

## Software

The Set of Instructions that tell the hardware what to do.

Developed by developers through the process of programming.

### Types of Software

Software can be divided into two categories:

- Operating Systems
- Application Software

### Operating Systems

An Operating System (OS) is first loaded into the computer by the boot program.

- Provides a platform for software developers to develop applications
- Manages all the programs in the computer
- Manages the hardware resources of the computer
- Provides the user-interface components

Microsoft

- First operating system for the IBM-PC (MS-DOS) - 1981
- Windows - 1985

Apple

- Macintosh (Mac OS) - 1984
- OS versions named after mountains (El Capitan, Sierra, High Sierra)

Linux

- Open Source
- UNIX offshoot with UNIX utilities provided by the GNU project

### Application Software

Software utilized to accomplish a specific goal, such as word processing, calculations, surfing the net.

### The “Killer” App

A software that becomes so essential that large number of people will buy a device just to run that application.

### Productivity Software

Standard tools for the workplace. They allow employees to complete their daily work efficiently.

### Utility Software

Programs that allow you to fix or modify your computer in some way. .e.g anti viruses. Created to fill shortcomings in an OS.

### Programming Software

Programs that allow you to produce software. Provide developers with an environment in which can write, test, and compile code, typically called an Integrated Development Environment (IDE).

## Mobile Applications

Software designed to run specifically on a mobile device

## Cloud Computing

Allows users to access software and data storage services on the Internet

The cloud refers to applications, services and data storage located on the Internet. Cloud Service Providers rely on giant server farms and massive storage devices that are connected via the Internet.

### Advantages

- No installation of maintenance
- Available from any computer with internet access
- Can scale easily
- New applications can be up and running quickly
- Services can be leased on an as-needed basis
- Not limited by availability of memory or disk space
- No loss of information if a disk crashes or laptop is lost or stolen

### Disadvantages

- Your info is stored on someone else’s computer
- Internet access is required
- Third-Party service providers

### **Private Cloud**

A section of web server space is given to a specific or

### **Virtualisation**

The process of using software to simulate a computer or some other device.

Virtual computers are referred to as Virtual Machines (VMs). Ergs implement virtual machines to reduce the number of physical servers needed to provide necessary services to users.

### **Software Creation**

Modern software applications are written using a programming language.

Programming Language

A set of commands and syntax that can be organized logically to execute specific functions.

### **Open-Source Software**

Software where the source code is available for any one to copy, alter to their needs and use.