ABSTRACT

One example of misuse of technology is theft of data or information by unauthorized parties. Therefore, it creates an encryption method to protect the information. Encryption is divided into several methods including Caesar Cipher, Vigenere Cipher, and RSA algorithm. The importance of encryption must be known by internet users.

Encryption has complex calculations so that not everyone can understand it well, including for D3 Telecommunications Engineering students at Telkom University who take Network Security courses. Based on the questionnaire that was distributed, as many as 80% of respondents had difficulty learning the Caesar Cipher method, Vigenere Cipher, and RSA algorithm related to the completeness of the material, the source of the material to the explanation technique. So in this Final Project an interactive learning media was created regarding the Caesar Cipher, Vigenere Cipher and RSA algorithm using Adobe Flash Professional CS6 and MATLAB R2017a software. It contains material, explanatory Videos, some practice questions to the converter application. The result of this learning media is to increase the understanding of each student as well as increase motivation and desire to learn on encryption materials, especially the Caesar Cipher algorithm, Vigenere Cipher and RSA.

Learning media that have been made from the results of tests carried out show the functionality testing where all functions run 100% as they should. Based on the questionnaire, the display of the learning media got an average value of 4.36 from a scale of 1-5, which means the display on the learning media was good.

keywords: interactive learning media, Caesar Cipher, Vigenere Cipher, RSA Algorithm, MATLAB R2017a.