**Graphical user interface, text, application, email

Description automatically generated**

# **Security Attacks**

A whiteboard with writing on it

Description automatically generated with medium confidence

## **Passive Security Attacks 🡪 No modification of Data**

Text

Description automatically generated

Characteristics

Text

Description automatically generated

### **The release of message content**

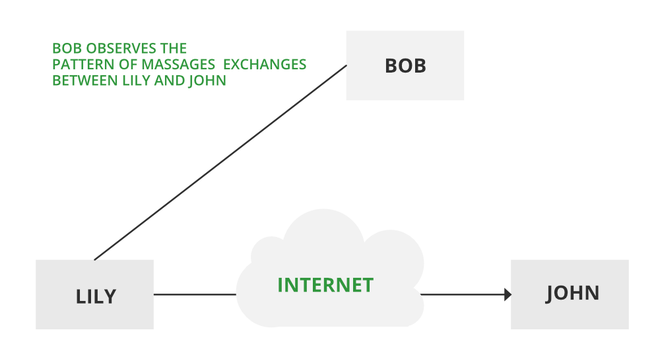
Diagram

Description automatically generated

### **Traffic Analysis**

Text, letter

Description automatically generated



## **Active Security Attacks 🡪 Modification of the Data**

Text

Description automatically generated

### **Masquerade**

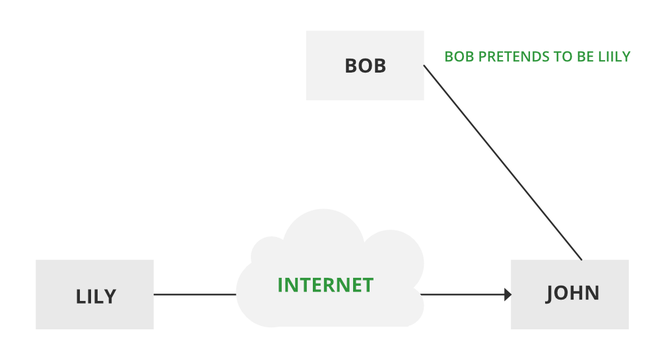
A picture containing text, whiteboard

Description automatically generated

* Sender usually don’t send message.
* But the receiver will receive the message from un-authorized sources in name of the sender.

Text

Description automatically generated



### **Replay**

Text

Description automatically generated

A picture containing text, whiteboard

Description automatically generated

Captures the message and re-sends it to the Receiver.  
Receiver receives two messages  
1) From the Sender directly.  
2) From the Third-Party (modified) in the sender name.

### **Modification of Message**

Text

Description automatically generated

A picture containing text, whiteboard

Description automatically generated

### **Denial of Services**

Text

Description automatically generated

A whiteboard with writing on it

Description automatically generated with low confidence

Characteristics

A screenshot of a computer

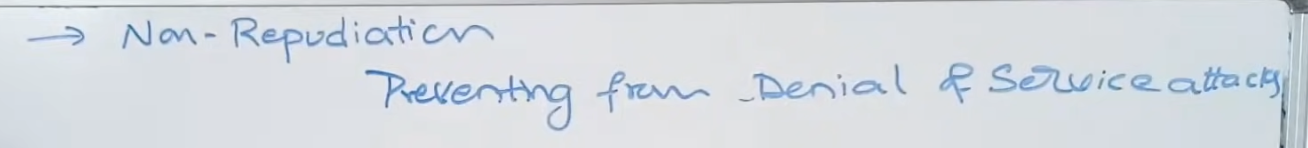
Description automatically generated with medium confidence

Text, letter

Description automatically generated

# **Specific Security Mechanism**

A picture containing text, whiteboard

Description automatically generated  


Difference between Authorization and Authentication

A white board with writing on it

Description automatically generated

Text, letter

Description automatically generatedText, letter

Description automatically generated

# **Pervasive Security Mechanisms**

Graphical user interface, text

Description automatically generated

Text

Description automatically generated

# **Cryptography types**

## **Symmetric Key Cryptography** **Text Description automatically generated**

Graphical user interface, website

Description automatically generated

## **A-symmetric Key Cryptography**

Public key cryptography (or) As-symmetric key cryptography.

Text

Description automatically generated

Timeline

Description automatically generated

User-B sends message to User-A

The hacker knows only the public key.  
The hacker doesn’t know the private key of User-A.  
So, the hacker cannot able to encrypt the cipher text.

Graphical user interface, text, application

Description automatically generated

## **Hash function**