

COMPUTERS IN OUR DAILY LIFE

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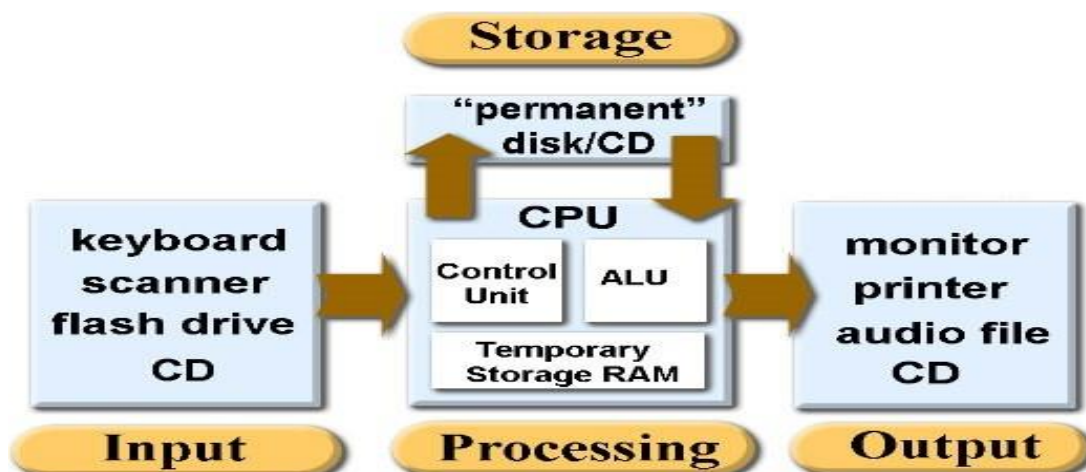
1. INTRODUCTION

The computer has brought about a quantum leap in our daily life, and dependence on computer has increased to occupy an essential position in every home and every company. All transactions in various fields have been shifted to be digitalized or to be electronic, as education depends on computers and technological development to improve its performance and results, as well as health fields and other fields. Computer has become one of the most important sources of knowledge, as the computer is connected to the Internet and browsing all sources of science and knowledge, whether written, audio or visual, and they can be downloaded onto the computer and find it at any time. The current century is the age of information revolution, as the computer has turned into a basic element of life for humans.

2. COMPUTER FUNCTIONS

The following are the four main functions that a computer performs, which constitute the reasons for the existence of this device and how it works:

- **Data Input:** It is the first function a computer performs, during which data is entered into the computer through various input devices; such as keyboard, mouse, and other input devices, and the process of entering data can be completed automatically through what is known as automating source data, through which special tools are used to collect data automatically, and then send it directly to the computer.
- **Data Processing:** It is the main function that the computer performs, during which raw data entered is processed in order to convert it into information to be used by its user, and this function is done by the central processing unit (CPU) and random access memory (RAM).
- **Data Output:** It is the process by which the processed data is extracted and converted into useful information for the user, and this information is extracted through the output devices available through the computer; such as paper printer, speaker devices, screen, and other types of output devices.
- **Data and Information Storage:** It is the fourth and final function of the computer, as data and information are processed via computer memory and saved on a storage unit known as the hard disk to be usable at any time, and such data and information can also be saved via external storage tools; such as optical disks.

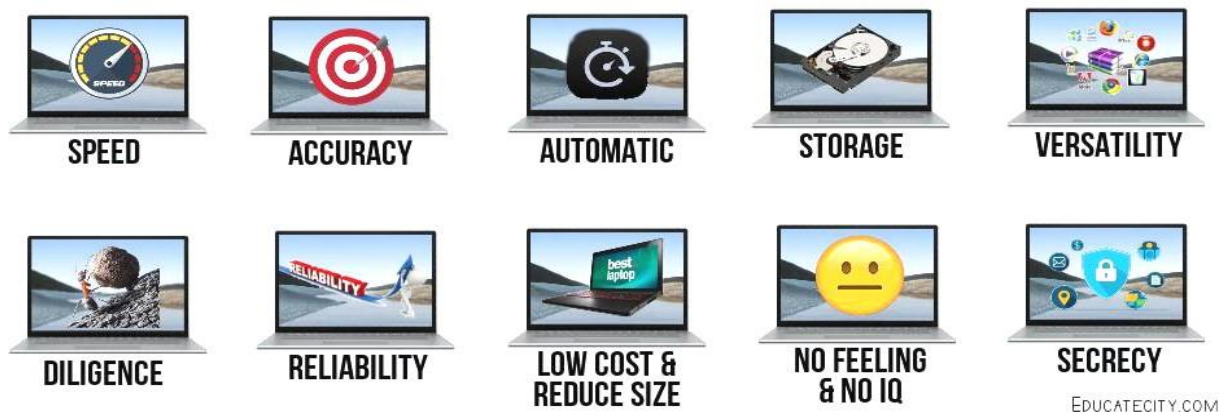


3. CHARACTERISTICS OF COMPUTER

The computer has a set of characteristics that distinguish it from other electronic devices, and these characteristics are as follows:

