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Characteristic
of
Computers

Introduction
to Computer
Hardware and
Softwares

Fundamentals of Computer & OS Concepts

Session 1

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Brief Definition and History of Computers



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Definition

What is a Computer: is programmable electronic device that accepts raw data as input and processes it with a set of instructions (a program) to produce the result as output. It was derived from the Latin word which means, "Compute" - which means to calculate.

History of Computers.

Generally speaking, computers can be classified into three generations

1st generation : 1937 – 1946

- Development of the ABC Computer by Developed Dr. John V. Atanasoff and Clifford Berry
- 1943 Computer name the Colossus was built for the military
- 1946 Electronic Numerical Integrator and Computer (ENIAC) was built

1st generation :

First generation: 1937 – 1946. Developed Dr. John V. Atanasoff and Clifford Berry and was called called the Atanasoff-Berry Computer (ABC). In 1943 an electronic computer name the Colossus was built for the military. Other developments continued until in 1946 the first general– purpose digital computer, the Electronic



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Characteristics of Computer



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Computers come in different size and shape but how do we classify them between each other?

- Speed



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Computers come in different size and shape but how do we classify them between each other?

- Speed
- Accuracy



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Computers come in different size and shape but how do we classify them between each other?

- Speed
- Accuracy
- Storage capability



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Computers come in different size and shape but how do we classify them between each other?

- Speed
- Accuracy
- Storage capability
- Versatility



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Computers come in different size and shape but how do we classify them between each other?

- Speed
- Accuracy
- Storage capability
- Versatility
- Diligence



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Computers come in different size and shape but how do we classify them between each other?

- Speed
- Accuracy
- Storage capability
- Versatility
- Diligence
- Reliability



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Computers come in different size and shape but how do we classify them between each other?

- Speed
- Accuracy
- Storage capability
- Versatility
- Diligence
- Reliability
- Resource sharing



Types of Computers



Micro
Computer



Mini
Computer



Mainframe
Computer



Super
Computer

Size and Speed





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Brief History of Computers



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The computer as we know it today had its beginning with a 19th century English mathematics professor name Charles Babbage. He designed the Analytical Engine and it was this design that the basic framework of the computers of today are based on.

Generally speaking, computers can be classified into three generations. Each generation lasted for a certain period of time, and each gave us either a new and improved computer or an improvement to the existing computer.

First generation: 1937 – 1946 - In 1937 the first electronic digital computer was built by Dr. John V. Atanasoff and Clifford Berry. It was called the Atanasoff-Berry Computer (ABC). In 1943 an electronic computer name the Colossus was built for the military. Other developments continued until in 1946 the first general– purpose digital computer, the Electronic Numerical Integrator and Computer (ENIAC) was built. It is said that this computer weighed 30 tons, and had 18,000 vacuum tubes which was used for processing. When this computer was turned on for the first time lights dim in sections of Philadelphia. Computers of this generation could only perform single task, and they had no operating system.

Second generation: 1947 – 1962 - This generation of computers used transistors