ABSTRACT

Consultation methods for a problem began to vary in the delivery either in person, video calls or plain texts. One of the health fields that handles this kind of thing is a psychiatrist. Unlike physical health, mental health is more difficult to keep confidential. Mental disorders such as depression are often found in many people even though they are students. Therefore, it takes a machine or a person who can be trusted to listen to the problems of that person. One of the machines that can be used for depression counseling is a chatbot.

In this final project, a system is designed to classify chatbot text using Bidirectional Long Short-Term Memory (Bi-LSTM). With the text method, it is classified where the answers from users are based on six categories, namely love, friends, family, academic, financial and career which are used for depression counseling. Tested with three test scenarios, namely data partition, epoch and batch size.

The system in this final project uses a dataset in the form of text, where the text is a collection of answers from users. The dataset consists of six labels, each of which has 80 training data. From this study, it was found the best configuration with 93% accuracy, 93% precision, 93% recall, and 93% F1-score using 80% training data and 20% test data, number of epochs 15, batch size 16, optimizer Adaptive Moment (Adam) and use sigmoid activation.

Keywords: Activation, Bi-LSTM, Chatbot, Depression, Mental Disorders, Optimizer