WEB-BASED DATA SECURITY SYSTEM FOR LOAN RECIPIENTS USING THE CAESAR CIPHER ROT13 METHOD (Case Study: Ud. Balbilad, Majalengka)

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ABSTRACT

Ud. Balbilad is a trading unit located in Majalengka Regency that engages in the buying and selling of silver, gold, and foreign currency. Since 2000, Ud. Balbilad has also provided business capital for its customers. However, this trading unit still employs a manual bookkeeping system for recording loans to customers in need of business capital. Due to frequent data loss and data manipulation, which leads to inconsistencies in the records, the lack of a computerized system has resulted in a time-consuming loan processing workflow, from data entry to loan disbursement. In response to these issues, this study designs a secure data management system for business loan recipients that ensures data integrity by implementing the Caesar Cipher ROT13 cryptographic algorithm, developed using PHP and Javascript. The result of this research is a web-based system that facilitates the management of loan recipient data. Additionally, the system can encrypt and decrypt data, ensuring its authenticity.

Keywords: Security, Capital, Caesar Cipher, ROT13