ABSTRAK

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Program Studi	:	Teknik Informatika
Judul Laporan Skripsi	:	ANALISIS SENTIMEN ULASAN APLIKASI SPOTIFY PADA GOOGLE PLAY STORE MENGGUNAKAN ALGORITMA *RANDOM FOREST* DAN *NAÏVE BAYES*
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Penelitian ini membandingkan kinerja algoritma Random Forest dan Naïve Bayes dalam mengklasifikasikan sentimen ulasan aplikasi Spotify di Google Play Store. Data yang digunakan terdiri dari 1500 ulasan berbahasa Indonesia. Proses analisis meliputi pengumpulan data, pra-pemrosesan data (pembersihan, penghapusan kata tidak relevan, tokenisasi, dan stemming), pelabelan data, dan pembagian data latih serta data uji dalam tiga skenario: 70:30, 80:20, dan 90:10. Hasil evaluasi menunjukkan bahwa Naïve Bayes secara konsisten mengungguli Random Forest. Pada skenario pembagian data 70:30, Naïve Bayes mencapai akurasi 96%, precision 95%, recall 95%, dan F1-Score 95%, sedangkan Random Forest mencapai akurasi 94%, precision 93%, recall 93%, dan F1-Score 93%. Pada skenario 80:20 dan 90:10, Naïve Bayes tetap lebih unggul dengan akurasi 95% dibandingkan Random Forest yang memiliki akurasi 93% dan 94%. Kesimpulannya, Naïve Bayes lebih efektif dan konsisten dalam mengklasifikasikan sentimen ulasan aplikasi Spotify dibandingkan Random Forest. Naïve Bayes menunjukkan keunggulan dalam akurasi, precision, recall, dan F1-Score, serta memiliki tingkat kesalahan yang lebih rendah dalam mendeteksi sentimen positif.

Kata Kunci: Analisis Sentimen, Random Forest, Naïve Bayes, Ulasan Aplikasi, Spotify, Google Play Store

ABSTRACT

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Title Research Proposal   : SENTIMENT ANALYSIS OF SPOTIFY APPLICATION REVIEWS ON GOOGLE PLAY STORE USING *RANDOM FOREST* ALGORITHM

This research compares the performance of Random Forest and Naïve Bayes algorithms in classifying the sentiment of Spotify app reviews on the Google Play Store. The data used consists of 1500 Indonesian-language reviews. The analysis process includes data collection, data pre-processing (cleaning, removal of irrelevant words, tokenization, and stemming), data labeling, and division of training data and test data in three scenarios: 70:30, 80:20, and 90:10. The evaluation results show that Naïve Bayes consistently outperforms Random Forest. In the 70:30 data sharing scenario, Naïve Bayes achieved 96% accuracy, 95% precision, 95% recall, and 95% F1-Score, while Random Forest achieved 94% accuracy, 93% precision, 93% recall, and 93% F1-Score. In the 80:20 and 90:10 scenarios, Naïve Bayes remains superior with 95% accuracy compared to Random Forest which has 93% and 94% accuracy. In conclusion, Naïve Bayes is more effective and consistent in classifying the sentiment of Spotify app reviews than Random Forest. Naïve Bayes shows superiority in accuracy, precision, recall, and F1-Score, and has a lower error rate in detecting positive sentiment.

Keywords: *Sentiment Analysis, Random Forest, Naïve Bayes, App Reviews, Spotify, Google Play Store*