Introduction to Computers & The Internet

Week 7 – Revision Week

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- Wk 2: Computer hardware & software
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Wk 1: Introduction to Computers

- Definition of and advantages of computers
- Difference between Data and Information
- Generations of computers from early years
  - 4 generations
- Types of computers and their characteristics
  - Super, mainframes, mini, micro, workstation, control

Wk 2: Computer Hardware & Software

- Computer hardware and software
- Input and output devices
- CPU
- Memory – RAM vs ROM
- Storage – Disks, CD's, floppy , USB, flash memory, storage
- Motherboard - components

Wk 3: Computer Software

- Computer software – what is it?
- Types of operating systems
  - What it is, how it works and what it does
- Utlility programs
  - Types and what they do
- Types of application systems
- - Types and what they do.
- Programming languages
- Software development
  - Versions and development stages

Wk 4: Computer Networks

- Definition of a network
- Network architecture & hardware
- Types of networks (distance) – LAN vs WAN
- Advantages of networks – 5 of them
- Types of network (components) – P2P vs Server & advantages/disadvantages of server based networks
- Network problems
- Internal vs External networks

Wk 5:Computer Communications

- PSTN – Telephone Network
- Analogue connections
- Modems
- Transfer rates
- Multiplexing
- Digital communications
- ISDN
- Wi-fi
- Broadband
- Bluetooth
- Mobile Internet
- GPS

Wk 6: Information Technology

- What is Information Technology?
- Many uses of computers in society
  - Education
  - Banking
  - Industry
  - Pharmacy
  - Management
  - Health
  - Entertainment
  - Science
  - AI
  - Telephone networks
  - Security
- Disadvantages of using computers in our everyday lives