


Computer Basics

Computer Hardware and Software



**The danger is not that the computer once starts to think like a man ,
and that man once begins to think like a computer . Sidney George . Harris**



What is a
computer?

Beginning

History of
computers

Main
components

Science

conclusion

Beginning

- a **computer** is a general purpose device that can be programmed to carry out a set of arithmetic or logical operations automatically.

Since a sequence of operations can be readily changed, the computer can solve more than one kind of problem.



Briefly about the history of computers development

- The first mechanical computer, created by [Charles Babbage](#) in [1822](#), doesn't really resemble what most would consider a computer today. Therefore, this document has been created with a listing of each of the computer firsts, starting with the Difference Engine and leading up to the computers we use today.
- The first computer company was the **Electronic Controls Company** and was founded in [1949](#) by J. Presper Eckert and John Mauchly, the same individuals who helped create the ENIAC computer.
- The first microprocessor [Intel](#) introduces the first microprocessor, the **Intel 4004** on November 15, 1971.
- The word "computer" was first recorded as being used in [1613](#) and originally was used to describe a human who performed calculations or computations. The definition of a computer remained the same until the end of the 19th century, when the industrial revolution gave rise to machines whose primary purpose was calculating.



WHAT IS A COMPUTER?



- A computer is an electronic device that executes the instructions in a program.

A **computer** has **four** functions:

1. **accept data**
2. **processes data**
3. **produce output**
4. **stores results**

1. **input**
2. **processing**
3. **output**
4. **storage**

The information processing cycle



Some beginning terms

Hardware



the physical parts of the computer

Software



the programs (instructions) that tell the computer what to do

Data



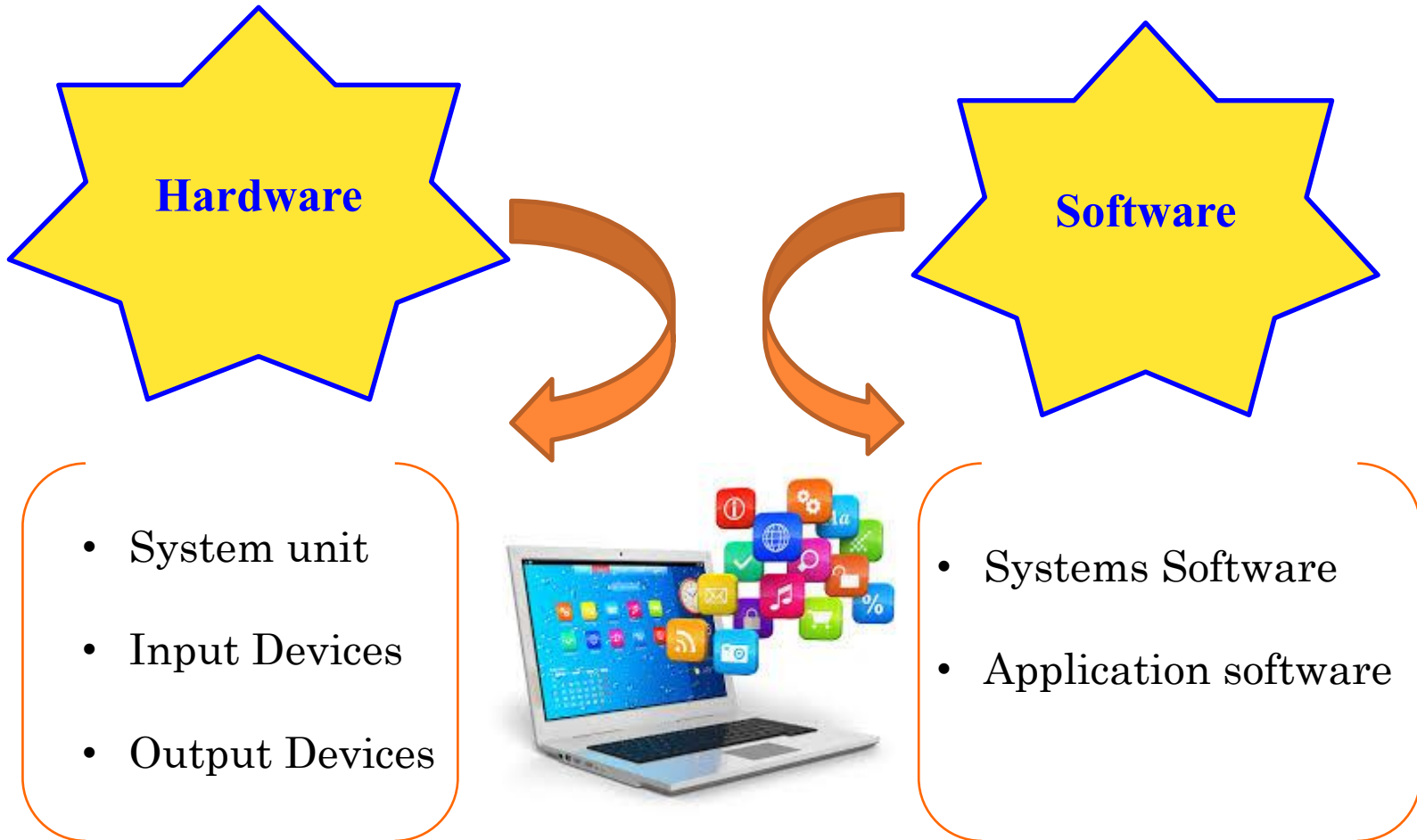
individual facts like first name, price, quantity ordered. Computers manipulate data to create information

