**Comparison of Operating Systems**

In this report, I will be comparing Windows XP, Windows 10 and OS X, three operating systems I am familiar with. I will compare their similarities and differences, and their suitability for a range of tasks and environments.

Windows 10 is Microsoft’s latest OS, and runs on almost any hardware (so long as it meets the minimum specifications). It has many of the features of older versions of Windows, as well as lots of new ones.

OS X is actually the name for many different versions of Mac OS’s. The latest is El Capitan (version 11), but I will be talking about Mountain Lion, the version I am familiar with.  
OS X Mountain Lion is based on the UNIX kernel, as OS X has been for over a decade. This means it has many of the features of UNIX available through the command line.  
OS X is generally aimed at designers and casual users. It has a host of design and art software exclusive to itself.  
It is worth noting that OS X can only be (legally) used on Apple hardware, which tends to be overpriced compared to other hardware.

Windows XP is an older version of Windows, and while it has the core functionality of newer versions (which are built on it), due to its age it has less support for new technology, and some features and settings are not available as they didn’t exist at the time of its release.

Windows 10 is aimed at business and casual use, with a slew of office programs such as Microsoft Office, and most software is designed with Windows in mind.  
Windows has gone through many redesigns, and after making a mistake with the deeply unpopular windows 8.1, they have added adjusted interfaces so that it still looks modern but is familiar to users of older versions of windows.  
Besides Cortana, a voice activated virtual assistant a bit like Siri, windows 10 is just a more modern version of windows 7. Software for just about any version of windows will work on 10, and due its lightweight nature, it will run on older hardware.

OS X can run Microsoft Office too, and most major software developers will provide versions of their software for both Mac and PC, so there is little difference between the two in terms of available software.

The main differences come down to the interface and design, and even then, the differences are small. Accessing almost any feature is different between the two OS’s, but as good design dictates an intuitive interface, it’s not difficult to figure out how to perform everyday tasks even when not familiar with the OS’s.

Windows XP, being quite old, has an outdated theme, but as it was most of the younger generations first OS, and is similar to modern versions of windows, most people will know how to use it.

As OS X uses the UNIX kernel, it is possible to install Linux packages, which is a very useful feature for a power user.

Many people like OS X’s sleek and intuitive design, which simplifies everyday tasks such as using office programs, web browsing and managing media as simple as possible. Because OS X can only be used on Mac hardware, the default install is guaranteed to perform well. The OS has also been optimised for the hardware, giving it a performance boost.

However, when it comes to compatibility, nothing beats Windows. Windows 10 is able to run programs intended for any version of Windows, and has the largest amount of available software by far. Power user features and settings are not hidden away like on OS X, and Windows is generally more transparent and open about its inner workings.

Windows XP will run on hardware that could be considered ‘ancient’ (i.e ’95 – ’05 PC’s), but as it is not optimized for newer hardware, it will not run quickly on a newer PC. It is also no longer supported by Microsoft, so is not secure or stable.

Overall, OS X is better suited for casual everyday users who just want to get work done, or extreme power users who are familiar with UNIX/Linux and know how to perform complex IT tasks.  
Windows is equally suited to the casual user, as it is simple enough to do everyday tasks on, and is the most used OS in the world, so it is familiar to more people. While slightly more advanced features are more easily available, a power user may not find the windows command line as useful as the OS X one. Having said that, it is a trivial matter to run windows on a PC (from a live CD/USB stick, installing a partition or full drive, or inside a VM), which when combined with the sheer amount of software and development tools available, makes windows a far superior platform for the power user than OS X.  
Windows XP is too old for a work environment, and with no official support, is better suited to hobbyist computing.

|  |  |  |  |
| --- | --- | --- | --- |
| Task | Is better than 🡪 | Is better than 🡪 | 🡨 Is worse than |
| Office use | Windows 10 | OS X | Windows XP |
| Graphics design | OS X | Windows 10 | Windows XP |
| media | OS X | Windows 10 | Windows XP |
| Web browsing | OS X | Windows 10 | Windows XP |
| development | Windows 10 | OS X | Windows XP |
| compatibility | Windows 10 | OS X | Windows XP |
| performance | Windows 10 | OS X | Windows XP |