Abstract

The significant increase in users on TikTok has led to a notable rise in the number of reviews in the form of opinions given to the application. The large number of opinions can be analyzed to identify the prevailing sentiment among the community towards the application. The sentiment analysis method employing machine learning is particularly well-suited to this problem due to its practicality and efficiency. The objective of this research is to develop a model that can be utilized as a sentiment analysis tool with a high degree of accuracy. In this research, the BiLSTM algorithm, combined with IndoBERT, a pre-trained model, is employed. The BiLSTM can comprehend the interrelationships between words within a sentence in a bidirectional manner. IndoBERT is pertinent to this research as it is a model that has been fine-tuned using Indonesian language datasets from various sources on the Internet. To support this research, a scenario was created by considering various aspects when adding methods as an optimization scheme until the optimal model was identified. The outcomes of experimentation demonstrate that sentiment analysis using the BiLSTM+IndoBERT method achieved the highest accuracy, reaching 81% in the classification report test and an average accuracy of 92.03% in cross-validation testing with a total of 10 folds.

Keywords: sentiment analysis, indobert, bilstm, tiktok, deep learning