**ABSTRACT** 

Data security is something that is important in the development of technology, especially

in the field of information technology. The stored data must be secure so it does not cause data

misuse. One of them in purchasing tickets, the growing times we can buy tickets online.

However vulnerable to breaking data, especially on the data of buyers. There is also a solution to

solve the data breaking system should use cryptography. With cryptographic buyers can transmit

data securely, because it uses the encryption process.

In this final project will design a system that can maintain security on online ticket

purchasing system by using Eliptic Curve Algorithm and MD5 where encryption is done with

public key and verification with MD5 function. From the attack experiment with Man in middle

can not happen because it does not have a different public key with the original server. The use

of ECC and MD5 algorithms is strongly recommended for the use of an application especially

requiring networks that are vulnerable to attack and theft from others.

**Kata Kunci**: Elliptic curve cryptography, Security MD5, Security system, Database security.