ABSTRACT

Shafa Talitha Rizqiah. 16119002

SENTIMEN ANALYSIS ON M-PASPOR APP REVIEWS ON GOOGLE PLAY USING SUPPORT VECTOR MACHINE (SVM) METHOD

Thesis. Information Systems, Faculty of Computer Science and Information, 2023 Kata Kunci: Sentiment Analysis, M-Paspor, *Support Vector Machine, Machine Learning*. (xiii+54+L-18)

On January 26, 2022, the Directorate General of Immigration of the Ministry of Law and Human Rights of the Republic of Indonesia launched an application named M-Passport. M-Passport is a new form of the Online Passport Queue Registration Application (APAPO) that is implemented to make passport services more transparent, accountable, and efficient. The M-Passport application has been downloaded more than 1 million times on the Google Play Store as of April 12, 2023. On the Google Play Store, there is a feature for ratings and reviews that contain user reviews of the available application or service. These reviews can be used for evaluation purposes to improve the application's quality by considering user feedback. This study applies sentiment analysis, which is a process to identify what the public likes, dislikes, their opinions, comments, or feedback, and classifies them into sentiment classes or labels. Sentiment analysis is performed using the Support Vector Machine (SVM) method. Comments will be classified as positive or negative sentiment. In the conducted study, there were 2000 reviews acquired from the Google Play Store. The data was then processed through preprocessing stages and implemented in sentiment analysis using the SVM model. The results of applying the Support Vector Machine to the classification of M-Passport reviews with a 70:30 split between training and testing data achieved an accuracy of 92%, Precision of 72%, Recall of 74%, and an F1 Score of 73%.

Bibliography (2008 - 2023)