

ABSTRACT

In 2019 the world was shocked by a deadly epidemic that spread throughout the world. This outbreak is named Corona Virus Disease 2019 (COVID-19) which first appeared in the city of Wuhan, People's Republic of China. This epidemic finally entered Indonesia and has claimed hundreds of lives. One of the efforts in dealing with the Covid-19 outbreak is to develop applications to cope with and prevent the Covid-19 pandemic. The PeduliLindungi application makes it easier for the government to identify people who need further treatment. PeduliLindungi users will also get a notification if an area is crowded and the area will be marked with a red zone. This study uses sentiment analysis on the PeduliLindungi application because this research will focus on user reviews of the PeduliLindungi application to determine public sentiment towards the PeduliLindungi application. Sentiment analysis is a technique or way to identify how sentiment can be categorized as positive, neutral, or negative sentiment. To perform sentiment analysis, machine learning is used which aims to detect patterns and clarify data in a model. One of the algorithms in supervised learning is K-Nearest Neighbor which will be used later in this study. K-Nearest Neighbor is a method of supervised learning that aims to classify an object based on the learning data that is closest to the object. This study will look for accuracy values in the K-Nearest Neighbor algorithm model in sentiment analysis using text mining. The best accuracy results from the comparison of 70:30, 80:20, and 60:40 ratios are 80:20 ratios with 89% accuracy. The results of the confusion matrix produce an average accuracy of 89%, an average precision of 91%, an average recall of 89%, and an average f1-score of 89%. And finally, the results of the K-Fold Cross Validation with results from 47% to 70%.

Keywords : Machine Learning, Sentiment Analysis, Text Mining, PeduliLindungi