

ABSTRAK

ANALISIS SENTIMEN APLIKASI SPOTIFY DI PLAYSTORE MENGUNAKAN METODE KLASIFIKASI

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Spotify adalah aplikasi streaming musik yang populer di seluruh dunia. Dengan banyaknya pengguna, aplikasi ini menerima berbagai ulasan positif dan negatif di Google Play Store. Penelitian ini bertujuan untuk menganalisis sentimen ulasan pengguna terhadap aplikasi Spotify menggunakan beberapa metode klasifikasi, termasuk *Logistic Regression*, *Random Forest*, *Support Vector Machine (SVM)*, *C4.5*, dan *Extreme Gradient Boosting (XGBoost)*. Data ulasan diperoleh melalui teknik *Web Scraping* menggunakan *API Google-Play-Scraper*. Setelah itu, dilakukan *text preprocessing* untuk membersihkan teks agar data dapat dieksekusi. Analisis sentimen digunakan untuk mendeteksi apakah suatu teks mengandung opini positif atau negatif. Metode *Random Forest* digunakan dalam penelitian ini terbukti memberikan hasil yang terbaik. Pengujian dilakukan berdasarkan rasio pembagian data latih dan data uji 80%:20%, 70%:30%, dan 60%:40% terhadap ribuan data ulasan. Berdasarkan hasil pengujian, metode *Random Forest* dengan rasio pembagian data latih dan data uji 80%:20% memberikan nilai *precision* 82%, *recall* 81%, *F1-Score* 81%, dan *accuracy* sebesar 81%.

Keywords: Analisis Sentimen, Spotify, Google Play Store, Web Scraping, text preprocessing, Logistic Regression, Random Forest, Support Vector Machine (SVM), C4.5, XGBoost.

ABSTRACT

SENTIMENT ANALYSIS OF SPOTIFY APPLICATION ON PLAY STORE USING CLASSIFICATION METHOD

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Spotify is a popular music streaming application worldwide. With many users, the application receives various positive and negative reviews on Google Play Store. This study aims to analyze the sentiment of user reviews of the Spotify application using several classification methods, including Logistic Regression, Random Forest, Support Vector Machine (SVM), C4.5, and Extreme Gradient Boosting (XGBoost). Review data was obtained through Web Scraping techniques using the Google-Play-Scraper API. Text preprocessing was then performed to clean the text so that the data could be executed. Sentiment analysis was used to detect whether a text contains positive or negative opinions. The Random Forest method, proven to provide the best results, was used in this study. Testing was conducted based on the ratio of training and test data of 80%:20%, 70%:30%, and 60%:40% on thousands of review data. Based on the test results, the Random Forest method with an 80%:20% data split ratio yielded a precision value of 82%, recall of 81%, F1-Score of 81%, and accuracy of 81%.

Keywords: Sentiment Analysis, Spotify, Google Play Store, Web Scraping, text preprocessing, Logistic Regression, Random Forest, Support Vector Machine (SVM), C4.5, XGBoost.