

# Recent PC System and its Functions Mastery

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**Abstract:-** The current living area is refers to as a digital generation simply because of the use of the new technology tools. It is important to master the materials you use. In computing, most people want nowadays to use computers without mastering the basic which goes with it.

Indeed, using a computer seems to be easy but since users know some bad sides of a computer, its architecture and functionalities must be understood as well. Although it is said that all computers have several characteristics in common, the differentiation includes one of debated concepts focused in this work.

Moreover, as all systems, PCs have a system called “PC System” that people need to know before pretending to use perfectly the computer. It is advised to all computer users that the PC System must be understood entirely for it better usage without which computer usage becomes complex. The present article guide computer users to disclose recent PC System and its functions.

This work concerns with, first, the way the PC System is organized, second, different parts of the computer, the way they are connected from one to another and functions are discussed for the better understanding by computer users.

**Keywords:-** Recent, PC System, Functions, Mastery.

## I. INTRODUCTION

Recent PC System and its functions mastery is a serious of ideas presented to computer users in the digital generation where Computer Science has become an essential tool for developing societies. Everybody expresses the interest to positive changes onto the working environment.

In Education, the use of Computers helps Teachers, Students, Institution Managers and Parents. Teachers publish what students need, for example, books, grades, quizzes, examinations etc. Students sit for tests, examinations as part of evaluation, and see results Online. Most of institution leaders guide school activities via the Website. Parents receive all kinds of the school information for their children through it.

The generation which goes with PCs is referred to as “Digital Generation”. PCs and cell phones with web access have replaced in many places old behavior today, no one can avoid Computer knowledge because it helps you perform living tasks.

In factories people work to increase work capacities and productivity, everyone on the market wants to be the “first”, a dream which is not easy to become true due to certain reasons related to the world competition challenges. Computer brings capabilities that bring impossible facts into possible. Digital generation requires the mastery of new technology tools usage that goes together with it. The Computer enables people to do great jobs in a few time.

It is revealed that teaching Computer Science courses requires a great knowledge about PC System and its functions without which confusion problem will take place. Let mention that, Computer Science teaching comprises two parts: theoretical and practical ones. Theoretical part comes before practical one, simply because theory shows how to practice. Computer science Teachers, Learners and Researchers are the most concerned of the work.

The PC System and its functions mastery will light interested readers about computer structure, how it function and the way it might be understood. The present topic also focuses on the principal parts of a CPU, especially hard and soft portions, including its functional presentation.

We cannot talk about the PC System structure without mentioning the Portable Computer (PC) itself. The question is to know what a Computer is. A PC is a machine that cannot run without electricity; it processes raw data to give under its quantified presentation output by means of components. As mentioned, PC scheme comprises double principal portions: Hard portion and Soft one.

### A. Hard Portion

It is any of automated or perfunctory part that you have the possibility to view or manipulate with hands. We have three well-known hard portions subdivisions: the Brain, the fundamental storage unit, hardware auxiliaries. Each of these portions comprises several other computer materials.

### ➤ PC Arrangement

#### • Processing

This what is considered, as the intelligence part among which the computer comprises, but supposedly the “Computer's Brain”, known by most of computer users. It is assembled on an integrated circuit which can help the application commands' execution, directs undertakings that run on the PC environment.

- *The Three Principal Sections of the Computer’s Brain are:*

- ✓ **Control Unit:** charged of commanding application examination, its interpretation, then helps a set of other hard portion to specified rules execution.
- ✓ **ALU (Arithmetic Logic Unit):** focuses on math operations performance (+, -, /, \*), including AND, OR, NOT operations.
- ✓ **Quick location unit (known as Register):** it a location needed for information storing and direction.

➤ *Pathway and Cards*

It is considered in computing as central bus within the system linking communication among other components while users need cards installation, to solve the dimension situation; the use of **Expansion slots** is the solution.

➤ *Central Memory*

The Centre memory referred to as volatile is available for information under process by the computer. When the CPU transfers the data into Random Access Memory while the computer user is executing an application, its data will be lost if the computer is turned off because of its volatility unfortunately. The opposite of RAM, Read Only Memory is non-volatile. It is here where we can found commands and procedures for the basic operations of the computer. So, information is kept in the memory when the power turns off.

