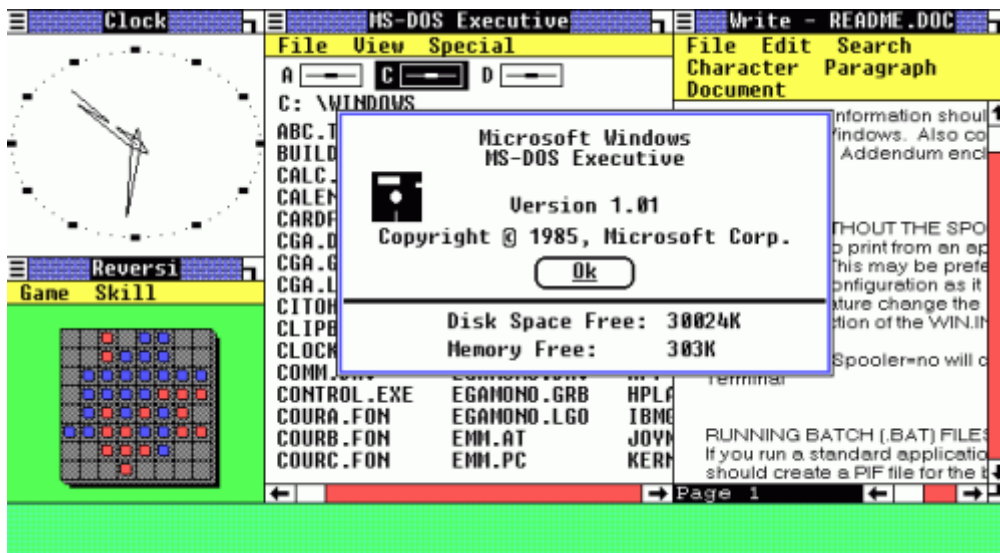# A Brief History of Desktop Operating Systems

There are many different Operating Systems in use, and some have a history dating back to the 1970s. We will look at the three main types in use on desktop computers - Microsoft Windows, Apple OSX and the Unix family.

Microsoft Windows

Microsoft Windows is the most commonly used desktop OS. It has gone through about twelve major versions. Windows is not free, but is usually bundled with new computer purchases called an OEM license. You can also buy Windows separately as a retail version.
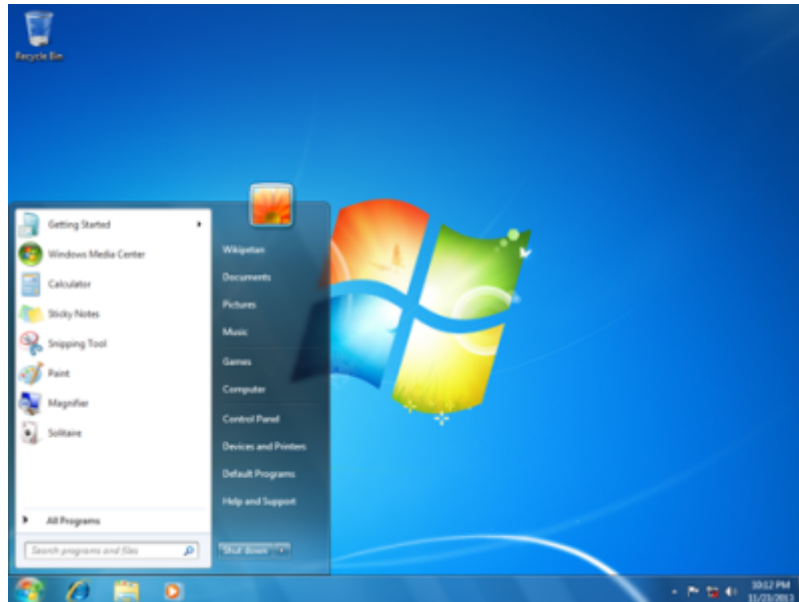
Beginning in 1985, Windows 1.0 ran on top of Microsoft's previous operating system MS-DOS. You can see the disk and RAM size in this screen shot. How does this compare to the RAM and hard disk in your computer?

