

Components of Email Message.

- **Headers**

Message header contains information concerning the sender and the recipient.

- **Subject**

This is the theme

- **The sender (from)**

This is the senders' internet email address.

- **Date and time**

This shows the time the email is received on the email account.

- **Receipt (to)**

This shows the email address of the intended receiver

- **Body**

It contains the intended message/ contents.

- **Carbon copy (CC)**

This is the copy of an email message sent to the receiver whose address appears in the respective header lines.

Carbon copy enables the copies of email messages to be sent to the third party while acknowledging their recipients

- **Blind carbon copy (BCC)**

A message is sent to other recipient who may not know about the matter

- **Attachment**

For attaching text, graphical, audio, or video files that the recipient can download for use.

Terms used in electronic mail

Compose

The process of creating and sending a new electronic mail message.

Inbox

It is the storage location of incoming messages

Sent mail

Location where all sent mails are stored

Starred messages

It's a feature for storing all messages such that they can be referred to for future use

Chide mail

It is a feature that allows the user to view all the details of a received electronic mail

Forward

It is a feature that allows a received electronic mail to be passed on to other recipients

Signing up

It's a feature used to create a new electron mail address

Signing in

A feature used to access an already created electronic mail account by use of a user name and password.

Signing out

It is the process of exiting an electronic mail address

Disadvantages of attaching files to an Email

- ✓ You can attach a file containing computer viruses
- ✓ It takes very many steps which is tiresome.
- ✓ It takes a lot of time to down load and upload
- ✓ It takes a limited amount of data it can send

Examples of Email Addresses

jacob@gmaol.com

Jackisonixdayuppie@yahoo.com

Email Program / software

Refers to programs that are used to manage email account messages or

Is a program that enables the user to create, send, forward and print messages. Eg g mail, yahoo, outlook etc.

COMPUTER SECURITY

Is the protection of computing system and data that they store.

It's also refers to as computer system security.

Alternatively Computer system security refers to technique of insuring that data stored in a computer cannot be read or compromised by an individual without authorization as well as protecting that stores data against physical theft

Computer security risk.

Is any event or action that would cause loss and damage to computer hardware, software or information.

Computer Crime

Is any act that violates security or privacy or causes harm to the information.

Data Security

Is the protection of data stored on a network or standalone computers from unauthorized access or

It refers to protection of data stored in the computer system

Breach/exposure of security or valuation of security results into modification or destruction or disposal of the system to security threat.

Data security concerns to protection of data from accidental or intentional destruction of information through the use of physical security, administrative controls, logic controls and other safeguards to limit accessibility.

Data security stands for;

a. Confidentiality

This involves protecting the content of data or information from being changed or edited by unintended recipient.

b. Integrity

Involves protection against deletion or corruption within databases during transmission on network.

c. Availability

Data should be accessed by authorized personal and in time

Terms frequently used in computer security.

- ✓ Security attack.

This refers to any act that involves computer security

- ✓ Hacking

Gaining illegal or unauthorized access of computer information or network

- ✓ Unauthorized Access

The use of computer or network without permission

- ✓ Cyber Crime

Refers to online or internet illegal use

Computer Crime mainly include;

- Hacking

This refers to the breaking into the computer systems to gain unauthorized access .Another highly dangerous computer crime is hacking of IP addresses in order to transact false identities.

- Phishing

This involves attempt to acquire user name and password by disguising. This is mostly carried out through email, use of fake websites asking users to feed in their personal details.

- Eaves dropping

This involves intercepting communication messages before it reaches a direct recipient.

An eavesdropper takes an advantage of security loopholes.

- Denial of service(DOS) attack

This is where a company's website or management system is put down or flooded with service request or overload and eventually it crashes

- Fraud

This is achieved by manipulating of records which ranges from mobile transaction to bulk internet or database access and manipulation.

- Making and digitally distributing child pornography. The distribution of phonographic materials is illegal punishable and unethical.
- Disobedient of intellectual property rights including property theft and software privacy .
- Creating and spreading of computer viruses.
- Physical theft of computers in company's computer lab etc.

Ways of preventing computer crime

- By using strong passwords and usernames.
- By using biometric devices to access the computers
- By sensitizing computer users on the value or importance of protecting information.
- By installing and activating strong firewall
- By installing the copy of the latest antivirus program
- By regularly updating system security

- Through data encryption like use of finger print, voice recognition etc.
- By backing up data regularly and ensuring recovery plans
- By penalizing users who have violated the intellectual securities
- By providing physical securities e.g burglar proofing, security guards and CCTV cameras.

Examples of common computer risks

- Computer viruses
- Hardware theft
- Software theft
- Information theft and information privacy
- Unauthorized access to computer system
- System failure

Computer viruses

Is a malicious program that copies itself into programs and spreads through multiple computer application affecting the computer files negatively without the permission of computer user

OR are programs designed to affect the computer negatively by altering the way it works normally without the knowledge or permission of the user.

Types /Examples of Computer Viruses

- ✓ Boot sector Virus.

This virus is executed when the computer is starting up because it resides in the boot sector of a floppy disk or master boot record of hard disk.

- ✓ File Virus.

This attaches itself to program files and loaded into memory when the effected program is run.

- ✓ Logic bomb.

Is a virus that activates when it detects certain condition.

- ✓ Time bomb.

Is a virus that activates itself at a particular time.

- ✓ Trojan horse

Is a program that hide itself within or look like a legitimate (genuine)program that executes when certain conditions or action is triggered or activated.

- ✓ Worm

This copies itself repeatedly in memory until no disc space remains which makes the computer to stop working.

- ✓ Polymorphic virus

This modifies its program code each time it attaches itself to another program or file so that even an antivirus utility has difficulty in deleting it.

Computer Ethics

These are moral guidelines that governs the use of computer and information system .

The computer ethics confirms the following;

- ✓ Unauthorized use of computer system
- ✓ Software privacy
- ✓ Information privacy
- ✓ Information accuracy
- ✓ Intellectual property rights
- ✓ IT code of conduct

Cracker

Is someone who tries to access a computer or network illegally.

Cracking

Is the act of breaking a computer system or network.

Reasons for cracking may be for profit or malicious

Antivirus Program

- A vast
- Dr.Solomon
- SMADAS
- Kapascy.

Symptoms of Computers affected by virus

- ✚ Over heating
- ✚ Slowing down in performance
- ✚ Failure of computer to boot / start
- ✚ Some files may increase in size
- ✚ Some files always fail to open
- ✚ Other programs fail to open
- ✚ Deletion of data.
- ✚ Computers may shutdown abruptly
- ✚ Computers makes abnormal sounds
- ✚ Duplication / replication of files and folders in the computer