

University of Southern Mindanao

Main Campus Graduate School Kabacan, North Cotabato



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Disaster Tweets Prediction

Overview

Twitter has become an important communication channel in times of emergency. The ubiquitousness of smartphones enables people to announce an emergency they're observing in real-time. Because of this, more agencies are interested in programmatically monitoring Twitter (i.e. disaster relief organizations and news agencies).

Objective

To identify the tweets from the twitter world which among them are relate to real disaster.

Process and Methods

The dataset Consist of 5000 tweets from social media platform twitter. The tweets are carefully selected and analysed to produce a non-biased dataset.

This script uses Multinomial Naive Bayes algorithm and confusion matrix are used to analyse and classify which tweets are truly related to disaster and which are not.



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Results and Discussion

Among the dataset there are 372 tweets referred as True Positive which indicated the number of positive tweets classified accurately.

334 tweets describe as True Negative which indicate the number of negative tweets.

225 tweets referred as False Positive describe as number of actual negative values classified as positive. And 179 as False Negative which describe as number of actual positive values classified as negative.

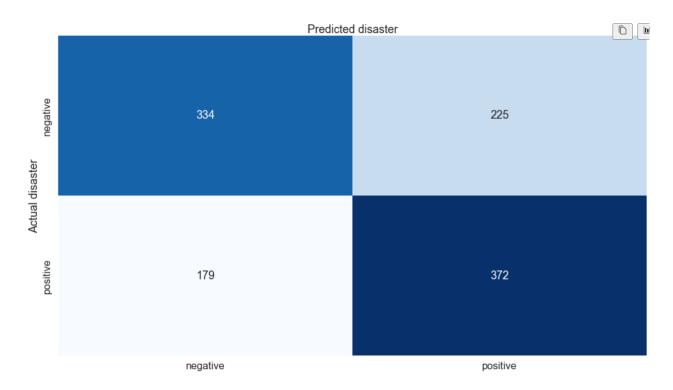


Image 1: Confusion Matrix



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Image 2. Word Cloud output

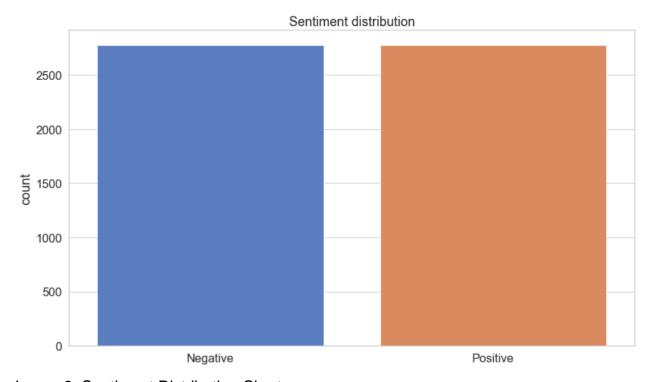


Image 3. Sentiment Distribution Chart