No computer data can pass through processor without being loaded into the principal memory for processing.

➤ *Bits and Bytes*

The code made of two numbers– 0 and 1 is what Computers use to make calculations. This is what we call ‘binary code’. The electronic circuits in a digital computer detect the difference between two states: ON (the current passes through) or OFF (the current does not pass through) and represent these states as 1 or 0. Each 1 or 0 is called a ‘binary digit’, or ‘bit’.

Bits are put in-group of eight-digit codes that typically represent characters (letters, numbers and symbols). Eight bits together are called ‘byte’. Thus, each character on a keyboard has its own arrangement of eight bits. For example, 01000001 for the letter 1, 01000010 for B, and 01000011 for C. All these are example of a byte each.

Computers use a standard code for the binary representation of characters. This is the American Standard Code for Information Interchange, or ASCII. In order to avoid complex calculations of bytes, we use bigger units such as kilobytes, megabyte and gigabytes.

We use these units to describe the RAM memory, disks storage capacities and program or document size.

Table 1 Measurement Byte Units

	Unit	Abbreviation	Quantity of memory
01000001	Binary digit	bit, b	1 or 0
	Byte	B	8 bits (One byte)
<i>A byte example</i>	Kilobyte	KB, K	1,024 bytes (2 <sup>10</sup> )
	Megabyte	MB	1,024 KB, or 1, 048,576 bytes (2 <sup>20</sup> )
	Gigabyte	GB	1,024 MB, or 1,073,741,824 bytes (2 <sup>30</sup> )
	Terabyte	TB	1,024 GB, or 1,099,511,627,776 bytes (2 <sup>40</sup> )

➤ *Peripherals*

Touchable parts connected to the computer are what we refer to as **Peripherals** without which no one will extract or interact with the computer. Input, Output and storage devices will be the furthestmost concern of the current section. Indeed, they are considered as computer surrounded found around the CPU.

• *Input Devices*

Physical equipment, which helps computer user, send typed information from one computer component to another such as the mouse and the keyboard. They include computer hard portion components that facilitate interaction between users and PC.

• *Output Devices*

The present peripheral allows users viewing processed information as finished result. The most known of the Output components are the monitor/screen and printer.

In addition, Output devices are pieces of hard portion that help display data with perfect brilliance. The screen and printer are the common output devices used.

✓ *The Screen (Screen)*

The screen also known as monitor is what computer users consider as touchable equipment that helps them viewing information in the computer. It shows even the contents of the computer storage materials. Without a screen, computer users cannot access the electronic information. The present cited output is considered as the most used on the CPU.

Screens found in the current generation use *Liquid Crystal Display (LCD) or Cathode Ray Tube (CRT)* technology. LCDs are slimmer design and do not ask much energy to run and almost have replaces the CRTs technology.

✓ *Essential Features*

During the process of typing, designing a computer work, users need essential features to make a high quality work such as ‘resolution’ that has to do with colour dots

numbers called “pixel” discovered on the screen. The number of pixels on the horizontal and vertical axes is used to express it. Usually, the resolution is 1024x768.

#### ✓ *Display Technology*

The work that the user is doing on the computer is displayed via the display peripheral thanks to modern technology. Working on a file that you cannot view is not possible. It is impossible to type without seeing what is on the screen. The focus of modern technology is on making the task you are doing apparent. A Display of Liquid Crystal is composed of two glass panels separated by a liquid crystal substance. To generate the image, differing amounts of light are blocked by the crystal. Using thin film transistor (TFT) technology, each pixel in an active-matrix LCD has its own switch. Called brightness or luminance, it is the quantity of light produced by the LCD monitor and is expressed in cd/m<sup>2</sup> (candela per square meter).

A conventional TV set and a CRT monitor are comparable. Millions of tiny red, green, and blue phosphor dots are embedded in it, and as an electron beam passes across the screen, they glow, producing a visible image. Video projectors that project images onto huge screens can be connected to PCs. They are employed in home theater and presentations.