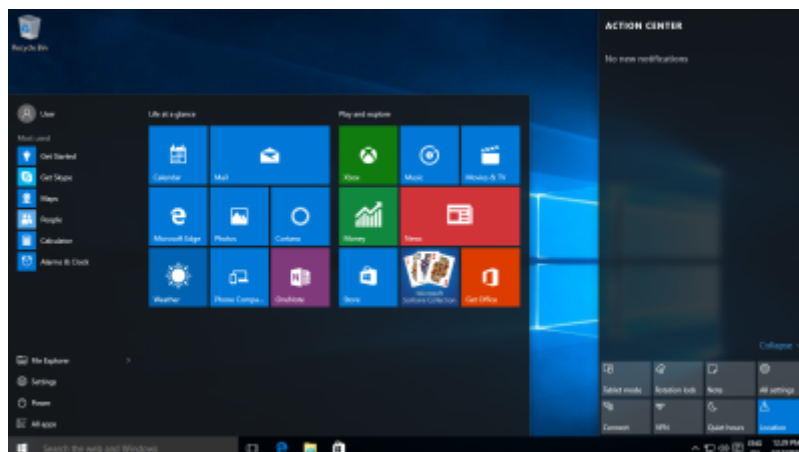"Windows1.0" by Screenshot taken and uploaded by Remember the dot (talk · contribs). Via Wikipedia - https://en.wikipedia.org/wiki/File:Windows1.0.png#/media/File:Windows1.0.png

Windows 7

Released in 2009, Windows 7 is still the most popular desktop OS and keeps much of the look and feel of Windows XP. Just a few years ago, at least 50% of all desktops on the internet were using Windows 7, which users seemed to prefer over Windows 8.

Windows 10

The latest version is Windows 10. It combines the familiarity of Windows 7 with the use of touchscreen-like panels in its User Interface (UI) first used in Windows 8, as displayed in the startscreen below.
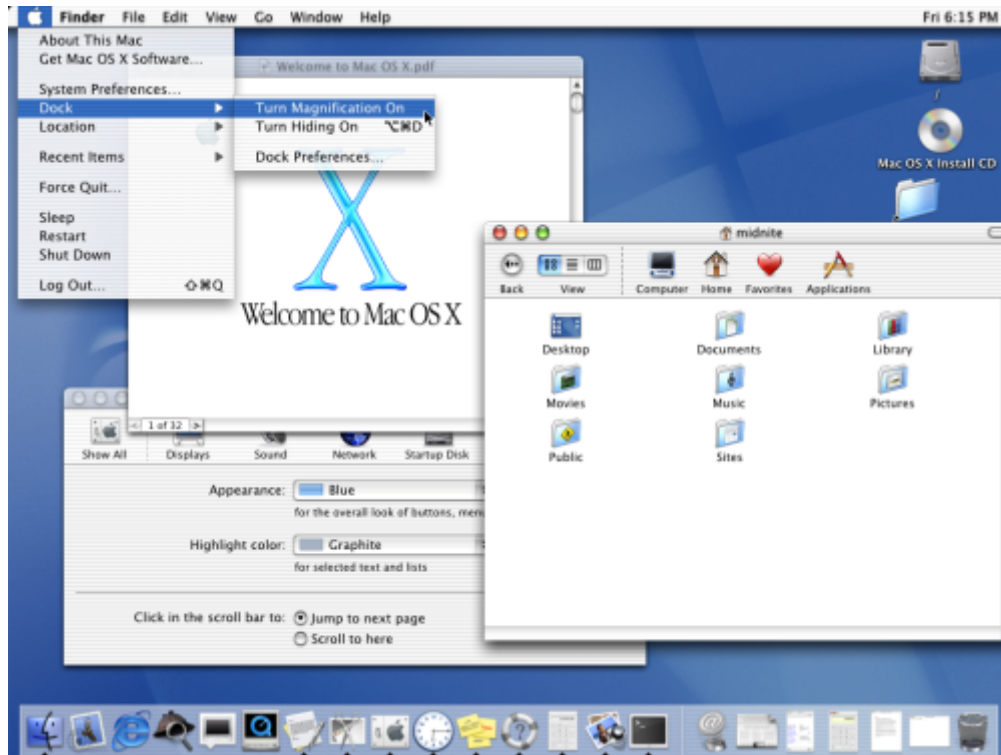

"Windows 10 build 10240 (RTM)" by Source (WP:NFCC#4). Licensed under Fair use via Wikipedia - https://en.wikipedia.org/wiki/File:Windows_10_build_10240_(RTM).png#/media/File:Windows_10_build_10240_(RTM).png

Apple OSX

Launched in 2001, OSX was developed by Apple Computers, now better known for its iPhone and other portable devices.

OSX is now free when you purchase an Apple computer, but is not licensed to be installed on other computer types.

The first version of OSX - 10.0 .....

"MacOSX10-0screenshot" by Source. Licensed under Fair use via Wikipedia -
https://en.wikipedia.org/wiki/File:MacOSX10-0screenshot.png#/media/File:MacOSX10-0screenshot.png

...looks remarkably similar to the latest version 10.10.

