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Glossary

Word	Definition
CPU	Central Processing Unit also known as a processor-the component(chip) in the computer that does all the tasks and calculations that a computer does. Basically, a CPU takes instructions from a program or application and performs a calculation. It also tells other hardware components what to do, for example moving the mouse cursor because you moved the mouse itself, or telling the GPU (Graphics card) to show an explosion because you clicked on a red barrel in a video game. It is the core of a computer and a computer cannot function without one (it is the most essential part).
(Processor)Architecture, for ex. ARM, Intel x86	The processor architecture is the physical design of the processor (transistors and all other components. That determines the compatibility of the processor with certain instruction (machine code). The design of the processor determines what software can run on the computer and what other hardware components are supported. A certain class of CPUs are designed to process certain machine code. By using a certain design, computer manufacturers can create machines that include different hardware components, but run the same software. For example, programs with instructions written for x86 processors cannot run on ARM (that's why Desktop programs don't run on mobile devices-desktop computers use the Intel x86 architecture and mobile devices mostly use the ARM architecture).*

Processor clock	The processor clock is an oscillator producing square waves. The clock output is a small voltage for a few nano seconds, then zero for an equal amount of time. One high and one low voltage output constitute one cycle of the clock. Clock speed is the rate at which a processor can complete a processing cycle. If the time period is one nano-second, the frequency is 1 Giga Hertz(1GHz). The more GHz and less time, the faster the computer (since more GHz, hence faster clock speed equals less time). The function of the clock in the CPU is like that of a Conductor of an orchestra who synchronizes different musical instruments, or like the military band which synchronizes marching. The clock in the computer synchronizes micro-operations in the CPU.
Memory allocation	Memory allocation is a process by which computer programs and services are assigned with physical or virtual memory space. Memory allocation is the process of reserving a partial or complete portion of computer memory for the execution of programs and processes. Memory allocation is achieved through a process known as memory management. Memory allocation is managed through operating system and software applications. Programs and services are assigned with a specific memory as per their requirements when they are executed. Once the program has finished its operation or is idle, the memory is released and allocated to another program or merged within the primary memory.

CPU(Processor)time	Processor time is a measure of how much time the processor spends on any particular process, expressed in a ratio. The amount of time a processor is occupied by the data it is processing is figured as a percentage of overall time that the processor is active.
Virtual machine	A full virtual computer with an operating system which runs as a guest in a program on the main operating system on the physical computer(host).The virtual machine uses resources from you main machine to run(you basically split the resources between your physical computer and your virtual machine(s)).The virtual hard drive or storage unit of the virtual machine is actually a file on your physical computer's operating system, whose size depends on how much you have filled up your virtual hard drive inside the virtual machine(for example if you have used 50GB in your virtual machine the file will take up 50GB on your physical computer).
Cloud computing	Cloud computing is the on-demand availability of computer system resources, especially data storage and computing power, without direct active management by the user. The term is generally used to describe data centers available to many users over the Internet. Google Drive is an example of user-oriented cloud storage. You upload the files there and you can access them from any machine but they are actually on computers which might be miles away from you and you gain access to them through the internet.
PDA	A personal digital assistant, also known as a handheld PC, is a variety mobile device which functions as a personal information manager (taking notes, writing documents or emails etc.). The PDAs have been mostly replaced by smartphones.

Buffer	In computer science, a data buffer (or just buffer) is a region of a physical memory storage used to temporarily store data while it is being moved from one place to another. Typically, the data is stored in a buffer as it is retrieved from an input device (such as a microphone) or just before it is sent to an output device (such as speakers). However, a buffer may be used when moving data between processes within a computer. Buffers can be implemented in a fixed memory location in hardware—or by using a virtual data buffer in software, pointing at a location in the physical memory.
Kernel	A kernel is the central part of an operating system. It manages the operations of the computer and the hardware, most notably memory and CPU time. The kernel is the most fundamental part of an operating system. It can be thought of as the program which controls all other programs on the computer. When the computer starts, it goes through some initialization (booting) functions, such as checking memory. It is responsible for assigning and unassigning memory space which allows software to run. The kernel is basically the bridge between computer hardware (physical memory, CPU, Graphics card, mice keyboards etc.) and the software (the operating system and programs).
Image (operating system or machine image)	In computing, a system image is a copy of the entire state of a computer system stored in a file on the operating system. If a system is shut down later it can be restored to exactly the same state as before the shutdown using a system image. In such cases, system images can be used for backup. Another type of system image is an installation image-a file from which the operating system is installed.*

[*] Apple switched from the PowerPC architecture to the x86 architecture to make the Macintosh platform more compatible with Windows PCs. Recently though Apple switched to the ARM architecture on their laptops in order to take advantage of their new custom-made ARM processors which will help with the efficiency but might cause compatibility issues with some programs as most desktop software uses the Intel x86 architecture (that is absolutely horrible news for developers who wrote programs for mac before the x86-ARM switch).

[*] It's an .iso or .img file-which is a kind of archive (which contains all the necessary files to install the operating system in a single file. Once it's written to CD or USB drive it's unarchived and ready to install the operating system on a computer.