

## Abstract

In movie reviews, there is information that determines whether the movie is good or bad. Sentiment analysis is used to process information to determine the polarity of the sentence. With unstructured reviews and a lot of data attributes so that it requires much time and computational capabilities that become a problem in the classification process. To process a lot of data selection features becomes a solution to reduce dimensions so it accelerate the classification process and reduce the occurrence of misclassification. In this study, the author uses the Multinomial Naïve Bayes method which will be combined with the selection feature of Gini Index Text to classify documents into positive and negative classes. The data used is IMDB data that contain reviews in English sentences, the data will be divided into two parts, training data is 90% and data testing is 10%. The test results prove that the Gini index as a selection feature can increase accuracy where accuracy without feature selection is 56% and with feature selection of 59.54% with an increase of 3.54%.

**Keywords:** Sentiment Analysis, Movie Review, Multinomial Naïve Bayes (MNNB), Gini Index Text (GIT)