

ABSTRACT

COMPARISON OF SENTIMENT ANNOTATION ACCURACY BETWEEN PRETRAINED INDOBERT AND BILSTM MODELS ON BRIMO APP USER REVIEWS

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Mobile banking applications have become part of social life and provide various conveniences in conducting financial transactions. One application that is widely used is Brimo, Brimo is a mobile banking application from Bank BRI that facilitates the financial transactions of its customers. However, it cannot be denied that an application must have shortcomings. These shortcomings can be evaluated by analyzing user reviews so as to provide insight into their experiences, including aspects of features, product functions, service quality, ease of use, and product value. Sentiment annotation is a method of assigning sentiment labels such as positive or negative to review text to facilitate analysis of user perceptions of the app. This research uses the pretrained IndoBERT model and the tested BiLSTM model to perform sentiment classification. There are two labels in this classification, namely positive and negative. The BiLSTM modeling dataset used is 20,000 reviews by taking 10,000 for training data, 9,000 testing data, and 1,000 validation data. BiLSTM modeling accuracy of 93.33% was obtained with skipgram word embedding architecture, epoch 50, and dropout 0.1. However, when tested with 2,000 different data, the BiLSTM and pretrained IndoBERT models produced an accuracy value of 95.70% versus 97.10%. Judging from the accuracy value obtained, it states that the IndoBERT pretrained model is still better than the BiLSTM model because it has a higher accuracy value.

Keywords: Accuracy Comparison, Sentiment Annotation, IndoBERT, BiLSTM