#### ✓ *The Computer Printer*

A printer is an electronic device that runs by means of energy without which its communication with a computer is a challenge. It is connected to other material by cables such as USB and power ones. It uses the cartridge with inks for the hard document presentation. Printing is considered as the last step during a file creating process. Notice that after all steps of a document creation, you need the very last work, instance in typing a book, the hard copy is needed for multiple usage, so the hard copy could be possible just by means of a Printer which helps computer users printing electronic file into paper.

The printer as an output device allows computer users have document printed under desired formats, but also with special characters' form. By means of Printer, you have multi-colored printed document. Indeed, nowadays markets provide several kinds of papers but the printer is able to accept or refuse a paper type during the printing process.

There are many different types of printers and vary in cost, speed, print quality and other factors such as noise or methods of printing. Up to you to decide, which printer is suitable for your needs? The bellow list comprises some examples of printer types:

#### ✓ *Dot-Matrix*

The present output device called “Dot-matrix” is a printer type that uses pins impacting ink ribbon to print. The current device is cheaper, movable, and last in terms of duration, it is an IBM production. Banks, railways, courts and auto repair shops mostly use this output.

#### ✓ *Inkjet*

The present peripheral produces hard copies of document or picture by spraying droplets of ink onto sheet. This type of printer is considered as the best for home office usage.

#### ✓ *Laser*

These printers produce output at great speed and with a very high resolution of 1,200-2,400 dpi. They scan the image with a laser beam and transfer it to paper with special ink powder called toner. They are constantly still being improved. In terms of speed and image quality, laser printers are preferred by experts for various reasons; for instance, they have a wider range of scalable fonts than inkjets, can emulate different language systems, and can produce high-quality graphics; however, they are expensive for home users.

#### ✓ *Image Setter*

This type of printers produces very high-resolution output (up to 3,540 dpi) on paper or on the actual film for making the printing plates. In addition, they are extremely fast. Image setters are most often used in desktop publishing (DTP). Although they produce the highest quality output, they have one important disadvantage: they are too expensive for homes or small offices.

In modern lithographic printing, images are created on a DTP computer and then output directly to the printing plates, without requiring film as an intermediate step. This technology is called computer to plate, or CTP; and the machine used is called a plate setter.

#### • *Storage Devices*

Storage devices refer to as other hardware parts. They are peripheral needed for storing, porting and extracting information. Today's storage devices are connected to the computer by means of cables through USB ports.

Storage devices are useful to computer users for data saving, transfer and manipulation meaning that the amount of data possible to be transferred without any cost could be impossible if they were hardly printed. A tiny flash memory is able to hold information which a house cannot. In terms of quick search, though the number of books you have in the storage device, it is easy to see the needed book, you just have to type the book's title on the search menu of the computer then the book is found than searching a physical book put in a library.

As for reading aspect, you do not need much time to open three electronic readable books with your computer than physical ones in a library. It is more secure saving information in the storage device and less expensive. Magnetic, Optical and Flash memory are the focus of the present point.

#### • *Magnetic Storage*

It mentioned that Magnetic storage is one of devices used to store data, they include Hard Disk Drives, Floppy Disks and Magnetic tapes. With this category of storage only

one disk accesses at one moment while optical allows mass replication.

New disks need to be formatted before using them, unless they come preformatted from the manufacturer. When the disk is formatted, the Operating System (OS) organizes the disk surface into circular tracks and divides each track into sectors. The OS creates a directory which will record specific location of files. When you save a file, the OS moves the **read/write head** of the drive towards empty sectors, records the data and writes an entry for the directory. Later on, when you open that file, the OS looks for its entry in the directory, moves the read/write heads to the correct sector, and reads the file in the RAM (memory: read only memory) area. However, formatting erases any existing files on a disk, so do not format disks on which data that you don't want to lose is stored.

- *Optical Storage*

Optical storage also called Optical disks (drives) can store data at much higher densities than magnetic ones. They are therefore ideal for multimedia applications where images, animation and sound occupy a lot of disc space. Furthermore, optical discs are not affected by magnetic fields, meaning that they are secure and stable, and can be transported through airport metal detectors without damaging the data. However, optical drives are slower than hard drives.

