

## **Abstract**

**Product reviews that can be accessed online help shoppers get information about the products they are about to buy. The emergence of e-commerce websites has made it possible for customers to express their opinions on goods and services. Business owners can gain an understanding of customer satisfaction. The problem that arises is that a large number of reviews can overwhelm users to read all the reviews, requiring sentiment analysis. Sentiment analysis is done to overcome this problem, by summarizing reviews into sentiments and displaying the sentiments of these reviews. To perform sentiment analysis on restaurant reviews, a classification method is needed. Naive Bayes is one of the classification methods that can be used to classify these sentiments. Decision Tree is used to compare the classification results of the Naive Bayes method. Both methods were chosen because they can produce a good classification model with a relatively simple process and relatively little data. The process of both classification methods uses a learning process and a testing process to obtain classification results. The experimentation resulted in Gaussian Naive Bayes that gave the best performance with the best f1-score of 90.81%. Compared with the Gini Decision Tree with the best f1-score of 89.64%.**

**Keywords: naïve bayes, decision tree, analisis sentiment, NLP**