

Abstract

The novel book is a literary work in the form of a long narrative prose, which has a series of stories about the life of a character and people around him by highlighting the nature and character of each character in the novel. With so many reviews that arise from the opinions of readers, it is increasingly difficult to find reviews that are in accordance with consumer choice. This is a problem in which, consumers do not always receive reviews from readers. To solve this problem, we need a method that can make it easy to analyze related to the review. Therefore, the solution that will be carried out is by applying a sentiment analysis classification. Sentiment analysis is a contextual mining of data in the form of text, which aims to analyze various opinions or opinions in the form of issues, comments, etc. on an object or problem by someone whose value will have a positive or negative value. This study, has several objectives, namely, to determine the performance of the Support Vector Machine (SVM) classification system that was built. Second, to find out the performance in weighting the Term Frequency-Inverse Document Frequency (TF-IDF) feature and Chi Square feature selection. Third, to determine the performance of the Term Frequency (TF) weighting and Chi Square feature selection. From the experimental results, it was found that the best performance results for the classification of sentiment analysis in the review of English-language novel books, namely the use of Gaussian RBF kernels for each of the two weighting features with feature selection used with a performance value of 74.2%.

Keywords: *Support Vector Machine (SVM), Sentiment Analysis, review, Term Frequency-Inverse Document Frequency (TF-IDF), Term Frequency (TF), Chi Square*