- *CDs and DVDs*

The present generation of Compact Discs and Digital Versatile Discs are both similar at one sight and they are not the same in their internal structure. Laser beam is the data reader for Compact Discs and DVDs.

In terms of computer data holding capacity, DVDs have bigger space than Compact Discs as storage device. There are double-sided and dual layer DVDs. Compact Discs formats include: CD-Roms, CD-R and CD-RW while DVDs' formats are: DVD-Rom, DVD+R, DVD-RW or DVD+RW.

- *Flash Memory*

The word 'flash' means 'very quickly' and it is used in many different ways such as in Pcs, USB flash drives, new U3 smart drives and flash memory cards. This peripheral is not volatile that can erase information and rewrite them at the level of byte. Mostly used in storing and transferring data. It is connected to the computer via USB Ports. Plug and Play is the technology used by the present category of peripheral, meaning that you need one plug and automatically the device runs.

It is presented under solid state but also provides interested opportunities for computer users. Known among other Electrically erasable programmable read-only memory, whereby programming code may be written and removed using electrical. flash storage keeps data stored after the power cut, that is why it is perfect using in digital cameras, CPU, mobile phone etc.

## B. Computer Soft Portion

Soft portion is one of the two main parts of a computer but this one is considered as computer intelligence portion, sometime known as a program, which facilitates the CPU running specified instruction. In this point, we will focus on the basic software, application software and programming languages without which you cannot talk about computer software.

### ➤ *Basic Soft portion*

The above named parts of the computer Software are all considered as basic software but for Computer Scientist the word basic software refers to the Operation System OS that will be the focus of the present assertion. Let confirm that no computer can be used without the Operation System OS that to say, it plays middleware role between both computer and user.

- *GUI Operating System*

The word **user interface** refers to the standard procedures that the user follows in order to interact with a computer. In the late 1970s and early 80s, the way users accessed computer systems was very complex. They had to memorize and type many commands just to see the contents of a disk, to copy files or see the respond to a single prompt. In fact, it was only computer experts who used computers, so there was no need for a user-friendly interface.

In 1984, Apple produced the Macintosh, the first computer with a mouse and a **graphical user interface (GUI)**. Macs were designed with one clear aim: to facilitate interaction with the computer. A few years later, Microsoft launched Windows, another Operating System based on graphics and intuitive tools. Today, Computers are used by all kinds of people, and as a result, there is a growing emphasis on accessibility and user-friendly systems.

A **GUI** makes use of WIMP environment: **windows**, **icons**, **menus** and **pointer**. The background of the screen is called the **desktop**, which contains labelled pictures called **icons**. These icons represent **files** or **folders**. Double-clicking a folder opens window which contains **programs**, **documents**, or more nested folders. When you are in a folder, you can launch a program or document by double-clicking the icon or you can drag it to another location. When you run a program, your PC opens a window that lets you work with different tools. All the programs have a high level of consistency, with similar toolbars, menu bars, and buttons and dialog boxes. A modern OS also provides access to networks and allows multitasking, which means you can run several programs – and do various tasks at the same time.

### ➤ *The Most Popular Operating Systems are:*

- The **Windows** family- designed by Microsoft and used on most PCs. The most resent version is Windows 11.
- **Mac OS** – created by Apple and used on Macintosh computers.
- **Unix** – a multi-user system, found on mainframes and workstations in corporate installations.

- **Linux** – open-source basic software developed under the GNU General Public Licence. This means anybody can copy its source code, change it and distribute it. It is used in computers, appliances and small devices.
- **Windows Mobile** – used on most PDAs and smartphones (PDAs incorporating mobile phones).
- **Palm OS** – used on Palm handheld devices.
- **RIM** – used on BlackBerry communication devices. Developed by Research in Motion.
- The **Symbian OS** – used by some phone makers, including Nokia and Siemens.

These computer platforms differ in areas such as device installation, network connectivity or compatibility with application software.

