PATIENT CARE DATA SECURITY APPLICATION DESIGN USING THE RSA ALGORITHM

(Case Study: Sukorejo Community Health Center)

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ABSTRACT

Sukorejo Community Health Center is the center for community health development in the Sukorejo area. Currently Sukorejo Community Health Center uses a security system that is still vulnerable to data leaks. This research aims to build an application for patient care data security. The patient care data security application is an application created to help employees store patient data safely. This application uses the desktop-based RSA (Riverst-Shamir-Adleman) algorithm using the Java programming language as an encryption system to secure stored files. The RSA algorithm is one of the most commonly used cryptographic algorithms today and is very strong in maintaining data security. This application is also equipped with an authentication feature that allows only authenticated users to access these files. The result of this research is to obtain an application for securing patient care data at the Sukorejo Community Health Center. Thus, it is hoped that this application will be very useful for employees in maintaining the security of very sensitive patient data.

Keywords: Desktop, Cryptography, RSA, Encryption, Java