

ETC 647 – Creating Technical Learning Environments

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Module Two - Operating Systems

Learning Log

In this module we were to explore Operating Systems (OS). I looked at the various versions of Windows and Apple. I also found some more information on Linux and Unix.

Windows

Windows, of course is the creation of Bill Gates at Microsoft (for a fun look at Bill right when Windows 1.0 came out check this page - <http://blog.monkeymethods.org/2005/01/bill-gates-strikes-pose-for-teen-beat.html>).

Anyway, since 1985 when Windows 1.0 came out there have been 11 versions including Windows 1.0. Windows 3.1 was the first one I ever used. Before that I used DOS and a Mac. I really preferred the Mac OS right up until XP. Now I move seamlessly between Mac 9.2 and Windows XP. For me an OS should just work in the background helping me to manage my files and applications. The OS becomes second nature to me and needs to be intuitive. I find that OS have come along way from the DOS days.

I did go to the Microsoft site and look up the features and requirements for each OS. Don't you just love how with each new version they want more, more, more. I am very interested to see how Vista does in the market. XP was a major change for most people and now that we have settled into this OS (has it really been out five years) they go and change it. Guess that is just progress. I did enjoy surfing around Microsoft and seeing all of their many innovations.

Apple

This is my favorite computer and I would love to upgrade to new hardware with the new OS, but I am just a poor college student. The newest OS for the Mac is Tiger. It looks fantastic, but again it wants more, more, more. To me the Mac OS is just easier on the eyes and a lot more fun to use, but I am bias. It is also much more expensive than the PC's with the Windows OS. Even though I hate to admit it the PC's are much more practical for the school environment than a Mac. If you are going to teach and train the masses then you need to go with the computer that is most popular.

However, I will always keep my Mac and buy a new one when given the chance. I come from the creative world where Mac's are valued, but I do work in the business one where PC's are the standard. I see that for the most part education is siding with the business world. Too bad, so sad. I think the Mac is a sports car and the PC is a MiniVan. Guess what? I drive a Honda Odyssey! Ha! Ha! But I still long for a Mercedes 450SL convertible.

UNIX & LINUX

This OS has been around since 1969 and has a good reputation for dependability in multiuser environment. Linux is loosely based on a UNIX derivative called MINIX. Linux is distributed under the terms of a General Public License, so we can all download a copy from the Internet which is where it is primary distributed.

It has been many years since I used UNIX, but I really liked the OS environment. It was easy to navigate around, but I was also just coming off of DOS. I would like to have more time on both of these OS.

What is the purpose of an Operating System?

I always tell my students that it is the communication manager of the computer. The OS interacts with the application software, device drivers and the hardware to manage a computers resources.

What is the purpose of the File Extensions?

The file extension helps to identify the file contents or tell you what application the file was created in. For example, .doc is the file extension for MS Word. It is the native file format of MS Word. File extensions can be changed or added, but it is generally not recommended. Mac does not use file extensions, so when saving a file on a Mac and transferring it to a PC you need to add the file extension.

How can you get a list of applications running on your PC?

Go to the Start Menu and click on All Programs. A window will appear with a list of the applications located on your computer.

Customize an OS of your choice.

Wally-I have done this in the past and will be doing around the end of November or beginning of December for NAU. I am working at the NAU-Tucson campus in the ITV department. They are going to be opening a new computer lab and ITV classroom for the Spring. I have been asked to help ghost the machines, so I will very busy with this activity soon enough.

I also have customized my PC and Mac here at home. No real problems and if I encounter one I have a guy named Joe that will come and bail me out for \$50 an hour! It has happened twice. OUCH!

File Systems

The OS uses a file system to keep track of the names and locations of files that reside on the hard drive. Most Macs use the Macintosh Hierarchical File System or HFS. Windows NT, 2000 and XP use a file system called NTFS or New Technology File System. The file system used for Windows 3.1 was called FAT16, while Windows 95, 98 and ME used FAT32.

I found a nice chart about NTFS vs FAT at http://www.ntfs.com/ntfs_vs_fat.htm. It does a nice job outline all of the differences.

Spec out a PC

Let me dream for a moment. Every teacher and student would have his or her own portable computer. All of the textbooks would be loaded on the computer and the school would be wireless with hotspots all over the campus. In my dream they would all be Macintosh PowerBooks for the teachers and IBooks for the students. OK I'll wake up.

I will look at PC's for my son's elementary school. Right now they have only two computers per classroom and one computer lab with about 35 computers all Window Machines. I think they use either Windows XP or 2000. I really think that all teachers need a laptop, so I will address this first.

Laptop

I'll go with Dell, for only \$500 each teacher can have an Inspiron1200. This has an Intel Celeron M360 processor (1.4Ghz). It has 256MB of RRAM,, Windows XP Home Edition, a 14.1 XGA display, and a 24X CD-RW/DVD. A 90-day warranty is also included. Not too bad for \$500.

Desktop

I'll stay with Dell for the desktops in each classroom. I would pick the Dimension 3000 which is an affordable Multimedia Computer. It starts at \$600. The processor is an Intel Pentium 4 (2.8GHz). It comes with Windows XP Home Edition but should be changed to Windows Professional for security. It comes with 256MB of RAM and an 80GB HD. It also has a 15" flat panel monitor. The warranty is for one year.

I have a call into my son's technical support staff person at his school and I want to talk with her more about what the school is currently running. As we continue along with these modules I will ask her opinion on computers, operating systems and networks. Hopefully I will gain better insight into what the elementary schools are using on their campuses.

This was an interesting module. I look forward to seeing the new VISTA OS. Maybe in the Spring we will begin to see on new computers, but I bet it will take a couple of years before it is main stream.