MOBILE WEB BASED TEACHER AND EMPLOYEE SALARY DATA SECURITY SYSTEM

(*Case Study*: SMP Muhammadiyah 1 Cilacap)

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ABSTRACT

SMP Muhammadiyah 1 Cilacap is an institution operating in the education sector and has been established since 1968. Data security is a very valuable asset and must be protected from manipulation, loss and access by unauthorized parties. Currently, SMP Muhammadiyah 1 Cilacap does not have an adequate security system for salary data. In an institution, salary data is very important and confidential information that must be kept secure. If salary data is changed, lost, or seen by unauthorized parties, this can cause jealousy among employees. To secure salary data, cryptography can be used to change the contents of the file into a form that cannot be understood by others. In addition, black box testing can be carried out to ensure security. This research aims to create a security system that is able to protect salary data by encryption, as well as returning the data to its original form through a decryption process. This system is designed to handle files in XLS, PDF and DOC formats using the AES 128 encryption and decryption method. The result of this research is a system that is able to encrypt teacher and employee salary data so that it turns into ciphertext, which cannot be understood by unauthorized parties. authorized.

Keywords: Security System, Salary Data Protection, Encryption, Decryption, AES 128 Algorithm, Cryptography, Blackbox Testing.