#### ➤ *Computer Utilization Software*

An application program, often known as a software application or simply an app, is a type of computer program that is usually used by end users to perform a specific activity unrelated to the operation of the computer itself. Examples include word processors, media players, and accounting software. All apps are jointly referred to by the collective noun "application software". System software, which deals with computer operation, and utility software are the other two main categories of software ("utilities").

Programs can be released independently, included in bundles with the machine and its operating system, or created as open-source, proprietary, or project software. The word "app" typically describes programs for portable electronics like phones.

## II. TERMINOLOGIES

An application, also known as an application program or application software, is a computer program created to assist users in carrying out a task. An application can alter text, numbers, music, pictures, and combinations of these depending on what kind of activity it was created for. While some application packages, such as word processing programs, concentrate on a specific activity, integrated software packages comprise multiple applications.

Software that is produced by users customizes systems to match their unique requirements. Spreadsheet templates, word processor macros, scientific simulations, audio, graphics, and animation scripts are examples of user-written software. Email filters can also be classified as user software. Users frequently underestimate the significance of this program, which they themselves created.

The distinction between application software and system software, which includes operating systems, is not clear.

#### ➤ *Classification*

There are many different and alternative ways to classify application software.

From the legal point of view, application software is mainly classified with a black-box approach, about the rights of its end-users or subscribers (with eventual intermediate and tiered subscription levels).

Software applications are also classified with respect to the programming language in which the source code is written or executed, and concerning their purpose and outputs.

#### ➤ *By Property and use Rights*

Application software is usually distinguished into two main classes: closed source vs open source software applications, and free or proprietary software applications.

Proprietary software is placed under the exclusive copyright, and a software license grants limited usage rights. The open-closed principle states that software may be "open only for extension, but not for modification". Such applications can only get add-on by third parties.

Free and open-source software shall be run, distributed, sold, or extended for any purpose, and -being open- shall be modified or reversed in the same way.

#### ➤ *Through the use of Coding Languages*

An important distinction that has emerged since the creation and nearly widespread adoption of the web is that web applications, which are written in HTML, JavaScript, and other web-native technologies and usually require the user to be online and running a web browser, are distinct from more traditional native applications, which are written in whatever language is available for the user's specific computer type. Web apps have been debatably replacing native apps in the computing community for a variety of uses, particularly on mobile devices like tablets and smartphones. Web applications have grown significantly in popularity for some purposes, but given their benefits, it is unlikely that they will go away very soon, if at all. Moreover, the two can work in tandem or even complement one another.

#### ➤ *By Intent and Result*

It is also possible to think about application software as either vertical or horizontal. Because horizontal apps are general-purpose, like word processors and databases, they are more widely used and popular. Vertical applications are specialty goods made for a certain business, industry, or division within an organization. Integrated software suites aim to address every conceivable detail of, say, customer service, accounting, manufacturing, or banking personnel. There are many types of application software:

- Several programs packaged together make up an application suite. They frequently share similar features, capabilities, and user interfaces. They might even be able to communicate with one another via opening files, for example. Suites of business software, such as Microsoft Office, LibreOffice, and iWork, consist of a word processor, spreadsheet, and other tools; however, suites for other uses, such graphics or music, also exist.

- Enterprise software handles the data flows and process needs of a full enterprise, spanning multiple departments, frequently in a sizable distributed environment. Supply chain management software, data replication engines, customer relationship management (CRM) systems, and enterprise resource planning systems are a few examples. A subset of enterprise software, departmental software targets smaller businesses or divisions inside larger corporations. (Travel expenditure management and IT helpdesk are two examples.)
- Common functionalities required to support corporate software systems are provided by enterprise infrastructure software. (Servers for email, databases, and network and security management systems are a few examples.)
- Platform as a service for applications (aPaaS) is a cloud computing service that provides settings for application services development and deployment.
- Unlike corporate management, information worker software enables users to develop and manage information, frequently for specific projects inside a department. Time management, resource management, analytical, teamwork, and documentation tools are a few examples. Word processors, spreadsheets, email and blog clients, personal information systems, and individual media editors may aid multiple information worker activities.
- Although it may contain software that permits content editing, content access software is typically used to access content without modification. The demands of people and groups to consume published digital material and digital entertainment are met by such software. (Web browsers, media players, and assistance browsers are a few examples.)
- Educational software is similar to content access software, but it has features or content that have been modified specifically for use by teachers or students. It might, for instance, provide assessments (tests), monitor development through content, or include cooperative features.
- Physical or abstract systems can be simulated using simulation software for educational, training, or recreational purposes.
- Print and electronic media are produced using media production software for consumption by others, usually in a business or educational context. This covers a wide range of applications, such as digital audio and video composition, HTML editors, digital animation editors, desktop publishing tools, multimedia development software, and many more.
- Software for product engineering is utilized in the creation of hardware and software. This include application programming interfaces, computer language editing and compilation tools, integrated development environments, computer-aided design (CAD), and computer-aided engineering (CAE).
- Software for displaying movies or playing music that has been recorded, screen savers, video games, and other computer-based entertainment are all considered entertainment software.

