

IMPLEMENTATION OF CUSTOMER DATA SECURITY USING THE RSA ALGORITHM

(CASE STUDY: CV TRANSBENDHO, SLEMAN)

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ABSTRACT

Data security is a very important aspect in the development of information technology today. There are exchanges of data and information, both work data and other data. One encryption algorithm that is often used is the RSA algorithm. On this occasion the author is interested in studying data security applications in web-based information systems. The problem in this thesis is how to implement the RSA algorithm for data security in web-based information systems. The methods used in this thesis are literature study, problem formulation, problem analysis and solving, revision, and drawing conclusions. In this research, the RSA algorithm is used as data protection. The system will generate public keys and private keys to secure data and to secure customer data. All user data, including encrypted passwords, public keys, and customer data except the user's private key, will be input into the database. The private key sent to email is encrypted with the RSA algorithm. The system will decrypt the encryption with the public key obtained in the database, then a message digest (Digest 1) will be generated. Then the system will create a new string from the identity code, email, username and password obtained from the users table.

Keywords: Encryption, Decryption, RSA, Rental.