

ABSTRACT

Chatbot is an artificial intelligence (AI) technology that can conduct human-like conversations either through text or voice. Chatbot systems in the form of Q&A that can help human activities, consultation on a problem and even offer solutions to medical problems. Every human being has their own level of anxiety, excessive anxiety to become a social anxiety disorder can interfere with activities. Therefore, chatbots can make a person's solution to be a listener of a problem.

Based on the above problems, research on this Final Task conducted text classification for chatbot counseling. The classification of text uses Long Short-Term Memory (LSTM) and the text modeling utilizes the modified dataset of ISEAR dataset as well as the responses from multiple people. The proposed LSTM method in the text classification was used the user's response of chatbot regarding its labels created in advance.

The system in this Final Project is trained using datasets in the form of text. Datasets created in the form of answers from users who are labeled positive and negative with 70 training data. From the results of this study, the model with the number of epoch 4 has the best configuration, namely RMSprop at a learning rate of 0.001 with a test accuracy of 85.71%. Likewise, the model with the number of epoch 6 has the best configuration, namely RMSprop at a learning rate of 0.01 with a test accuracy of 89.29%. In addition, performance parameters on epoch 4 with an average precision of 97%, recall 97%, and f1-score 97%. Then the performance parameters on epoch 6 with an average precision of 97%, recall 97%, and f1-score 97%.

Keywords: *Chatbot, Long Short-Term Memory, Social Anxiety Disorder.*