ABSTRACT

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SENTIMENT ANALYSIS OF USER REVIEWS FOR THE MYTELKOMSEL APPLICATION ON THE GOOGLE PLAY STORE USING THE BERT (*BIDIRECTIONAL ENCODER REPRESENTATION FROM TRANSFORMERS*) METHOD
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(xv + 66 + Attacthment)

Sentiment analysis is a process of analysis aimed at processing, summarizing, and analyzing information within text to determine the emotions conveyed by the author of the text. MyTelkomsel is a mobile app service launched by Telkomsel to provide ease of access for smartphone users in enjoying Telkomsel services. The MyTelkomsel application has been downloaded by more than 9 million users and has received 9 million reviews with a rating of 4.5 out of 5. Users of the MyTelkomsel application can express their comments about the app on Google Playstore. The sentiment analysis process is conducted using the BERT (Bidirectional Encoder Representation from Transformers) method to classify comments into positive, neutral, and negative sentiments, using the Python programming language. Based on the testing results conducted on a dataset of 4,500 comments, it achieved an accuracy of 83% on the validation data and 85% on the testing data using hyperparameters such as a batch size of 32, a learning rate of 2e-5, and 10 epochs. Based on the results of the sentiment analysis, the percentage accuracy of user sentiments for the MyTelkomsel application is 76% for positive, 43% for neutral, and 91% for negative sentiments.

Bibliography (2019 – 2023)