



# **48730, 32548 - CYBER SECURITY & ESSENTIALS**

## **LAB 3: CRYPTO-SSL-X509**

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## Outline:



1

Crypto encryption AES

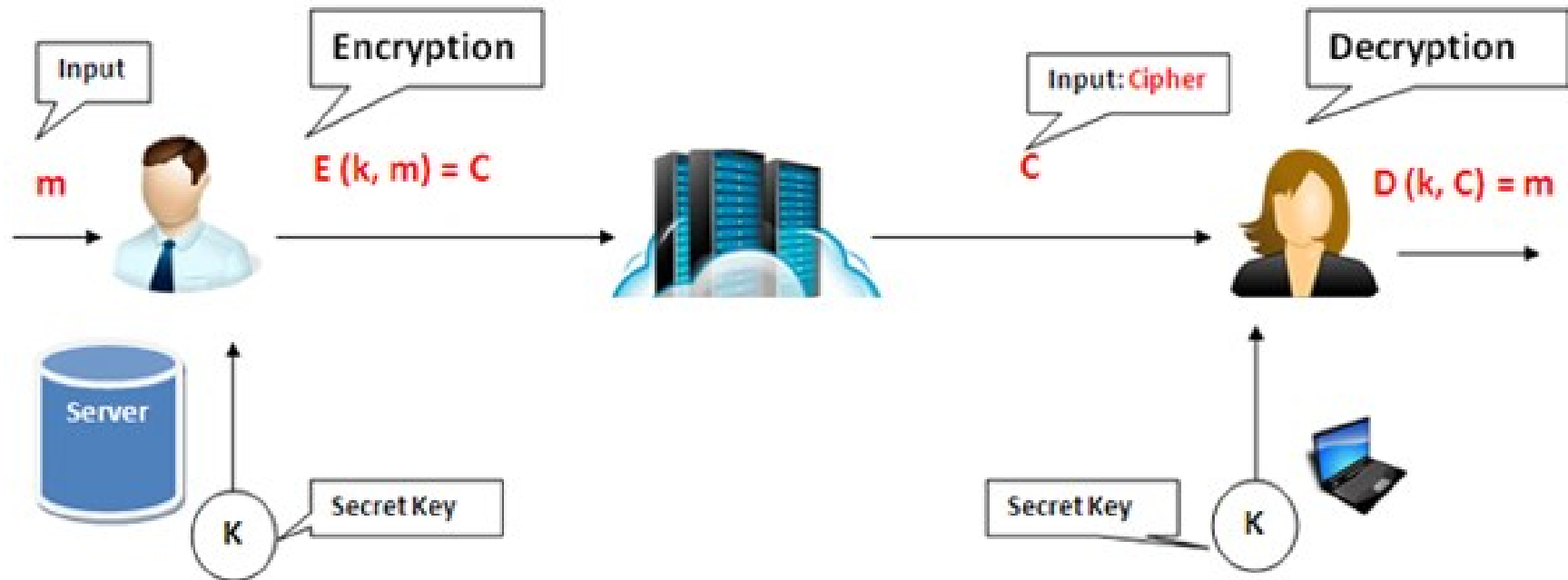
2

Certificates Authority

3

The overview tasks of Lab 3

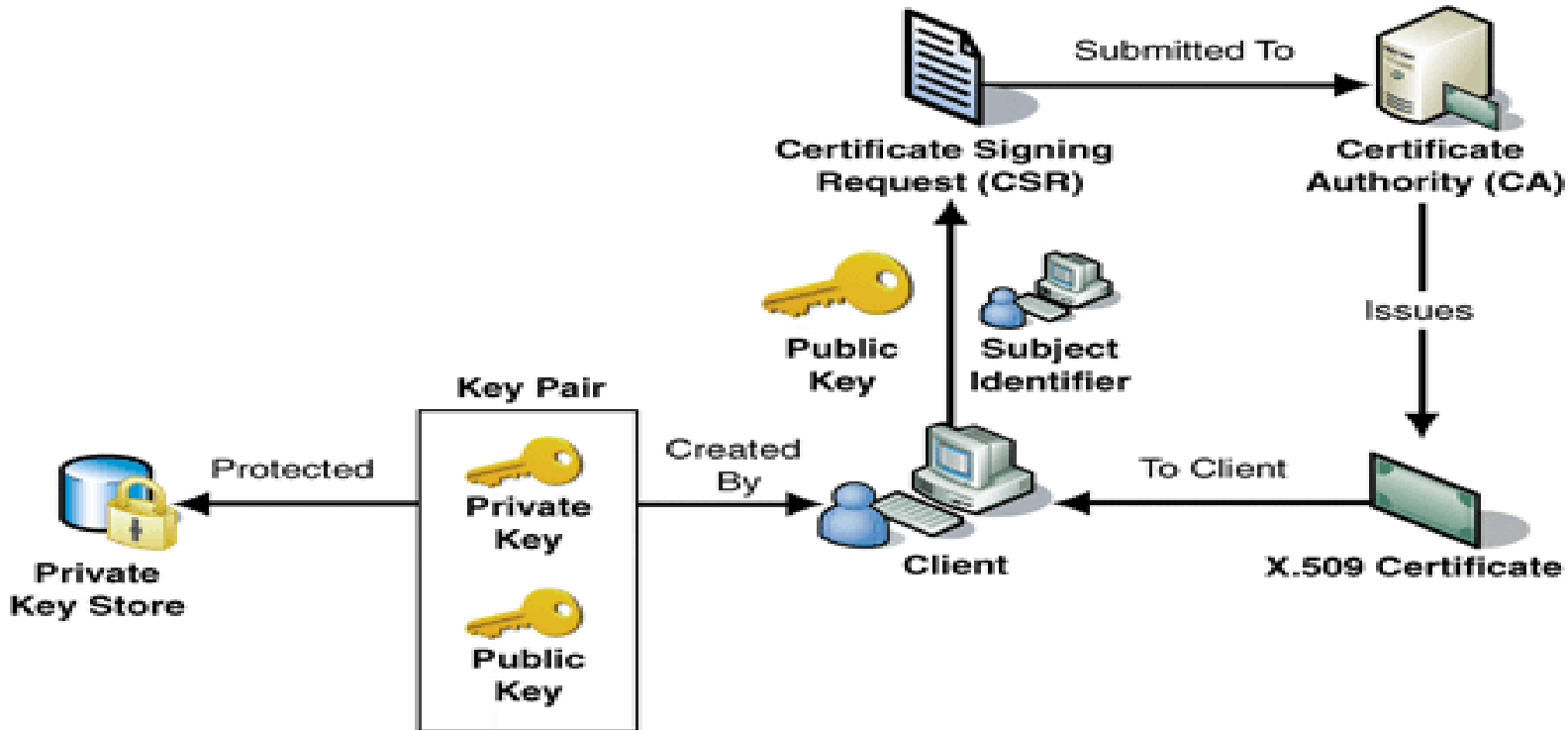
# 1. Advanced Encryption Standard [1, 2]



[1] <https://www.codeproject.com/Articles/1023379/Security-on-the-Web-by-Advanced-Encryption-Standar>

[2] [http://www.cis.syr.edu/~wedu/seed/Labs\\_12.04/Crypto/Crypto\\_Encryption/](http://www.cis.syr.edu/~wedu/seed/Labs_12.04/Crypto/Crypto_Encryption/)

## 2. SSL Certificate Authority [3, 4]



[3] <https://deliciousbrains.com/ssl-certificate-authority-for-local-https-development/>

[4] [http://help.bizagi.com/bpm-suite/en/index.html?cloud\\_auth\\_certificates.htm](http://help.bizagi.com/bpm-suite/en/index.html?cloud_auth_certificates.htm)

# 3. Outline of the Lab 3

1. Basic encryption and decryption using OpenSSL
2. You are a CA (Certificate Authority)
3. Create a Certificate for [cybersec.com.au](https://cybersec.com.au)
4. Use PKI for Web Sites
5. Tidy up and sign up your machine correctly

**THANK YOU!**

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**Question & Answer**