Understanding Computers

INTRODUCTION

This presentation is intended to provide an overview of the modern computer for those who have not had much experience with computers. It will explain their main features and functions and why they have become so important in our day to day social and business life.

The explanation will look at the basic aspects of computers with minimal use of technical terms or jargon and use analogies to assist clarification.

Future presentations will discuss new topics with live demonstrations on how to do a variety of tasks.

HOW WE PLAN TO RUN THESE PRESENTATIONS

- Start with the very basics

- Slowly build knowledge, skills and confidence

- Introduce new "how to do" topics

- De-mystify computers by reducing unnecessary technical terms and jargon

- Demonstration & Interaction

BUT WHY USE COMPUTERS
BEFORE THE COMPUTER AND NOW

- On a daily basis, we shop and purchase goods.
  - **Food & Clothing, Products and**
  - **Services**
    - **–** Mail, Banking, Entertainment, medical, travel, Information etc

- **How did we do this ?**
- Local and High street **Strip** Shops

- **With the concept of Shopping Centres –**we have a new experience in shopping, because it created **an environment** which enables

- 1   **many small businesses to operate under one roof** and
- 2   For Shoppers, a **convenient one stop** shop for most of **their business**

The Modern Home Computer

- Provides a new way of doing things - it

- offers a digital environment

- where a person can search and shop (not just one store or Shopping Centre, but

- around the **WORLD**

- all in the **comfort and convenience of your home**

Some things a computer can do

- a desktop computer can do a range of useful, informative, fun and creative activities. Some of these may include **–**

- using the internet

- playing games, music and videos

- writing letters

- Buying/selling or shopping online

- banking.

Types of Computers

There are many types of home computers, Desktop – Laptop-Tablet-Mobile phone

The Desktop or Personal computer

Main parts:
 Large Case
Large Screen
Keyboard
Mouse
Speakers
Printer
Camera (optional)
Internet connection
(not shown)

Basic guide to parts of a Desktop Computer

- These are the physical parts of a computer, and are
- often called **hardware**
- **The computer case (contains the brains of the computer)**
- It contains the **processor, microchips, circuits** and **hard drives** (think storage cabinets)that are **used to perform tasks** and **save your files**. All the other parts of a desktop computer connect to this case.
- **The screen -** Let you see what is happening
- **The mouse -** Used to point, select and move items on the screen
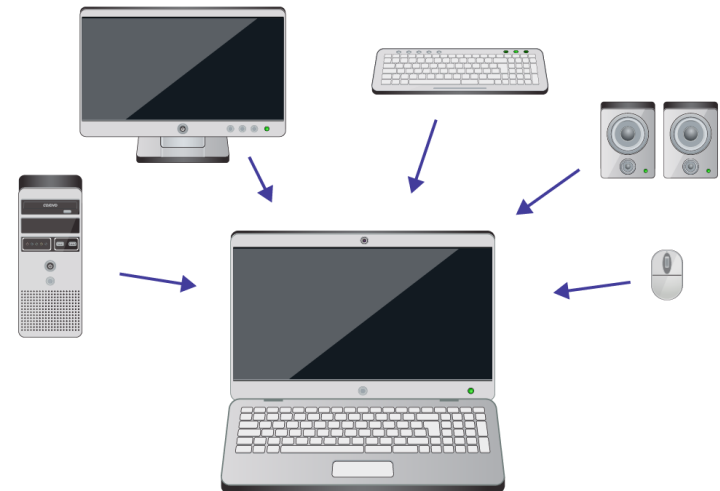- **printer** - Provides a hard copy for external filing
- Needs Mains power

Types of Computers

- **Laptop computers –**
  - **Smaller,- Battery**
  - **portable**

The screen, keyboard, and brains of the Computer are **integrated** into the **main computer case.**

Uses a **Trackpad** instead of mouse

(which can be added on later)

Types of Computers

Tablet computers

- Smaller again, fits into
  a handbag or travel bag
- Fully integrated
- Uses a Virtual keyboard

Types of Computers

The Mobile phone

- even smaller again.
  fits into a shirt pocket

Very Similar to a tablet

WHAT ARE PROGRAMS
But computer hardware alone cannot function without instructions

- Computer software can be described as a collection of small programs (instructions)that are programmed to perform specific functions

- *System Software::* These are the software that directly interacts with the computer hardware system. The primary examples are Operating systems [OS] and hardware device drivers.

- *Application Software::* These are also called customized software which is developed for personal use or developed to perform some specific task.

- A desktop computer will include programs, or applications (**apps** for short), that let you do a range of things.

