

**WEB-BASED DATA SECURITY APPLICATION USING ADVANCED ENCRYPTION
STANDARD (AES) METHOD**

ABSTRACT

Data is a collection of information or basic descriptions of a thing (object or event) obtained from observations (observations) and can be processed into more complex forms, such as information or solutions to specific problems. Data is very valuable for all computer users. Lately cryptography has become a method used in securing data. Cryptography is a science that studies mathematical techniques in securing an original information or message (Plaintext) into a hidden text (Ciphertext) and then converted into the original message again. Cryptography has three important elements, namely key generation, encryption and decryption. In cryptography, the block cipher algorithm is known in which there is AES (Advanced Encryption Standard) which is part of the Modern Symmetric Key Cipher, this algorithm uses the same key during the encryption and decryption process so that the data we have will be difficult to understand. The algorithm technique is used to convert data in the form of certain codes, for the purpose that the stored information cannot be read by anyone except those who have the right. Therefore, a data security system is needed to maintain the confidentiality of information so that it is maintained.

Keywords: Data security, Cryptography, Encryption, Decryption, AES Method