

Personal Computer (PC)

Evolution and components of the personal computer

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### Abstract

In the expository essay I will speak about the evolution and components of the personal computer most formally known as PC. I will begin with the history of the PC and how vast the size difference is throughout a timeline. There are many components of a PC, I particularly focused on CPU, Graphics card, RAM, Hard Drive and Disk Drive. Then I will go in further depth of how a computer memory is stored when using different mediums. This essay also explains the essence of data compression and how the compression affects the quality. We will also explore antivirus and software firewalls to protect your information on a PC. Lastly the roles of Hyper Text Markup language will finally be explained to how a PC communicates over the internet.

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### Evolution and components of the personal computer (PC)

A short history of the personal computer, according to History the invention of the PC explains the massive transformation of a pc from a “hulking machine that emerged out of World War II.” Visibly it’s easy to tell that size is a big difference we see compared to our personal computer (PC) that we have today. At the beginning around 1930’s computer were giant ENIAC machine. (Electrical Numerical Integrator and Calculator) this computer took about 167 square meter or 1800 square feet of floor space. Today’s PC in 2015 size range from a laptop that fits in your lap or a cellular device that fits in the palm of your hand.

The PC has five major commonest a CPU (Central Processing unit), Graphics card, RAM (Random access memory), Hard Drive and Disk Drive.

According to computer systems by Daniel Cole

These five major components are defines as such;

**CPU** – is the brain of the computer it allows all the different actions to take place and dose it to the right programs on the screen.

**Graphics Card** – allows the computer to show the screen it allows you to see 3D and 2D images.

**RAM** – a storage system, it allows stored data to be received and accessed easily.

**Hard Drive** – allows you to save and revisit work which you haven’t completed on the computer.

**Disk Drive** – allows the user to receive information you can also store the information on the disk.

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Next I will explain how Text, Audio, Image and video data are stored in a computer's memory. According to data in the computer all your text, audio, image and video data are stored by binary, bits and bytes. What this means is a "Binary is a mathematical number system: a way of counting". Usually represented by 0's and 1's which are also known as bits, short for binary digits. This mathematical number system imagine by substituting bytes to represent pixels. For sound analog waves are converted digitating by using a process called sampling. Text and video are processed in the same mathematical number system using bits and bytes to represent what data you are wanting to save. You are also able to write codes using the binary numbers. These codes can be used for programing or developing websites. There are endless usage for using binary number on your pc.

One of my favorite is how data compression works and how compression affects quality (fidelity), in Vancouver public library compression is another way to say a file is codes or in a file format. The higher compression the crisper the image and less fidelity. Compressing a folder can be beneficial when you are trying to transport multiple files at one time. Depending on the type of PC you can compress folders for windows or macs. If you receive a compressed file you are able to export these files and do a reverse effect so you can look at the files individually.

Ever wondered what software applications are and how they got stated? According to, study "Application software, are often called productivity programs or end-user programs because they enable the user to complete tasks such as creating documents, spreadsheets, databases, and publications, doing online research, sending email, designing graphics, running businesses, and even playing games". According to IBM software applications were developed in the 1980's to allow more "data to be retrieved simultaneously by using Structured Query Language (SQL), which can be embedded in most high-level languages."

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Have you ever experience a firewall? Ever wonder how antivirus and software firewalls pretext information stored on a PC? According to FBI gov explains the benefits of using antivirus software, it is to alert your pc when a unwanted software is trying to embed itself on your computer. Some software collects personal information without your consent, with using a firewall you can help protect you by detecting malicious codes with virus and worms.

Lastly what is the role of HyperText Markup Language (HTML) in PC to PC communication over the internet? According to FCIT “Hypertext Markup Language (HTML) is the language used to write web pages. A browser takes the HTML and translates it into the content you see on the screen.” Some examples of when this is present is when you move your cursor over a picture or text and the arrow changes into a pointer indicating additional information and links.

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### References

Invention of the PC. (n.d.). Retrieved November 9, 2015.

History of Computers. (n.d.). Retrieved November 9, 2015.

Timeline Highlights. (n.d.). Retrieved November 9, 2015.

Williams, C. (n.d.). 5 hardware components found inside a PC. Retrieved November 9, 2015.

Data In The Computer. (n.d.). Retrieved November 9, 2015.

Inspiration Lab - Advanced Audio Editing with REAPER Tags: Audio\_editing, inspiration\_lab, sound . (2015, October 15). Retrieved November 9, 2015.

What is Application Software? - Definition, Examples & Types. (2013). Retrieved November 9, 2015.

How to Protect Your Computer. (2010, March 17). Retrieved November 9, 2015.

The Internet: Internet Basics. (2009). Retrieved November 9, 2015.