

Information Technology Fundamentals

Unit 1: Computer Basics

Wrap-up



What is a Computer?

A **computer** is an electronic device that manipulates information, or data. It has the ability to store, retrieve, and process data. You probably already know that you can use a computer to type documents, send email, play games, and browse the Web.



Hardware vs Software

Hardware

Hardware is any part of your computer that has a physical structure, such as the keyboard or mouse.

Software

Software is any set of instructions that tells the hardware what to do. It is what guides the hardware and tells it how to accomplish each task.



Hardware vs Software

Hardware Examples:

- Printers
- Mouse
- Speakers
- Monitors

Software Examples:

- Web browsers
- Games
- Word
processors



Desktop

They can be small, medium, or large in style, and they usually sit on a desk. Once you add a monitor, mouse, and keyboard, you have what is typically known as a desktop computer.



Laptop

Laptops are battery- or AC-powered personal computers that are more portable than desktop computers, allowing you to use them almost anywhere.



Tablet

Tablet computers—or tablets—are handheld computers that are even more portable than laptops. Instead of a keyboard or touchpad, tablets use a touch-sensitive screen for typing and navigation. The iPad is an example of a tablet.



Servers

A server is a computer that serves up information to other computers on a network.

Servers also play an important role in making the Internet work: They are where webpages are stored. When you use your browser to click a link, a web server delivers the page you requested.



Game Console

A game console is a specialized kind of computer that is used for playing video games. Although they are not as fully featured as desktop computers, many newer consoles allow you to perform nongaming tasks like browsing the Web.



What is an Operating System?

An **operating system** is the most important software that runs on a computer. It manages the computer's memory, processes, and all of its software and hardware. It also allows you to communicate with the computer without knowing how to speak the computer's language. Without an operating system, a computer is useless.



Graphical User Interface

Modern operating systems use a graphical user interface, or GUI (pronounced gooey). A GUI lets you use your mouse to click icons, buttons, and menus, and everything is clearly displayed on the screen using a combination of graphics and text.



What is an Application?

You may have heard people talking about using an application or an app. **An app** is a type of software that allows you to perform specific tasks. When you open an application, it runs inside the operating system until you close it. Most of the time, you will have more than one application open at the same time, and this is known as multitasking.



Desktop Applications

Word processors: A word processor allows you to write a letter, design a flyer, and create many other types of documents. The most well-known word processor is Microsoft Word.



Desktop Applications

Web browsers: A web browser is the tool you use to access the Internet. Most computers come with a web browser pre-installed, but you can also download a different one if you prefer. Examples of browsers include Internet Explorer, Firefox, Google Chrome, and Safari.



Desktop Applications

Gadgets: Sometimes called widgets, these are simple applications you can place on your desktop (or on the Dashboard if you're using a Mac). There are many different types of gadgets, and they include calendars, calculators, maps, and news headlines.



What is the Cloud

You may have heard people using terms like the cloud, cloud computing or cloud storage. The cloud is the Internet—more specifically, it's all of the things you can access remotely over the Internet. When something is in the cloud, it means it is stored on servers on the Internet instead of on your computer.



Web-Based Services

Dropbox is a cloud storage service that lets you easily store and share files with others, and it lets you access your files from a mobile device as well.

Evernote lets you type notes, clip webpages, take photos, and organize all of them from your computer or mobile device.



Web Apps

Web apps—which run in the cloud and do not need to be installed on your computer.

Examples include:

- Gmail and Yahoo! Mail
- Facebook
- Google Docs



Why Used the Cloud?

There are many reasons to use the cloud, but the main reasons are convenience and reliability. Saving a file to the cloud ensures that you'll be able to access it with any computer that has an Internet connection, so you won't need to worry about using CD-ROMs or USB flash drives. The cloud also makes it much easier to share a file with coworkers and friends.

