

System and Application Software

Hello class and welcome to Week Two! Congratulations on making it to this week! Now, this week we are going to be talking about software.

When I say software, what comes to mind? Hopefully, an app of some sort that you have enjoyed using comes to mind. One very commonly known app that you may have used time and time again is Microsoft Word. Perhaps, you have been able to use other apps associated with the company or so; or perhaps an app for gaming. There are multitudes of apps that you may have been introduced to, but we want you to be aware of the tools for productivity as well as creativity.

Take a moment and reflect on a tool you used to increase your productivity. Was it Google Chrome? Was it Microsoft Word? Was it Microsoft Outlook? Or was it a device with an operating system?

You must use some sort of software to give your computer hardware instructions to execute a task. The term software was coined by John Tukey.



There are two types of software we want to focus your attention on. That is your system software and your application software. Recognize there is a difference now because your system software will include the likes of your operating system.

What is one example of an operating system? Well, it is the Windows version of the software that you might have heard of. Some of you are currently using Windows 7 or perhaps Windows 10. Perhaps, you are using a Mac Operating System. If not, maybe you have delved into UNIX or LINUX. All of these are different types of operating systems. The operating system is the manager, the boss.

Whenever you turn your computer on, to get that computer going, it takes the operating system to manage all of those requirements: to manage the driver, to provide required communication between the hardware and the software. The operating system is very critical.

Also as part of the system software, you are going to see some utility programs that help to maintain your overall computer and the effectiveness and the performance of your computer. Those would fall in with your utility programs and device drivers that will serve as a translator, the interpreter for the different devices that are communicating with the operating system.

So, the system software is very critical to having any kind of computer system. Then we get all of the fun stuff to go with it. We get the kinds of apps that will help us write a book, create a poem, write music, conduct a presentation, and help us be able to play a game all of those fun and exciting kinds of software, would be your application software. We are going to dive into a few of those and give you additional highlights throughout this week. So what you see in the lesson is a reminder of what the application software is and how the system software would function. Recognize that there are some basic functions of computer system software that you need to realize and appreciate.

Two major types of software work in tandem to afford users the full power of using technology. Williams (2015) defines these software as,

- Application software is software that has been developed to solve a particular problem for users—to perform useful work on specific tasks or to provide entertainment.
- System software runs at the most basic level of your computer and enables the application software to interact with the computer and helps the computer to manage its internal and external resources, as well as manage the hardware.

While you interact more with application software, all aspects of your system have an intimate relationship with the system software. So, let's further look at the key components of system software outlined by your courseware,

- Operating systems - An operating system is the principal component of system software in any computing system.
 - Device drivers - Device drivers help the computer control peripheral devices.
 - Utility programs - Utility programs are generally used to support, enhance, or expand existing programs in a computer system.
 - Language translators - a type of system software that converts language from natural to machine language, so the computer is able to execute instructions.
-