

User Sentiment Analysis on Skolla Application Reviews Using the Naive Bayes Method

Supervised by Prawidya Destarianto, S.Kom, M.T

Muhammad Rizal Fahlevi

Study Program of Informatic Engineering
Majoring of Information Technology

ABSTRACT

This research was conducted with the aim of analyzing user sentiment towards the Skolla tutoring application based on reviews from the Google Play Store. As a digital education platform, Skolla has been downloaded by over one million users, generating diverse responses. The dataset used in this study consisted of 1,000 reviews. All data was labeled in collaboration with a linguistics expert. The dataset was then divided into 80% training data and 20% testing data. In this study, the sentiment analysis classification results using the Naive Bayes algorithm demonstrated proficient performance with an accuracy rate of 96%, positive precision of 97%, negative precision of 91%, positive recall of 99%, negative recall of 81%, positive F1-score of 98%, and negative F1-score of 86%. This classification model was subsequently integrated into a React-based website to allow users to practically monitor review sentiments. Overall, the Naive Bayes method proved highly effective in recognizing sentiment characteristics, particularly for positive reviews.

Keywords: Sentiment Analysis, Naive Bayes, Skolla