

Windows v Mac v Linux



Although it is referred to as a “piece of software” in reality an Operating System is **not** a single program; it is a collection -hundreds of **smaller modules**, with each module responsible for fulfilling a specific task.

Building an OS in a **modular** fashion ensures that it can be easily updated or “patched” (its errors are fixed) in a more manageable way. An OS may receive many online patches via a internet connection, typically to **resolve security issues** or mend “bugs” that have been reported.

There are many different **commercial** OSs.

Most home users are familiar with **Microsoft OSs**, particularly the **Windows** family. The newest Microsoft OS is **Microsoft Vista**, released to businesses in November 2006, which will supersede the older Microsoft **windows XP**. It is likely that this is the OS you use at home, **school or college**.

Linux

Linux was initially created as a **hobby project** by a young student, **Linus Torvalds**, while studying at the university of Helsinki in Finland. Linus had a keen interest in a small Unix **system** called **Minix**; his goal quickly became to create an OS that **exceeded** the Minix functionality. Although he started work on this in 1991 it would not be until 1994 when the 1.0 version of the **Linux Kernel** (the core part of the OS) was publicly released.

The Linux kernel is developed and released under the GNU general public licence and as such its source code is freely available to everyone.

These days other hands guide Linux's ongoing development, and there are literally hundreds of different Linux distributions (distros) which are freely available for download. Each is geared for a particular purpose (e.g. scientific research, education etc.); some even fit onto a single floppy diskette!

Common distributions include:

- **Ubuntu** (www.ubuntu.com)
- **Fedora** (www.fedora.org)
- **OpenSuse** (www.opensuse.org)

Tux the Penguin is the official **mascot** of the Linux OS, as created by **Larry Ewing**.

Graphical User Interface

GUI pronounced “goo-ey”) is based on WIMP (Windows, icon, menus and pointing device) systems as in the early 1970s by the famous innovators **PARC (Palo Alto Research Center)**.

A GUI creates a user-friendly media-rich environment for users to **explore**, work and play in using a **combination** of **moveable** and **resizable** windows, **icons** and **intuitive point-and-click mouse control**.

Perhaps the most famous GUI is Windows.



Microsoft vista Interface

Apple MAC and Linux also have intuitive and attractive interfaces.



Linux Fedora Interface



The Apple Mac OS X Interface

Linux desktop managers are also becoming more intuitive, robust **and** aesthetically pleasing.

GUIs are popular as they represent a good levelling tool; users of any age and IT experience can quickly feel at home, performing a combination of both simple and complex tasks with equal ease.

Graphical user interfaces are now the standard interface for modern Operating Systems. Although they generally rely on mouse and keyboard, some have voice recognition software which allows the OS to respond to vocal commands. This is particularly useful to those with limited mobility. In addition, narrator software is also present to describe events and options on screen for those visually impaired. Both aim to improve equal opportunities among users.

GUI- Advantages & Disadvantages

For	Against
They are very user-friendly	Graphically intensive GUIs require faster processing
They are easy to configure to suit different user's preferences	This can make them slow to respond on less powerful hardware
They provide comprehensive input device support	Newer OSs require more hard disk space to install
There is no need to remember complex CLI instructions	And they need greater system resources (processor, memory etc.) to run
Basic operations can take longer than when using the CLI.	

Exercise

Visit the website below for a review of Windows and Apple MAC.

http://www.jobsite.co.uk/career/advice/mac_pc.html

- 1) Why has the Magazine & Newspaper industry traditionally relied on Mac PCs
- 2) What do each of the Professionals recommend.

Trevor Cummings
 Andrew Dickinson
 Mathew Steenson

- 3) You have £1000 to spend on a new PC.
 The Pc will be used at home for general personal tasks such as letter writing and budget calculations. It will also act as entertainment centre Music & films as well as family photos and movies.

Investigate the Windows and Mac options available.

This website may help:

<http://www.familyresource.com/lifestyles/technology/buying-a-home-computer-mac-vs-windows>

4) Complete the following table which compares Windows OS & Mac OS.

	Windows	MAC OS
Purpose (area it is mainly used)		
Features		
▪ User interface		
▪ Support for digital media (music, photos, movies)		
▪ Networking		
▪ Security/reliability(stability)		
▪ Software		
Functions		
▪ Filing system		
▪ Device drivers		
▪ Program management		
▪ Peripheral Management		

Some good reviews can be found at:

Reviews.cnet.com