#### ➤ *Through the Platform*

Applications can also be categorized by delivery devices, like mobile apps for mobile devices, distribution networks, like cloud computing and Web 2.0 applications, or desktop applications for certain operating systems.

When executing basic computation, measurement, rendering, and word processing functions and not being utilized for hardware control through a graphical user interface or command line interface, the operating system itself can be regarded as application software. This excludes application software that comes pre-installed on operating systems, like text editors and calculators.

#### ➤ *Database*

The collection of related data in computing is called **database**, and focuses on a service among several that a company could have. It is an information sated up to facilitate easy access, management and updating. This is one of soft portion components known to solve problems related to management. Database Management System for storing, organizing and retrieving information by means of computer. Both referred to as database covering meanings.

The database is created by linking different tables in which users put data. For example: the creation of a database for students' management, you need tables such as T-Student, T-Teacher, T-Course etc. All of them must be linked one to another. Each table must have attributes, for instance: T-Student can comprise the following attributes "MatrStudent, Name, sex, Phone and Address" these information is what you need to describe a student. In this table, MatrStudnt is refers to as Primary Key (PK). Notice that each of the above attributes should be given a 'type of data'.

There are two principal types of them: Relational and non-relational. The first type of database is structured and meets standards for reliability. MySQL, SQLServer, Ms SQL etc are examples of the type's databases.

#### ➤ *Language Used for Programming*

It is referred to as what helps computer designers writing several applications/programs without which communication between the computer and user would be impossible. The same communication with the computer then needed for controlling the computer operations' flow using instructions or commands.

Thus, programming language create job opportunities, but also is an essential skill for the present generation that goes when digital education rises. In programming, there are three kinds of programming languages: 1) computer language, 2) Assembly language, 3) advanced language. Nowadays languages that can help getting a job opportunity are: Html, Java, JavaScript and Python. Programming languages differ from one to another by their generation too. System software and application one are referred to as programs' types.

A well-organized set of instructions that, when followed, direct the computer to act in a specific way. Programs are what make computers useful.

A recipe is similar to a program. It has a list of components, or variables, and a set of instructions, or statements, that instruct the computer on how to use the variables. Text, graphical images, or numerical data can all be represented by the variables.

Programming languages are numerous; some examples are C, C++, Pascal, BASIC, FORTRAN, COBOL, and LISP. Every one of these languages is advanced. Although it is more challenging, it is also possible to develop programs in assembly languages, which are low-level languages. High-level languages are more similar to human languages, while low-level languages are more like the language spoken by a machine.

#### ➤ *Programming Language Category*

The concept programming language refers to applications that help to write other programs and low and high-level languages are the two fundamentals. The first listed category deals with machine-dependent; because they are made to be run on a precise CPU while the second one (high-level languages) concerns independent device capable to be run on computer diversities.

The above listed higher-level languages do not offer more capabilities of programming, but they do provide a more sophisticated programmer/computer interaction. In another way, the higher the level of the language, the easier it is understood and used. For example, in a fourth-generation language, you just need instructing the PC System what to do, not essentially how to do that.

#### ➤ *Computer Language Categorization*

Instructions through a computer application can be launched straight when they are in a machine language, after a substitution process when in an assembly language, or after translation from some high level language.

