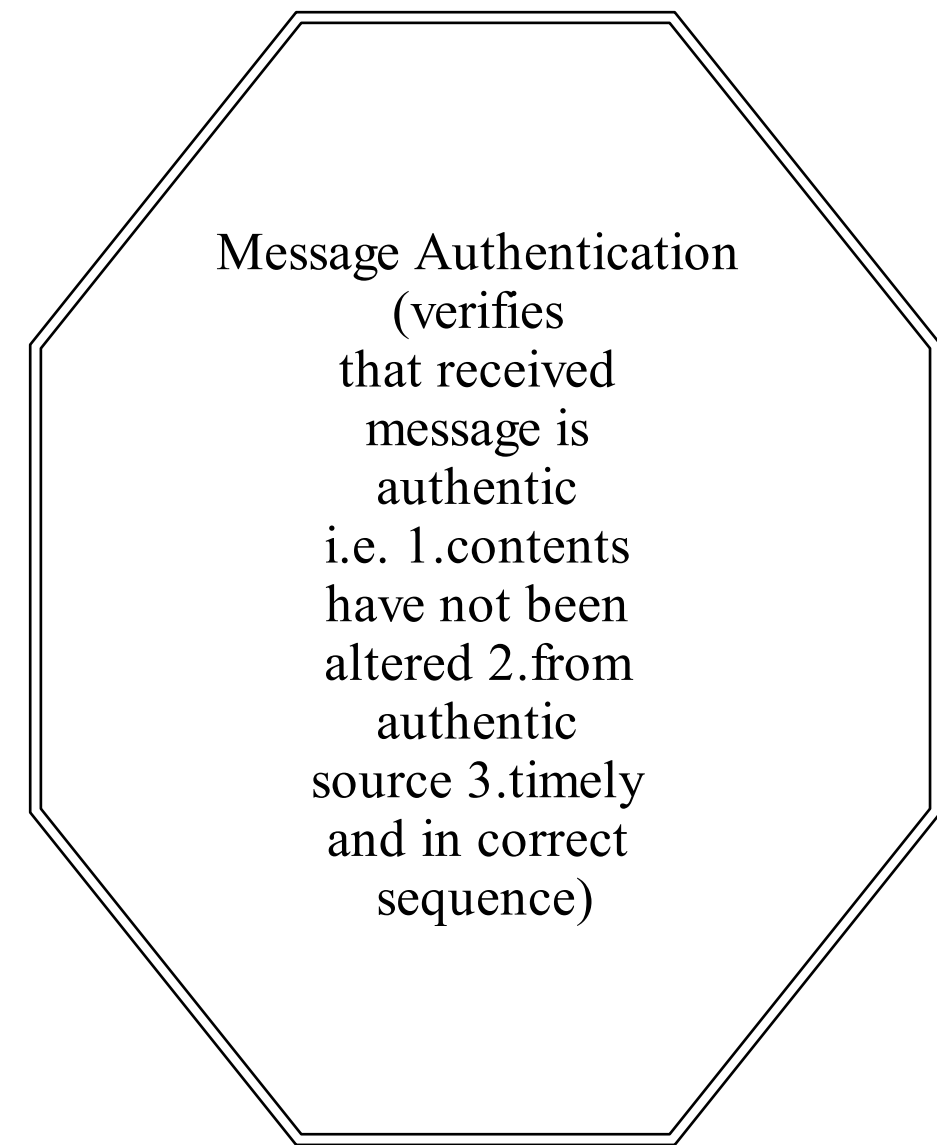


Student: CTAnonymous8



types of message authentication

Message authentication using a one way hash function

authentication without message encryption (authenticated tag/code is generated with each message and attached to the actual message)

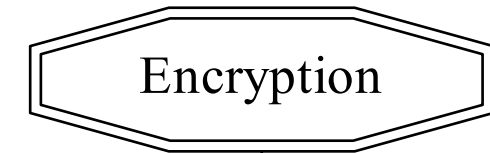
Public Key Encryption (uses two separate keys
1.Public key and 2.Private key)

using public key encryption

Sender encrypts data using his public key Receiver decrypts using his private key

using private key encryption

Sender encrypts using his private key Receiver can decrypt using his public key



Student ID:2490584
Slide set 3

STATISTICS	
Branch:	11
Node:	15
Linking Phrase:	7
Orphan:	1
Leaf Node:	11
Preposition:	13
Sub Map:	2
Avg Word Per Concept:	11.5

CMAP Information	
Title:	CTAnonymous8.cmap
Created:	2020-12-07T07:54:08-05:00
Modified:	2020-12-07T07:54:08-05:00
Language:	en
Format:	x-cmap/x-storable
Publisher:	FIHMC CmapTools 6.04
Width:	1863
Height:	628

types of encryption

Symmetric Encryption (single key encryption)
plain text->encryption algorithm->secret key
secret key->decryption algorithm->plain text

Symmetric encryption algorithms

AES (128 bit plain data and 128/192/256 bit key to get a cipher block)

DES (uses 64bit plain text and 56bit key to produce a cipher text)

3 DES (repeats DES 3 times using 2 or 3 unique keys)

requirements for symmetric encryption

Key sharing between sender and receiver must be done in secure fashion

Need a stronger encryption algorithm and attacker cannot be able to guess the key

Attacks on symmetric encryption

Brute Force (trying all possible keys on cipher text)

Cryptanalytic attack (rely on finding the nature of the algorithm)