

***DATABASE ENCRYPTION WITH CRYPTOGRAPHY USING AES
ALGORITHM FOR DATA PROTECTION FOR USERS***

(Case Study: PT. Cosmoprof Indokarya Pematang)

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ABSTRACT

Data security is an important thing to implement in information systems. Data security makes the system safer from hacking by irresponsible parties. This research focuses on the security of user data when users register on a website page so that the personal data that will be stored in the database is encrypted with an encryption algorithm, namely the AES algorithm. The data used as research for the encryption process is data from users of the booking system at PT Cosmoprof Indokarya located in Pematang Regency, where previously there was no data security algorithm, therefore researchers will apply an encryption algorithm to ensure user data is said to be safe. From the data encryption process according to the design and successfully implemented in the system and through data security testing as expected, a booking security system was created. Data encryption is said to be important because it protects personal data such as addresses and telephone numbers which can be considered private for some people. The results can be in the form of ciphertext or wording that has been changed so that other people cannot interpret it.

Keywords: data security, encryption, database, cryptography, AES algorithm.