

IMPLEMENTATION OF VIGENERE CIPHER CRYPTOGRAPHY ALGORITHM AS A MEDIA FOR SECURING WEB-BASED PERSONNEL INFORMATION

(Case Study: Mercubuana Village, West Tulang Bawang Regency)

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ABSTRACT

The final assignment with the title Implementation of the Vigenere Cipher Cryptographic Algorithm as a Web-Based Personnel Information Security Media (Case Study: Mercubuana Village, West Tulang Bawang Regency) aims to develop a personnel information system for the Mercu Buana Village sub-district with a focus on the security of employee personal data using the Vigenere algorithm Cipher. The background for writing this final assignment is the need for the Mercubuana Village Subdistrict, which has 14 employees, to have a personnel information system that can manage personal data safely. Currently, there is no system that can encrypt and decrypt employee personal data as a security measure. Therefore, this project proposes the development of a web-based personnel information system that can encrypt and decrypt employee data using the Vigenere Cipher algorithm. This project methodology includes problem identification, literature study, system design, implementation, and system testing. The expected result of this project is a system that is capable of properly encrypting and decrypting employee data in the database, so that it can provide the necessary security for employee personal data. The conclusion of this project includes the understanding that a web-based personnel information system can make it easier to manage personnel data. By using the Vigenere Cipher cryptographic algorithm, employee personal data can be properly secured, preventing potential crime and misuse of data. The implementation of this algorithm allows encryption and decryption of data with predetermined keys, preventing employee personal data from criminal acts and misuse of data.

Keywords: Staffing, Data Security, Cryptography, Vigenere Cipher