- Speed** : the computer is characterized by its ability to process data at a high speed, reaching the point of processing millions of commands per second.
- Accuracy** : It is considered one of the most important characteristics of a computer, as it can perform orders and instructions that come to it with a high degree of accuracy and efficiency without any error.
- Durability** : The computer is characterized by its high ability to work continuously without fatigue or change in its accuracy level.
- Storage** : The computer can store large amounts of data and information across several storage devices for retrieval when needed.
- Versatility** : The computer is used to perform different tasks almost simultaneously; for example, you can start typing via a computer word processing program and listen to music using the music players on the device simultaneously.

CHARACTERISTICS OF COMPUTER



4. TYPES & EFFICIENCY OF COMPUTERS

Computers can be classified according to their efficiency and ability to process data into five different types, as follows:

- Personal Computer**: It is a computer that contains a medium-power microprocessor present on a single chip in the device, and is used to process some simple computer applications; like word processing and playing games.
- Workstation Computer**: It is a computer that is closer to a personal device, but it is characterized by a greater ability to process advanced applications; such as Auto CAD, and other types of applications that require more processing capacity.
- Mini Computer**: It is a computer with greater processing capabilities more than its predecessors, despite its small size, and this type of device can be used by about 250 users at one time.
- Mainframe Computer**: It is a computer with very large capabilities. It can provide computer services to thousands of users at the same time, and it is possible to run many programs simultaneously so that they are processed and dealt with all at the same time.

□ **Super Computer:** It is the fastest and most powerful type of computer in the world, as it can process millions of commands per second, so these expensive devices are used in applications that require a great deal of digital analysis, such as applications of weather forecasting, scientific simulation, and nuclear energy researches.

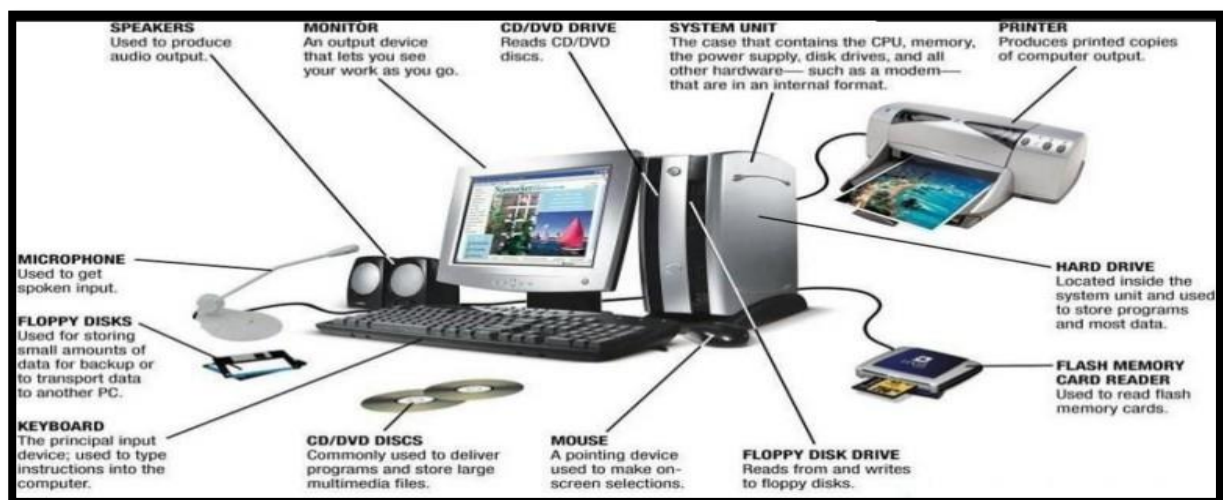
Types of Computers



5. MAIN PARTS OF COMPUTER

There are many basic components in the computer, which enables it to perform its tasks, and these parts are as follows:

