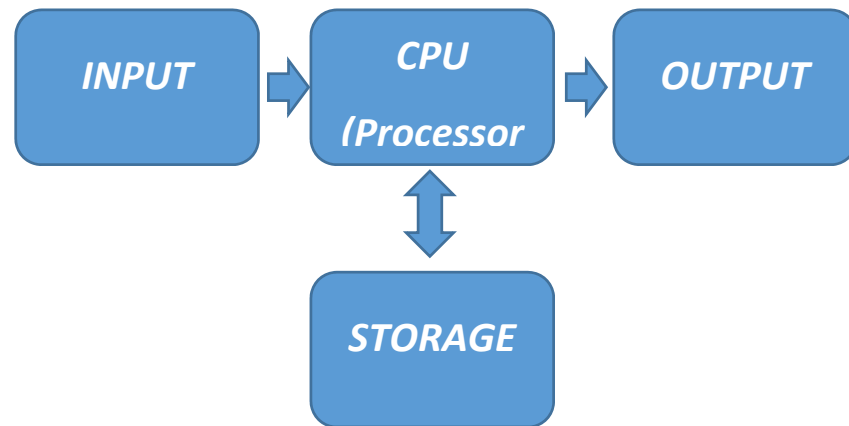


STANDARD COMPUTER SYSTEM



Computer system – Collection of **HARDWARE** and **SOFTWARE** that work together to perform a **TASK**

HARDWARE: You can Touch
Software : You cannot touch

LEGAL = MUST DO IT ..

Data Protection Act

- Personal data-> Kept secure
- Personal data-> Kept accurate
- Personal data-> Specific Purpose

Health and safety at work act

- Safe working environment
- RSI -> Keyboards
- Posture -> Chairs

Copyright, Designs and Patents Act

- Illegal to use software / other media without buying it
- Purchasing of licences

RELIABILITY of computer systems

How reliable is a computer system??

Measured by how often it is available – 99% availability..

Mean time before failure (MTBF)

If **RELIABILITY** is essential (Hospital patient monitoring systems) then **HARDWARE REDUNDANCY** is used to protect system.

HARDWARE REDUNDANCY – HAVE MORE THAN ONE CRITICAL COMPONENT SO THEY CAN BE SWAPPED

DATA LOSS – Two copies of data stored so data can be restored if necessary – (Previous versions at EMC)

Companies using **COMPUTERS** should have a **DISASTER RECOVERY** plan – Fire / Flood / Theft An effective plan should enable them to get system back online without delay

IMPORTANCE of computer systems

Computers are **EMBEDDED** within many everyday tasks

TRAVEL – Traffic Lights / Sat Navs / Flight Control Systems

DEVICES – Mobile Phones / Cookers / Microwaves

NO COMPUTERS =>

Minor inconvenience (Cannot boil kettle)

Major safety issues (Traffic lights stop working)

ETHICAL = SHOULD DO IT..

Environmental

- Disposal of old computers
- Recycling – Give to others
- Use of landfill
- Reduce energy – Turn TV off standby / PC off standby / Use SSD drives rather than MAGNETIC

Privacy / E-Netiquette

- Keep personal details secure
- Not post inflammatory / derogatory posts online etc

Data Security

- Wikileaks – Divulging government secrets – Good or Bad..??

STANDARDS and computer systems

Computer systems = complex.... If every company did it their own way they would be even more complex / internet wouldn't work etc

DE FACTO – People/ organisations work certain way and over time this way of working becomes standard – Using **INDENTS** when coding / Adding comments to programme code.

DE JURE – (LAW) Wireless signals – Must be adhered to otherwise different devices will not be able to connect

PROPRIETARY –(Owned by organization) Ensure compatibility within company's products – **APPLE AUDIO FORMAT** can only be played on **APPLE** devices

INDUSTRY standards- Set by industry – **IEEE** electricians

OPEN standards – Collaborative – **HTML** used to develop web pages / **TCPIP** used to connect internet