

### **Components of a Computer System**

A computer comprises of some basic elements. These include hardware, software, programmes, data and connectivity. No computer can function in the absence of these elements. Apart from these elements, a computer system comprises of three basic components. These components are responsible for making computers actually function.

*Components of a Computer System:*

Every computer system has the following three basic components:

**Input unit**

**Central processing unit**

**Output unit**

Components of a Computer System: Input Unit, Output Unit, CPU

While there are other components as well, these three are primarily responsible for making a computer function. They must work in complete synergy because that will ensure smooth overall functioning. Hence, we can even call them building blocks of a computer system.

#### **Input Unit**

These components help users enter data and commands into a computer system. Data can be in the form of numbers, words, actions, commands, etc. The main function of input devices is to direct commands and data into computers. Computers then use their CPU to process this data and produce output.

For example, a laptop's keyboard is an input unit that enters numbers and characters. Similarly, even a mouse can be an input unit for entering directions and commands. Other examples include barcode readers, Magnetic Ink Character Readers (MICR), Optical Character Readers (OCR), etc.

Another example of input devices is touch-screens. Users can simply touch these screens without using any other device to enter commands. From smartphones to ATM machines, these input devices are becoming very popular these days.

#### **Central Processing Unit (CPU)**

After receiving data and commands from users, a computer system now has to process it according to the instructions provided. Here, it has to rely on a component called the central processing unit. The CPU further uses these three elements:

a) Memory Unit

Once a user enters data using input devices, the computer system stores this data in its memory unit. This data will now remain here until other components of CPU process it. The

memory unit uses a set of pre-programmed instructions to further transmit this data to other parts of the CPU.

#### b) Arithmetic and Logic Unit

This part of the CPU performs arithmetic operations. It does basic mathematical calculations like addition, subtraction, division, multiplication, etc. Further, it can even perform logical functions like the comparison of data.

#### c) Control Unit

This unit is the backbone of computers. It is responsible for coordinating tasks between all components of a computer system. The control unit collects data from input units and sends it to processing units depending on its nature. Finally, it also further transmits processed data to output units for users.

### **Output Unit**

The third and final component of a computer system is the output unit. After processing of data, it is converted into a format which humans can understand. After conversion, the output units display this data to users. Examples of output devices include monitors, screens, printers and speakers. Thus, output units basically reproduce the data formatted by the computer for users' benefit.

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