- **Processor:** It is the part that receives inputs via the computer, then processes it to obtain the required output, and the processor is concerned with dealing with all instructions issued by the basic system units, and the processor in the computer is known as Central Processing Unit (CPU).
- **Memory:** It provides rapid access to data in the computer, where information is retrieved from it instead of from storage units on the device, and the computer contains different types of memory; such as read-only memory (ROM) and random access memory (RAM).
- **Motherboard:** It is the physical part through which the components of a computer are linked together.
- **Storage Device:** They are the devices responsible for storing data permanently via the computer, such as the hard disk.
- **Input Devices:** They are the devices through which the user can communicate with the computer and enter data to it.
- **Output Devices:** They are the devices through which output of processing that takes place through the device is seen, and the most famous example is the computer screen.



6. IMPORTANCE OF COMPUTERS IN OUR DAILY LIFE

Education

The computer has a great contribution in the field of education in schools and universities, as it uses hard and magnetic disks to explain lessons and deliver information to students. The student can also keep information to retrieve it at a later time. Computers equipped with the Internet provide important information and connect all students around the world. The concept of smart classes and e-books are only possible because of computers.

Medicine

The computer is used in hospitals, clinics and health centers to book appointments and make files for patients. It can also be used in surgeries, and this information is quickly retrieved, as well as preserving patient information, medications taken by the patient and the patient's health development.

Internet

The computer is used to access the Internet, and with the help of the Internet you keep in touch with your friends and family. Computers provide this easily to us, and the Internet is also used to search for information, all you have to do is type a word in the search engine and open many pages to provide all the information about the word. Also, you can watch movies, videos, and news on computers connected to the Internet.

Entertainment

The computer is also used as a means of entertainment, as it can give us a lot of options when it comes to entertainment. You can play a fun game, listen to music, watch movies and videos, or chat with your friends.

Accounts

The computer is used in calculations, data storage and analysis in banks, commercial centers and shops, and it can also be used at home to calculate the family budget.

Industry

The industry has come to rely heavily on computers, as factories have used computers to operate modern machines and equipment in order to ensure a high level of quality in production.

Transportation

The computer is used in the field of transportation, where the routes of transport lines are controlled, booking tickets for travel via the Internet, as well as booking airline tickets anywhere in the world. The computer is used to control the means of transport, determine departure times and aircraft directions, in addition to storing information for workers in transport and communications sector.

Companies and Banks

Banks use computers to maintain accounts and manage transactions and securities. Banks also provide banking services facilities, maintain records of their customers online, and also help customers check the balance of their account, and conduct financial transactions over the Internet easily and quickly. Furthermore, people also use computers to facilitate their working lives, by paying bills, managing home budgets, watching movies and listening to songs. They can also use free online applications for communication and information exchange purposes, such as: social media, Skype, and moreover. Computers can be used in every area of life, such as: medical, industrial, airline, and weather forecasting.

Life Sciences

Computers can be used in life sciences, through the use of sensors and other devices that the computer can understand. The computer has tremendous speed in analyzing complex operations, as it can perform calculations that may take many years to complete by humans, but computers get it done within a few days. There are several examples of computer uses in life sciences; including medical imaging, genomics, drug design and discovery, assistive technology, and simulation.



7. DISADVANTAGES OF COMPUTER USE

Health Damages

Sitting for long periods of time at a computer may cause wrist pain, as a result of frequent use of the mouse and keyboard. It may also lead to dryness and redness of the eyes as a result of constantly looking at the screen. You should pay attention when using the computer for long periods, take frequent breaks and move from one place to another and practicing exercises.

Learning Skills

Although the computer provides advanced educational programs, the continuous use of it affects the strength of concentration, and thus affects the ability to learn. Games and other forms of entertainment provided by the computer lead to harm the mind and distract the attention. Frequent switching between programs and games makes it difficult to concentrate. For long periods of time, this could negatively affect the students and their tracks of studies.

Addiction

Computer addiction is a common thing in recent times, which negatively affects children and adults alike. It can develop when the child is left to spend a long time in front of the computer screen. This leads the child to avoid physical activities and social interaction. While spending more time on the computer, parents have to determine a specific time to spend it on the computer, with attention to the type of games and programs that children use.

Social Isolation

A user should not rely on the computer as the only means for self-entertainment or social communication, as computers connected to the Internet consume a lot of time without the person noticing that, and this may cause some people to addiction or social isolation. Additionally, it may cause depression when the person compares himself with other persons from the photos that others post on social media.

