ABSTRACT

Yogyakarta is one of the cities in Indonesia which is famous for its culture, traditions and natural beauty which can attract many tourists. Information about tourism in Yogyakarta can be found in various media such as websites, newspapers, advertisements and so on, but these media cannot provide interactive information such as chatbots. This study aims to build a chatbot application that can make it easier for tourists to find tourist information quickly and interactively using the Telegram application. The Boyer-Moore algorithm and the Levenshtein Distance algorithm are used to find the right answer according to the questions from the user. Based on the results of system testing using confusion matrix, the accuracy rate of chatbot with Boyer-Moore algorithm is 50% and chatbot with Levenshtein Distance algorithm is 50%. With the average speed of duration answering the Boyer-Moore algorithm is 3.145 and the Levenshtein Distance algorithm is 3.968. So that in this study it can be concluded that the Boyer-Moore algorithm is better than the Levenshtein Distance algorithm, in searching for answers on the chatbot application.

Keywords: Chatbot, Tourism, Algorithm, Boyer Moore, Levenshtein Distance