But there is a secret under the shiny GUI of the Apple operating system. OSX is based on - or derived from - Unix.

"MacOSX10-0screenshot" by Source. Licensed under Fair use via Wikipedia -
https://en.wikipedia.org/wiki/File:MacOSX10-0screenshot.png#/media/File:MacOSX10-0screenshot.png

The Unix Family

Unix is a multiuser, multitasking computer operating system. It was developed in 1969 by Ken Thompson and Denis Ritche at Bell Labs in the USA as a tool for programmers.

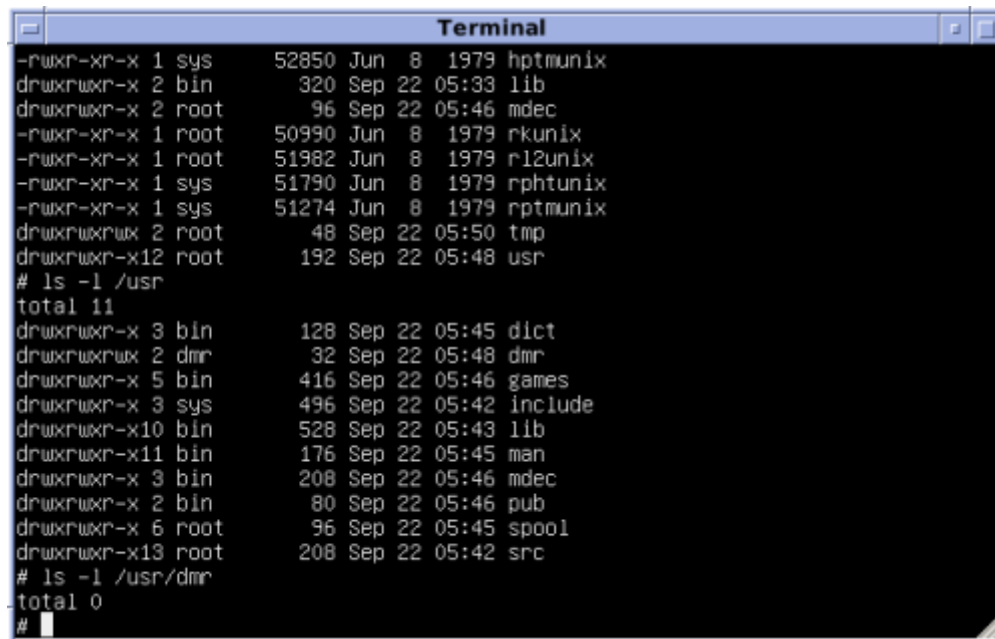Unix was originally run on minicomputers like the one shown below.

In this era, computers where only ever expected to be used by government, academics or in large business environments, as computers like this cost the equivalent of around $500,000 today.

By en:User:Toresbe - From english Wikipedia. Original description was: The Oslo PDP-7, before restoration started. I took the picture., CC SA 1.0, https://commons.wikimedia.org/w/index.php?curid=1963657

Unix was originally controlled from a simple text only interface called the Command Line Interface (CLI). The CLI has remained basically the same for the last 40 years.

This is what the Unix terminal looked like. It was first used in 1978.
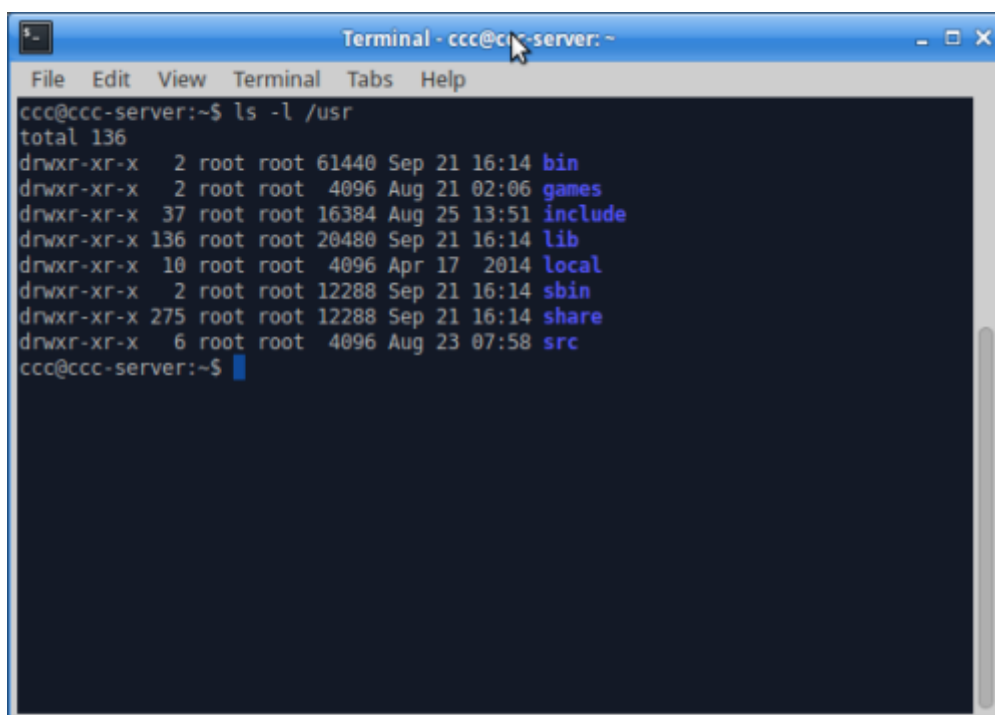
Here is the terminal, which you will be using in the next workshop on your own computer.

