

Abstract

Multinomial Naïve Bayes as a classifier for cases in sentiment analysis is commonly used, but the usage of TF-IDF as feature weighting considered unsuitable at those case, this is because the characteristics of TF-IDF that considered term frequency is priority. Thus, Improved Multinomial algorithm is used combined with Improved Gini Index (iGini) in weighting because considered more suitable and able to produce better performances.

In this final project, comparison of performances is done between Multinomial Naïve Bayes + TF-IDF and Multinomial Naïve Bayes + TF-iGini. The results from experiments shows that iGini able to produce quite good performance compared with IDF on Multinomial Naïve Bayes, but not good enough to substitute IDF on sentiment classification cases.

Keywords: *sentiment analysis, feature weighting, IDF, improved gini, Multinomial Naïve Bayes, Indonesian.*