Default



the original settings; what will happen if you don't change anything

Main components



COMPUTER HARDWARE

INPUT

“ Reads”

□ **Input device**

□ Hardware that allows data to be entered into the computer

□ **Input devices:**

keyboard

mouse

scanner

microphone

webcam

CD-ROM



COMPUTER HARDWARE OUTPUT

- **“Writes”**
- **Output** – information that is printed or displayed once it has been processed
- **Display Devices** – Monitor
- **Printer:** Inkjet, Laser, Photo, Color
- **Speaker**
- **Projector**



Input/Output: (I/O)

- **“Read or Write”**
- Disks and Disk drives
 - Internal (hard drives)
 - External (floppy, CDRW)
- Flash Memory Cards, USB Flash Drives
- Modems
- Touch Screen Monitors



COMPUTER SOFTWARE

□ **Systems Software** - Operating System

- Windows, Mac OS, Linux, Vista

□ **Application Software** – everything else

- MS Word, MS Excel, MS ACCESS
- Business Application
- Internet Browsers
- Games



MY THOUGHTS ABOUT SCIENCE



Science

- Nowadays people live in the era of progress and development that provides a wide range of opportunities for everybody. Using accumulated knowledge, people can make discoveries and inventions, which seemed incredible not long ago. To my mind, some sciences are sure to be learned. It is a well-known fact that science is an important part of many different kinds of jobs. Doctors study diseases and discover new cures and treatments. Chemists invent new medicines. Agricultural scientists help to bring fresh nutritious products to our supermarkets. These are just a few examples. You can find many more examples of science on the ground, in the skies, and in the oceans. However, scientific discoveries can also have a negative impact. Some of the latest technological advances that make our life easier or more enjoyable have proved to have unwanted and often unexpected long-term effects.

All in all, we should be very careful using new scientific discoveries and technologies not to damage the world we live in and save our planet for further generations.



INTERESTING COMPUTER FACTS:

- Over 6,000 new computer viruses are released every month.
- The first computer mouse, constructed in 1964, was made out of wood.(by Doug Engelbart)
- The average human being blinks 20 times a minute – but only times a minute when using a computer.
- The first electro-mechanical computer was developed in 1939.
- By the end of 2012 there will be 17 billion devices connected to the internet.
- Over 1 million domain names are registered every month.
- With it's 800 million internet users, Facebook would be the third largest country in the World.
- The first hard drive was created in 1979 and could hold 5MB of data.
- The NVidia GeForce 6800 Ultra video card contains 222 millior transistors.
- 20% of online viruses are released by organized crime units.



Computer in our life

Our life would be boring without computers. It's hard to believe that one device can provide people with entertainment, news, education, music. With the appearance of computer many things have lost their importance. People don't watch TV anymore, don't go to the cinema very often. They don't listen to the radio, CD- or MP3-player. They've stopped buying newspapers and magazines. Many have taken online classes. Thus, computers and Internet have become an integral part of every family. Computer is a powerful tool. It helps to create colourful presentations, to calculate large numbers, to write articles, to save and edit photos, to keep documentation and, of course, to surf the web.



How important the role of electronics in our lives?

1. a new discoveries



2. make life easier



3. New opportunities



Conclusion!

Computers have drastically changed everyone's lives. Several decades ago people haven't even known anything about these electronic devices, whereas nowadays even a small child can operate this machine. Almost all modern technology depends on computers, which are used for data storage: files, secret information, bank transactions and else. Computer technology belongs to the fastest-growing industry. After all, computers have become the most useful tool in everyone's homes nowadays and they have certainly changed our lives for the better.



**THANK YOU FOR
ATTENTION!**



**Have a nice
day!!!**