

## **Abstract**

Opinion mining is the analysis of the opinion by looking at the sentiment, behavior, or emotions contained in a product. Some of the opinion mining methods are using the lexicon-based and supervised learning. Lexicon-based method has a low recall, while supervised learning has good accuracy but requires a long training period.

Therefore on this last project will discussed to combine lexicon-based method with one of the supervised learning method, namely Multinomial Naïve Bayes for English language opinion classification based on the sentiment class, ie positive and negative. Characteristic feature extraction performed using n-gram, POS-Tagging, and score-based feature on lexicon. The output of the system is the polarity of each document and the performance will be calculated using Precision, Recall, and F-measure. With the implementation of opinion mining with combining lexicon-based method and Multinomial Naive Bayes, this research get accuracy 0,637.

**Keywords :** Opinion mining, multinomial naïve bayes, lexicon-based method