

Sentiment Analysis of JConnect Application Reviews on Google Play Store Using the Naïve Bayes Algorithm

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ABSTRACT

The advancement of technology and increased internet access have driven progress in digital banking services, including the JConnect application developed by Bank Jatim. Although this application has successfully reached 1 million installations, its rating remains at 3.4, reflecting user dissatisfaction. To gain a deeper understanding of user perspectives, this study conducts a sentiment analysis on reviews shared on Google Play Store using the Naïve Bayes algorithm. The methodology applied includes comment data collection, text pre-processing (Cleaning, case folding, tokenization, normalization, stopword removal, and Stemming), and word weighting using TF-IDF. Sentiment classification is then performed into two categories, positive and negative, using the Multinomial Naïve Bayes model trained on 80% of the data and tested on 20%. The findings indicate that most users express negative sentiment towards JConnect, with the Naïve Bayes model achieving an accuracy of 84%, a precision of 99% for negative sentiment, and 16% for positive sentiment. However, the model struggles in identifying positive sentiment, as shown by the lower recall score for the positive category (83%) compared to the negative category (84%). This study serves as a reference for application developers to improve JConnect services based on user feedback and as a guideline for developing more advanced sentiment analysis models in the future.

Keyword: Sentiment Analysis, Mobile Banking, JConnect, Google Play Store, Naïve Bayes