Desktop Environments

With the rise of desktop computers, users needed a more friendly way to control their computers than the CLI. This lead to the creation of a **Desktop Environment**.

The desktop environments (or just desktop) is what we usually think *is* the computer.

The most basic desktop tasks are moving, opening and closing files and folders.

All desktops fill the same basic needs:

- They give the user a Graphical User Interface (GUI)

- They interact with the OS using an mouse and keyboard.

The first computer with a desktop environment was the Xerox Alto, released in 1972.
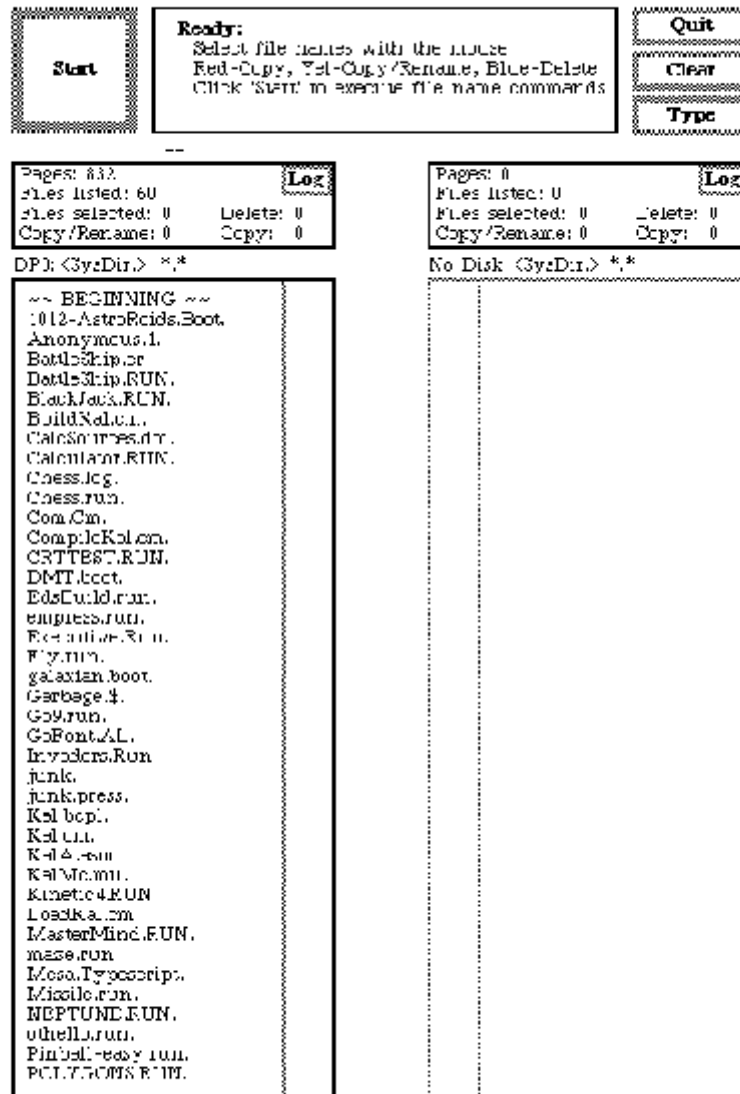

By Joho345 - Own work, Public Domain, https://commons.wikimedia.org/w/index.php?curid=3699855

Icons, windows, and menus usually have a distinctive style in each desktop environment. We can usually tell at a glance what OS a computer is using based on this style.

This is the Xerox Alto desktop environment.

By Source, Fair use, https://en.wikipedia.org/w/index.php?curid=31740837

Desktop Environments can also exist 'on top' of a CLI. As Unix-like computers have become more popular,many desktop environments have been developed.