

ABSTRACT

Nowadays database technology has evolved which makes a wide variety of data stored in digital form. Today databases have been widely used in various fields, including in the field of health. Databases in the world of health have been used to assess postoperative complications, calculate costs, and investigate many other topics.

However, the use of databases also turns out to have a disadvantage, namely regarding the privacy of its users. Concerns over the security and privacy of sensitive information are increasing year by year due to several developments in the world of health. Therefore, a security system is needed that can protect data when it is transmitted.

In this final project research, the author wants to create a mobile application that can record medical records, as well as be able to share these medical records with doctors by providing cryptographic algorithms when the data is transmitted. So that medical record data that contains personal data that should not be known to other people other than the desired health worker is not easily leaked when read after exchanging data. As a result of this research, the application can run well in encrypting and decrypting. The time it takes for the application to read the decryption data to be able to bring up the average data is 134.4 ms.

Key Word : *AES-256, Cryptography, Data Base, Decryption, Encryption*