- A **word processor program for eg,** lets you **write letters**, and a **music player** program allows your computer to **play songs**

- There are many types of computer programs, and each does something different. Some programs will **come with** your computer, while **others can be loaded** onto your computer as you need them

Computer Operating systems

- **There are two main Computer Operating Systems**

- **APPLE (MacOS)**

- **Pros-** Tight Control over hardware manufacture,   Cons – Expensive
  - Quality design   - Not commonly known
  - Apps interwork reliably together   by many.
  - High security

- **MICROSOFT (Windows OS)**

- **Pros-** Many manufactures,   Cons – Security sometimes a problem
  - Cheaper than Apple
  - O/S Well understood
  - Apps created by many different companies

Switch the computer on

- **The Bootup Process - But what is happening behind closed door ? It's busy as a bee (consider a small business opening up each morning, cleaning and tidying up before the first customer enters the front door)**

- **It follows a series of tests & checks to make sure all is in order,**

- **Checks its hardware, apps, storage and memory**

- **Tidying up, - putting files and folders away in their correct place**
When it is ready, it opens up
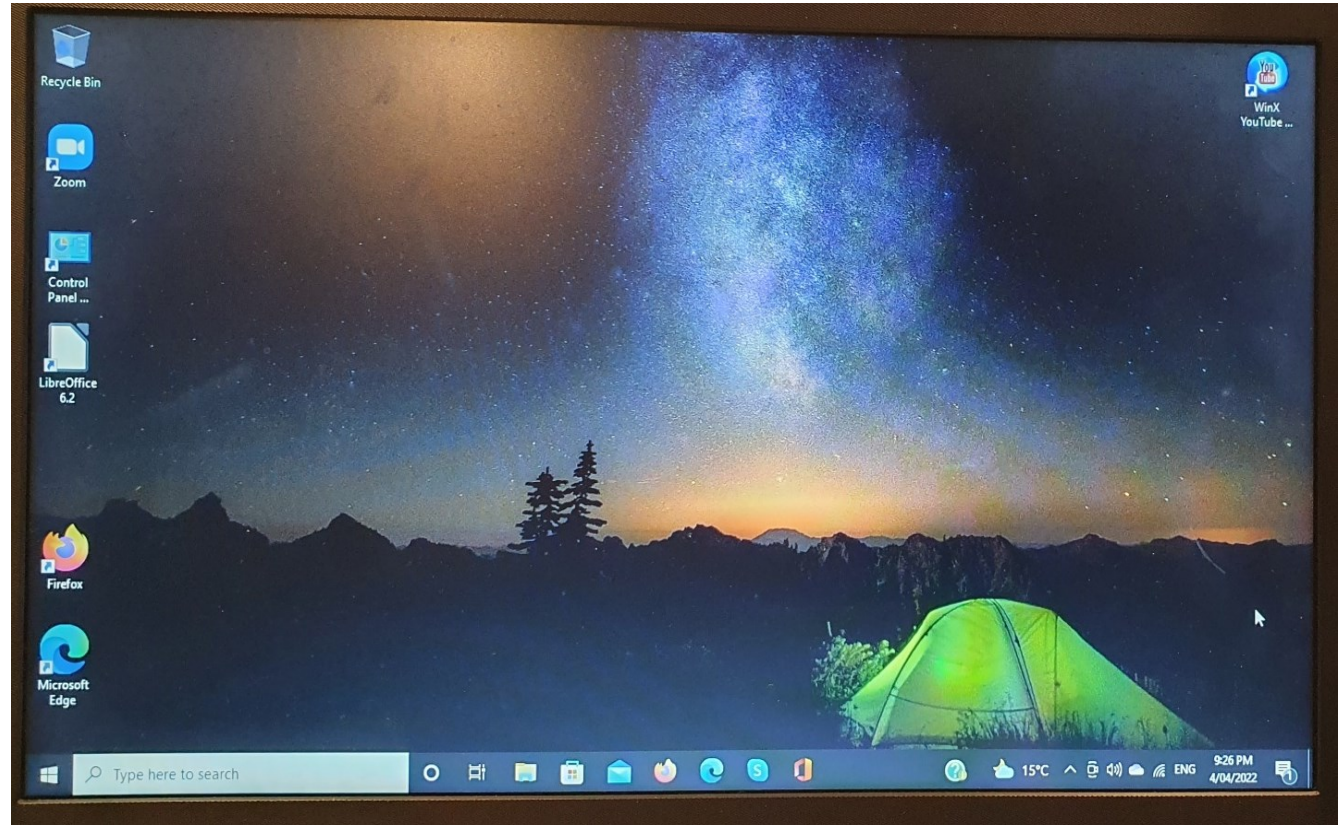
Sign On – Process

