

INTISARI

Penelitian ini berjudul “Analisis Sentimen Game Mobile Legends di Google Play Store Menggunakan Metode Support Vector Machine dan Logistic Regression” yang bertujuan untuk membandingkan kinerja algoritma Support Vector Machine dan Logistic Regression dalam mengklasifikasikan sentimen ulasan pengguna terhadap aplikasi Mobile Legends: Bang Bang. Data yang digunakan berupa 2.000 ulasan berbahasa Indonesia dan Inggris yang diperoleh melalui metode web scraping dari Google Play Store. Ulasan tersebut diproses menggunakan teknik preprocessing dan diekstraksi fiturnya menggunakan metode TF-IDF, kemudian dilakukan pelabelan otomatis sentimen menggunakan model RoBERTa untuk membagi ulasan ke dalam dua kelas: positif dan negatif. Model dikembangkan menggunakan algoritma SVM dan Logistic Regression, serta dievaluasi menggunakan metrik accuracy, precision, recall, dan F1-score. Hasil analisis menunjukkan bahwa algoritma SVM memiliki performa lebih unggul dibandingkan Logistic Regression dengan nilai accuracy mencapai 95,23%, precision 95,23%, recall 95,23%, dan F1-score 95,20%, sedangkan Logistic Regression memiliki nilai evaluasi yang sedikit lebih rendah. Temuan ini menunjukkan bahwa SVM lebih efektif dalam melakukan klasifikasi sentimen ulasan aplikasi game dibandingkan Logistic Regression. Penelitian ini diharapkan dapat memberikan kontribusi bagi pengembangan metode klasifikasi teks berbasis machine learning, serta memberikan masukan yang berguna bagi pengembang aplikasi dalam memahami opini dan pengalaman pengguna terhadap layanan aplikasi mereka.

Kata Kunci: Analisis Sentimen, Mobile Legends, TF-IDF, Support Vector Machine, Logistic Regression.

ABSTRACT

Abstract This research, entitled “Sentiment Analysis of the Mobile Legends Game on Google Play Store Using Support Vector Machine and Logistic Regression Methods”, aims to compare the performance of the Support Vector Machine and Logistic Regression algorithms in classifying user reviews of the Mobile Legends: Bang Bang application. The dataset consists of 2,000 reviews written in Indonesian and English, collected through web scraping from the Google Play Store. The reviews were preprocessed and transformed using the Term Frequency–Inverse Document Frequency (TF-IDF) method, and the sentiment labels were automatically assigned using the RoBERTa model into two classes: positive and negative. The classification models were built using SVM and Logistic Regression and evaluated using metrics such as accuracy, precision, recall, and F1-score. The results showed that the SVM algorithm outperformed Logistic Regression, achieving an accuracy of 95.23%, precision of 95.23%, recall of 95.23%, and F1-score of 95.20%. Meanwhile, Logistic Regression performed slightly lower in all evaluation metrics. These findings indicate that SVM is more effective in classifying user sentiment on game reviews. This study is expected to contribute to the development of text classification methods using machine learning, and to provide valuable insights for application developers to understand user opinions and experiences regarding their application services.

Keywords: Sentiment Analysis, Mobile Legends, TF-IDF, Support Vector Machine, Logistic Regression.