Analysis of Student Sentiment Towards the S-Learn Application for Information Technology Department Using the Naïve Bayes Classifier Method

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ABSTRACT

S-Learn is a learning application used by Information Technology students at Jember State Polytechnic. This study aims to analyze student sentiment towards S-Learn using the Naïve Bayes Classifier method and present the results through a website dashboard. A total of 545 student comments were collected through Google Forms, pre-processed, and weighted using Term Frequency-Inverse Document Frequency (TF-IDF). The dataset was divided into 436 training data and 109 testing data. Using the Multinomial Naïve Bayes method with an alpha value of 0.5, the model achieved 89.91% accuracy, 86.42% precision, and 100% recall. The results are presented through the website dashboard, and User Acceptance Testing (UAT) showed a 100% acceptance rate across all 12 test scenarios. This system is expected to help evaluate student opinions and support the improvement of the S-Learn application.

Key words: *Sentiment Analysis, S-Learn, Naïve Bayes Classifier, TF-IDF, Website Dashboard*