However, we have different varieties of computer languages available for our convenient and for better understanding; some vital programming languages can be categorized as:

- **Algorithmic language:** designed to direct mathematical or symbolic computations. They express algebraic operations in notation similar to mathematics and allow the use of subprograms. They are known as the first high-level languages, the case of FORTRAN, ALGOL, LISP, C;
- **Business oriented languages:** especially used for professional and data processing purpose. I.e.: COBOL, SQL;
- **Educational-oriented languages:** designed to be used for Educational, and teaching purpose. Example: BASIC, Pascal, LOGO, Hypertalk;

- **Object-oriented languages:** these languages facilitate being in charge of complexity in extent programs. Objects package data and operations on them so that only the operations are widely accessible and internal details of the data structure are hidden. In addition, objects may be derived from more general ones, inheriting their capabilities.
- Examples: C++, Ada, Java, Visual Basic etc.
- **Declarative languages:** Also known as, non-procedural or high level languages in which a program specifies what is to be done rather than how to do it. The two joint kinds of declarative languages are: logic and functional languages, the case of PROLOG (Programming in Logic), SQL database language, LISP, and Haskell, etc.;
- **Scripting languages:** called as little languages. They are interested in solving relatively minor software design hitches that do not involve the overhead of data declarations and other features wanted to make large programs being in charge. They are used for Operating System utilities. Ex: PERL (practical Extraction and Report Language);
- **Document editing languages:** specifies the organization of printed text and graphics. They fall into many classes: text formatting notations, description languages, and Mark-up languages. Examples: TeX, PostScript, SGML
- **World Wide Web Display Languages:** used to work with World Wide Web. Example: HTML, XML;
- **Web Scripting Languages:** Web pages marked-up with HTML or XML are largely static documents. Web scripting can add information to a page as a reader uses it or let the reader enter information that may, for example, be passed on to the department of an online business. CGI (Common Gateway Interface) provides one mechanism: it transmits requests and responses between reader's web browser and the Web server that provides the page.

#### ➤ *Some Language Characteristics*

- *Here are the Programming Language Characteristics:*
- ✓ **Read and understanding Capacity :** deals with how its reads and writes codes in a particular language;
- ✓ **Running ability:** it must function in a computer varieties;
- ✓ **Regularity:** focuses on the breadth of applicability and versatility of a language's features and constructs;
- ✓ **Shorter code:** deals with the written form;
- ✓ **Error detection:** concerns the error detection;
- ✓ **Programming cost:** talks about expenses
- ✓ **Writing rule:** the way designer write; etc.

### III. CONCLUSION

The current article on Recent Pc System and Its Functions Mastery gives the overview of how people should perceive nowadays PC System and the mastery of their functions while using the computer.

It important to understand the importance of this topic and to continue working on it in order to come up with effective solutions. It was affirmed that many of the users do not understand the way computer components are interconnected and its functions. We invite all readers to be interested with the discovered issue, learn more about it in order to reduce crashes they sometime face while using a computer.

It is noticed that many of computer learners generally focus on the use of computer without knowing that the best way of using a computer is the mastery of hierarchy of it at first. The way they are organized and they work. As a result, the more they focus on the usage, the more they will face problems. Indeed, today's computers are damaged without being totally used, because of the computer capacities ignorance.

For the provided reasons, the computer principal parts named hardware and software ought to be discussed deeply because of different essential elements that link them. As for the hard portion of the computer, it is mentioned that, physical material attached to the CPU are the most concern for the discussion. We talk about the physical part to refer to the three well-known hard portions subdivisions: the Brain, the fundamental storage unit, hardware auxiliaries. Computer users must master these portions.

As for the second part related to the software, computer users are invited considering the listed part which instructs the commands to be processed by the computer. The basic software, application software and programming languages are the more concerned to talk about. Computer users have to understand the difference between the two parts.

As expressed, both, Hardware and Software have to be illustrated in details in teaching as during the theoretical or practical sessions in order to help learners master them. Indeed, we always say, using a computer is one thing and mastering how the computer runs with other components is something else.

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