives. Through the online communities, we get an interactive media where consumers inform and influence others through forums. Social media is generating a large volume of sentiment rich data in the form of tweets, status updates, blog posts, comments, reviews, etc.

Sentiment analysis refers to identifying as well as classifying the sentiments that are expressed in the text source. Tweets are often useful in generating a vast amount of sentiment data upon analysis. These data are useful in understanding the opinion of the people about a variety of topics. Therefore we need to develop an Automated Machine Learning Sentiment Analysis Model in order to compute the customer perception. Due to the presence of non-useful characters (collectively termed as the noise) along with useful data, it becomes difficult to implement models on them.

Twitter sentiment analysis comes under the category of text and opinion mining. It focuses on analyzing the sentiments of the tweets and feeding the data to a machine learning model to train it and then check its accuracy, so that we can use this model for future use according to the results. It comprises of steps like data collection, text preprocessing, sentiment detection, sentiment classification, training and testing the model. Hence sentiment analysis has a very bright scope of development in future.