

ABSTRAK

Roblox merupakan salah satu aplikasi permainan daring yang memiliki jumlah pengguna besar dan memperoleh banyak ulasan di Google Play Store. Ulasan tersebut memuat berbagai tanggapan pengguna mengenai kualitas layanan, performa aplikasi, serta pengalaman bermain. Banyaknya jumlah ulasan menyebabkan proses analisis secara manual menjadi kurang efisien, sehingga diperlukan analisis sentimen untuk mengelompokkan opini pengguna secara otomatis. Penelitian ini bertujuan untuk membandingkan kinerja metode *Support Vector Machine* (SVM) dan *Naive Bayes* dalam analisis sentimen ulasan pengguna aplikasi Roblox yang diperoleh dari Google Play Store. Sentimen ulasan diklasifikasikan ke dalam tiga kategori, yaitu positif, negatif, dan netral. Proses penelitian meliputi pengumpulan data, pembersihan data, pelabelan sentimen berdasarkan *rating*, *preprocessing* teks, serta ekstraksi fitur menggunakan *Term Frequency-Inverse Document Frequency* (TF-IDF). Data yang telah diproses kemudian diklasifikasikan menggunakan metode SVM dan *Naive Bayes* untuk membandingkan performa masing-masing model. Evaluasi dilakukan menggunakan *confusion matrix*, *accuracy*, *precision*, *recall*, dan *F1-score*. Hasil penelitian menunjukkan bahwa metode SVM setelah *hyperparameter tuning* memperoleh kinerja terbaik dengan nilai *accuracy* sebesar 0,73 dan *weighted average F1-score* sebesar 0,69. Hasil tersebut menunjukkan bahwa metode SVM lebih optimal dibandingkan *Naive Bayes* dalam mengklasifikasikan sentimen ulasan pengguna aplikasi Roblox, meskipun kelas netral masih menjadi kelas yang paling sulit dikenali oleh model.

Kata kunci: Analisis Sentimen, Roblox, Google Play Store, *Support Vector Machine*, *Naive Bayes*, TF-IDF.

ABSTRACT

Roblox is one of the online gaming applications with a large user base and numerous reviews on the Google Play Store. These reviews reflect users' opinions regarding application performance, service quality, and gaming experience. The large number of reviews makes manual analysis inefficient, making sentiment analysis necessary to automatically classify user opinions. This study aims to compare the performance of the Support Vector Machine (SVM) and Naive Bayes methods in sentiment analysis of Roblox user reviews collected from the Google Play Store. The reviews were classified into three sentiment categories: positive, negative, and neutral. The research process included data collection, data cleaning, sentiment labeling based on user ratings, text preprocessing, and feature extraction using Term Frequency-Inverse Document Frequency (TF-IDF). The processed data were then classified using the Support Vector Machine and Naive Bayes methods to compare the performance of both models. Model evaluation was conducted using a confusion matrix, accuracy, precision, recall, and F1-score. The results indicate that the Support Vector Machine with hyperparameter tuning achieved the best performance, obtaining an accuracy of 0.73 and a weighted average F1-score of 0.69. These findings demonstrate that the Support Vector Machine outperformed Naive Bayes in classifying the sentiment of Roblox user reviews, although the neutral class remained the most challenging category for both models to classify accurately.

Keywords: Sentiment Analysis, Roblox, Google Play Store, Support Vector Machine, Naive Bayes, TF-IDF.