ABSTRACT

Advances in information technology currently have a positive impact in various fields, one of which is education. Education is one of the foundations of national development. In the 2013 curriculum, history subjects have a very important position in the life of the nation and state. Indonesian history subjects are obliged to shape the character of students through the values contained in them. History is domiciled as a social science in science. For its age, history is one of the oldest social sciences, and its embryos have existed in the simplest surviving human myths and traditions. In studying Indonesian history subjects, students have difficulty understanding the material and lack of student interest in learning so that a Question Answering System chatbot was created on the LINE Messenger platform which can make it easier for students to ask questions about Indonesian history subjects. Question Answering System or QAS system that allows users to describe their information needs in a more specific and natural format, namely in the form of Natural Language Questions. Chatbot is a program in artificial intelligence designed to be able to communicate directly with humans. The application used to build a chatbot is LINE Messenger. LINE occupies the second position as a Social Messenger which is widely used by Indonesians, the population of LINE users in Indonesia is 50% in We Are School and Hootsuit. Chatbots can have conversations with users. The method used is Similarity Sentence Measurement or SSM and Biggram. The advantage of using the Similarity Sentence Measurement method is that this method can work well from collecting, then uniting information, then finding conclusions that can be drawn from that information. The evaluation test in this study calculated the algorithm pattern which obtained a value of 0.86. Then do a question and answer on the chatbot by the respondent so as to obtain an accuracy result of 80%. In this study, it can be concluded that chatbots can conduct questions and answers and assist students in providing correct and correct answers regarding Indonesian history subjects using the Sentence Similarity Measurement and Bigram methods.

Keywords— *Question Answering System, Chatbot, SSM, Sentence Similarity Measurement Method, LINE, Indonesian history subjects*