

ABSTRACT

Harits Raihan, 10120500

SENTIMENT ANALYSIS ON SOUNDCLOUD APP REVIEWS ON GOOGLE PLAY USING SUPPORT VECTOR MACHINE (SVM) METHOD

Thesis. Department of Information Systems. Faculty of Computer Science and Information Technology. Gunadarma University. 2024.

Keywords: Sentiment Analysis, SoundCloud, SVM, TF-IDF, AUC, Accuracy

(xii + 53 + Attachment)

Music streaming apps are digital platforms that allow users to listen to music directly over the internet without the need to download it first. These apps offer various features, such as access to millions of songs, playlist creation, and music recommendations based on user preferences. SoundCloud is one of the unique music streaming applications as it offers an upload feature for its users, allowing them to share and listen to different types of music and audio. The app gets a lot of reviews from its users on the Google Play Store, reflecting their experience when using the app. Sentiment analysis of these reviews aims to understand user perceptions and provide feedback. Sentiment analysis technology enables the processing and interpretation of text data in identifying users' opinions or feelings. This research focuses on sentiment analysis of SoundCloud app user reviews with classification using Support Vector Machine (SVM) method. A dataset containing 4,578 reviews was processed through preprocessing stages such as filtering, case folding, normalisation, negation, tokenization, removal of stopwords, and stemming. The Lexicon-Based approach classifies the reviews into three categories, positive, neutral, and negative. The dataset that has been processed is then divided into training data and test data. Model evaluation shows the best Area Under Curve (AUC) results with a value of 99.35%, accuracy 96.50%, precision 98.20%, and recall 98.00% using a linear kernel and parameter $C=100$. These results show that the performance of this system is better than the previous research and indicates the ability of the SVM model in distinguishing the sentiment of reviews, especially in the neutral and positive categories.

Bibliography (2020-2023)