- **Make sure only registered Users are allowed**

  When a registered User is recognised, it opens up, and presents the Desktop Screen
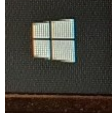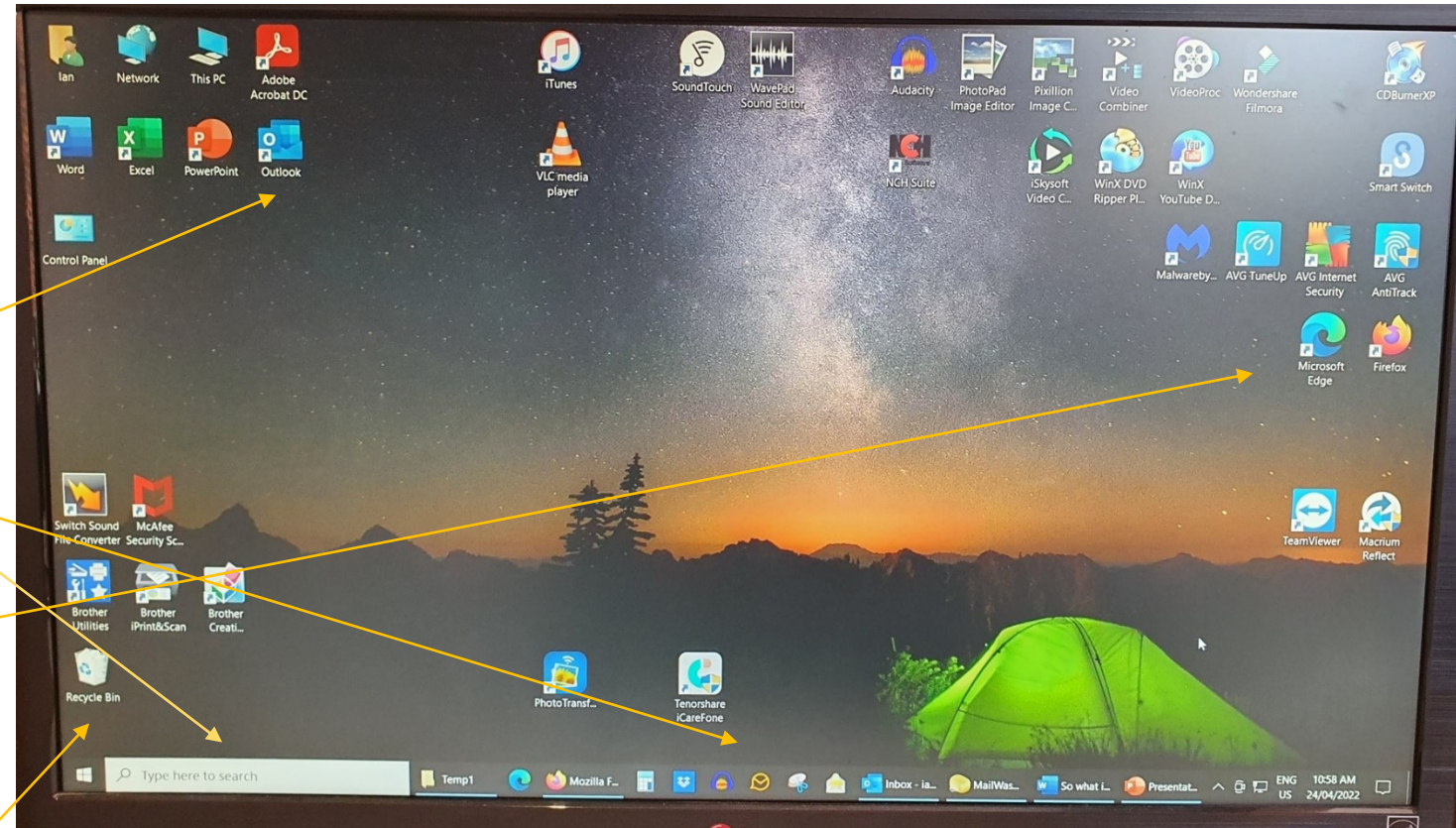
What is the Desktop Screen

- Fundamental part of the default [user interface)](#) in Windows.

- It is a space where you can organize **applications, folders**, and **documents,** which appear as **icons.**

- Your desktop is **always** in the background, behind any other applications you're running.
- **S15**

Key Features of the Desktop Screen

- **Windows icon**
- **Search Bar**
- **Task Bar**
- **File Explorer**
- **Email**
- **Internet Browser**
- **Office App Icons**
- **Control Panel**
- **Waste Paper basket**

Demonstration
Explanation of the Desktop

Recycle Bin

Type here to search

Ian

Network

This PC

Adobe
Acrobat DC

Word

Excel

PowerPoint

Outlook

This PC

← → ∨ ↑   💻 › This PC ›

- ⭐ Quick access
- 📦 Dropbox
- 💻 This PC
- 💽 Seagate Expansion Di
- 🖧 Network

∨ Folders (7)

📁 3D Objects   📁 Desktop

📁 Pictures   📁 Videos

∨ Devices and drives (5)

💽 Local Disk (C:)   💽 Local Disk (E:)

40.4 GB free of 111 GB   65.9 MB free of 99.9 MB