Lack of Attention & Distraction

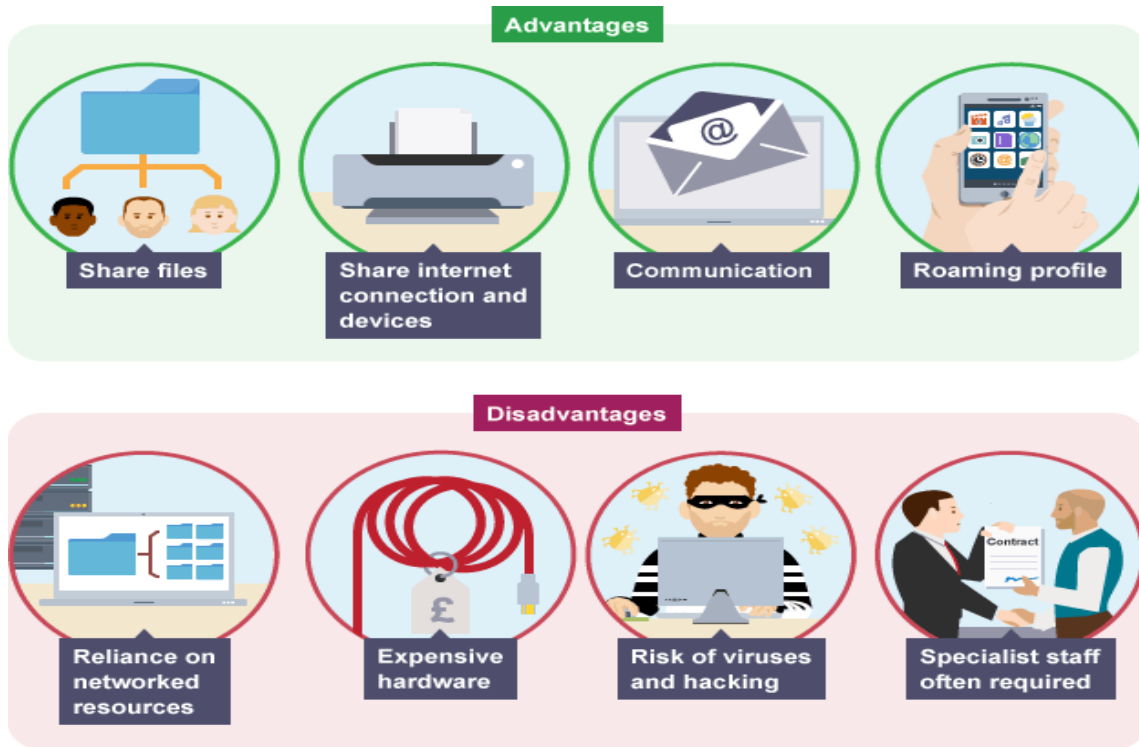
Computers connected to the Internet facilitate access to information instantly and quickly, which makes a person able to multitask, but it leads to be distracted, which leads to reduce productivity and commit more mistakes, and to feel frustrated when the inability to reach the desired results easily.

Waste of Time and Energy

There is no doubt that many people use computers without the need for a positive purpose, as many people may spend their time playing games and chatting for a long period of time, which causes a waste of time and energy, as most people now spend a lot of time on social networking sites, such as Facebook and Twitter, or in sending long text messages through smartphones, which is a bad factor for their health, and also has negative effects on social life.

Data security

Computers enable access to data stored on the computer by unauthorized persons to access this data, as it has posed many serious data security problems.



Tips to Prevent Computer Harms

- Do not continue to look at the computer screen for more than 40 minutes. It is necessary to take breaks for 5 minutes. It is preferable to take a tour on foot and wash the face with cold water.
- Continuing to blink eyes from 20 to 30 times per minute.
- Do not use glasses while using a computer without consulting a specialist, even if these glasses are used to treat some eye diseases.
- Make sure to rotate the eye in an anti-clockwise direction for 4 or 5 times after every hour of working in front of a computer screen.
- Close the eye firmly for 5 seconds, then open it as wide as possible.

8. CONCLUSION

At the end of a study on computers in our daily life, we had shown you the components of the computer, the types of computers, the importance of the computer in our daily life, the harms of using the computer as well as the most important tips to prevent such harms, and as we mentioned that the computer has become an indispensable thing, and humans depend on it to facilitate all operations and activities, and that is why the computer has become the nerve of life.

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