APLIKASI ENKRIPSI DAN DEKRIPSI TEKS DALAM QR CODE MENGGUNAKAN ALGORITMA RIVEST-SHAMIR-ADLEMAN DAN ADVANCED ENCRYPTION SYSTEM

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ABSTRACT

Encryption and Decryption Application for QR Code using Rivest-Shamir-Adleman method and Advanced Encryption System method is an application using cryptography system, security network. Cryptography is technique-based on mathematics for dealing with information security like secrecy, integrity data and authentication data. In this system consist of plaintext, cipher key, cipher text, encryption algorithm and decryption algorithm. Plaintext is a message or data that can be read. Cipher key is input key that determine the output from encryption process. Cipher text is output from encryption process. This application using features of QR Code as an object to hide the message, using Advanced Encryption System and Rivest-Shamir-Adleman. Besides that, this application also can generate QR Code output with the plaintext inside it, then can translate the value inside QR Code with QR Encoder and processing data in QR Code to transform the plaintext into QR Code with cipher text value. Decryption process can be done until the input of the cipher key is correct so that the cipher text inside the QR Code can be restore to original. The results point that the encryption and decryption application for QR Code is fulfilling its purpose because the application can produce good results that the encrypt output is random and can be decrypt back too and also can be implemented using QR Code features.

Keywords

Quick Response (QR) Code, Cryptography, RSA, AES, plaintext, cipher text, cipher key, encryption, decryption.