IMPLEMENTATION OF NEW STUDENT DATA SECURITY USING CAESAR CIPHER (CASE STUDY: SMA NEGERI 1 SIDIKALANG)

ABSTRACT

Data security is one of the most important issues that organizations, businesses and individuals must pay attention to in today's digital era. The technique that is often used to maintain data confidentiality is cryptography, which studies data security techniques using certain algorithms. One encryption algorithm that is quite simple and commonly used is the Caesar cipher, which is a classic encryption algorithm that is simple but quite powerful. The aim of this research is to implement information security with Caesar cipher in a simple application. The results of this research show that the application of the Caesar cipher can improve data security in computer applications. SMA Negeri 1 is an educational facility located in Sidikalang District, Dairi Regency. SMA Negeri 1 upholds religious aspects so that many children from the local area are interested in registering to study at State High School 1. However, the data collection system for new students is not very strict, making the data easily accessible to those who do not have it. right. Based on these problems, this research implements a security system for new student data using Hypertext Preprocessor (PHP) programming. In this implementation system, administrators can add student data, names and national student identification numbers. The data processed is new student data carried out by the administration sector where the encryption and decryption process will be carried out on new student data using the Caesar algorithm method. With the New Student Data Security Implementation System Using the Caesar Chiper Method, it can help secure student data at SMA Negeri 1 Sidikalang so that it is safer from irresponsible parties. With the input method carried out manually using a system provided by research.

Keywords: Caesar Cipher, Security, PHP.