

# MODULE: 1 [SOFTWARE]

## **B1: what is software?**

--> Software: s/w is the language of computer.

- is a collection of computer programs and related data that provide the instructions for telling a computer what to do and how to do it.

- Just like human language.

- 3 main groups depending on their use and application.

1) System software / operating system.

2) Application s/w

3) Programming language...

## **B2: types of software?**

### **--> 1) System s/w or OS:**

- provides the basic functions for computer usage and helps to run the computer hardware and system.

- is the s/w used by the computer to translate inputs from various sources into a language which a machine can understand.

- Basically OS coordinates the different hardware components of a computer.

- Ex. Linux, window, macOS, Android, iOS

### **--> 2) Application s/w:**

- is the general designation of computer programs for performing user tasks.

- Types of application s/w

-> 1) Mobile app:

- Application that run on mobile

- Ex. Instagram, facebook, etc

-> 2) Desktop app:

- That run stand-alone in a desktop or laptop computer.
- Ex. Microsoft office suite which includes Word, Excel and PowerPoint.
- Ex. Outlook for email, and firefox, Google Chrome, Mozilla are the web browser.
- Anti-virus is an application and so is the media player.

-> 3) Web app:

- That run on a web browser
- ex. google.com, facebook.com, etc

--> 3) **Programming s/w:**

- is the process of designing, writing, testing, debugging, and maintaining the source code of computer programs.
- This s/w is pawritten in a programming language.
- The purpose of programming is to create a program that exhibits a certain desired behavior.
- Ex. c++, html, java, Simlab, php, Python and Visual basic.

**B3: what is software methodology?**

--> Software development methodology is a process or series of processes used in software development. Again, quite broad but that it is things like a design phase, a development phase. It is ways of thinking about things like waterfall being a non iterative kind of process. Generally it takes the form of defined phases.

**B4: what is design pattern?**

-->A design pattern is the re-usable form of a solution to a design problem. The idea was introduced by the architect Christopher Alexander and has been adapted for various other disciplines, particularly software engineering.