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TWITTER DATA SENTIMENTS ANALYSIS

SENTIMENT ANALYSIS OF TWEETS USING MACHINE LEARNING

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INTRODUCTION

In today's digital world the sentiment analysis is one of the most challenging task. In this project i have used a COVID-19 data set which contain different tweets from different people regarding COVID-19 and Trained a Machine Learning Model over that data and predicted the outputs using that model.
The goal is just to automate the task of analyzing the sentiments of people sharing different tweets.

OBJECTIVE

Objective of this project is, to analyze the overall sentiments of people and make a precise judgment about their feelings.
By the use of this model we can predict the sentiment of a text shared by a person that weather a person is sharing negative information or he is trying to share positive information.

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DATA SET DESCRIPTION

COVID-19 DATA SET FROM KAGGLE.COM

Data set was downloaded from the **Kaggle**. the dataset contains related tweets shared by different people regarding the same topic. it has a column as **Text.** Although it had 2 columns initially but one was dropped during preprocessing. And along with that the hashtags, URLs etc. were also removed from the data set.

LIBRARIES USED..

I used different python libraries for different purpose.

1. NUMPY
2. PANDAS
3. MATPLOTLIB
4. SEABORN
5. SKLEARN
6. TEXTBLOB
7. WORDCLOUD

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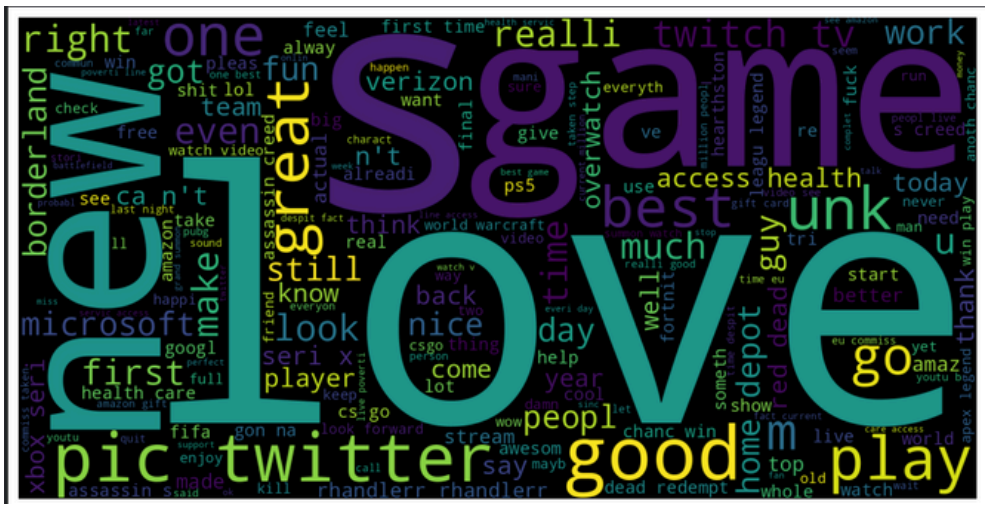
METHODOLOGIES

Here is the overview about Methodology used..

The data set was loaded into the code by using pandas library.
Then the preprocessing was performed on text like we used regular expressions to remove stop words, punctuations, URLs etc.
Then the stemming was performed on the text inorder to reduce the text to base words.
Then the polarity was calculated using the potters-stemmer.
After that the tags as **Positive, Neutral, Negative.**
Then data was splitted into **Training and Testing sets.**
After that a Machine learning model was Trained over that data. Given below is **WordCloud**



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RESULTS AND ACCURACY

HERE ARE THE RESULTS AND ACCURACY OF ML MODEL

ACCURACY = 97.97