

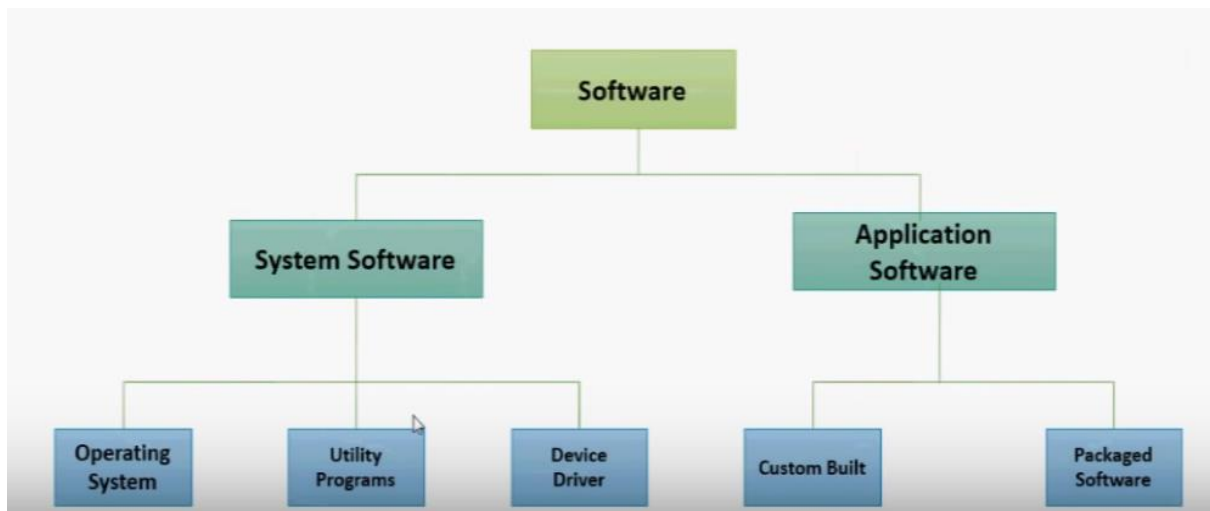
Chapter Three

Graphical User Interfaces

A Graphical User Interface, or GUI, makes computers easier to operate by using pictures and icons to represent files and programs.

Software: is a set of instruction, computer programs and procedures that help the computer in carrying out their processing .software is untouchable component of the computer. Software cannot be executed without hardware.

Types of computer software



1- System Software: It is used to control the usage and all location of different hardware components, it also enables the other application programs to execute and this software is developed to control the hardware components. We can divide **System Software** to:

a- Operating system: An operating system is a group of programs that manage all activities on the computer. When you turn on a computer, the operating system programs run and check to be sure all the parts of the computer are functioning properly. There are many different operating systems. Each do the same thing: they control all input, processing and output. There are a number of operating systems such as MS-DOS and Microsoft Windows XP.

b- Utility program: is a type of system software that is used management of computer system.

c- Device driver: a device driver or hardware driver is a group of files that enable one or more hardware devices to communicate with the computer's operating

system. Without drivers, the computer would not be able to send and receive data correctly to hardware devices, such as a printer.

2- **Application Software**: We can divide Application Software to:

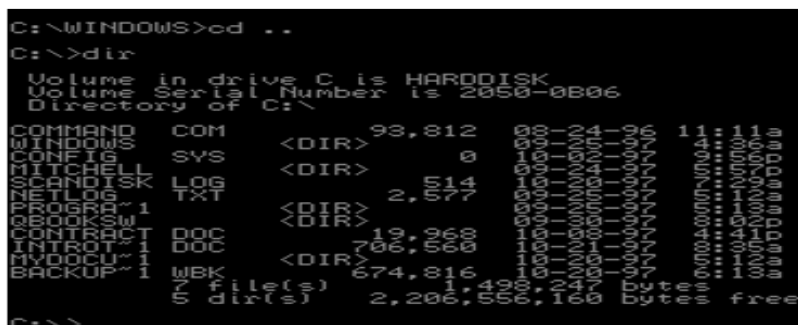
a- **Packaged Software**: Packaged software is a collection of programs that perform similar functions or have similar features. For example, Microsoft Office includes multiple applications such as Excel, Word, and PowerPoint.

b- **Custom – built software**: custom software development is the designing of software applications for a specific user or group of users within an organization. Typically used for specific applications

Types of Operating Systems

1- **MS-DOS(1980)**: MS-DOS stands for Microsoft Disk Operating System. MS-DOS was one of the first operating systems for the personal computer.

DOS Desktop



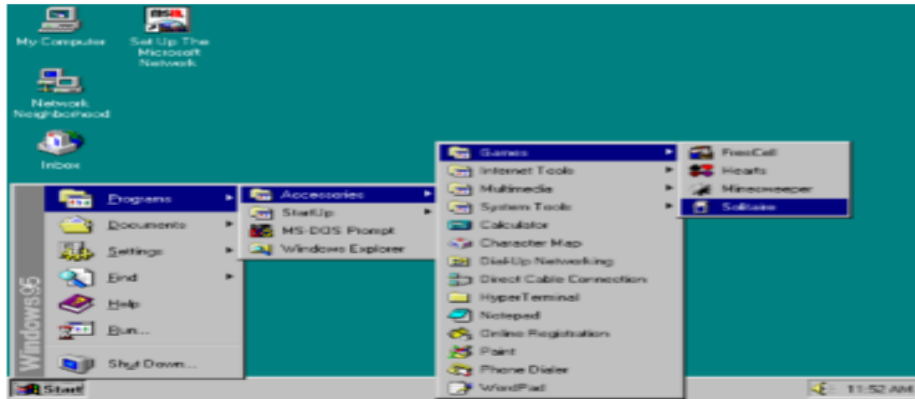
```
C:\WINDOWS>cd ..
C:\>dir
Volume in drive C is HARDDISK
Volume Serial Number is 2050-0B06
Directory of C:\

COMMAND  COM      <DIR>  93,812      0
CONFIG   SYS      <DIR>      0
FITCHELL <DIR>      0
LOG      TXT      <DIR>    2,008      14
WBK      <DIR>      0
DOC      <DIR>    109,000      0
DOC      <DIR>    674,816      0
file(s)  5
dir(s)   2,206,556
```

2- **Windows** : Windows is an operating system from Microsoft, is a **GUI** (graphical user interface) operating system. This type easy to use pictures instead of MS-DOS commands and have **WIMP** features:

- **W**indows
- **I**cons
- **M**enus
- **P**ointing device (mouse)

Windows Desktop



The operation environment was introduced by Microsoft in the early 1980's, and has advanced with the following versions

1-Windows 3.1(1992):

2- Windows 95 1995

3-Windows 98 1998

4-Windows 2000

5-Windows Millennium

6-Windows XP

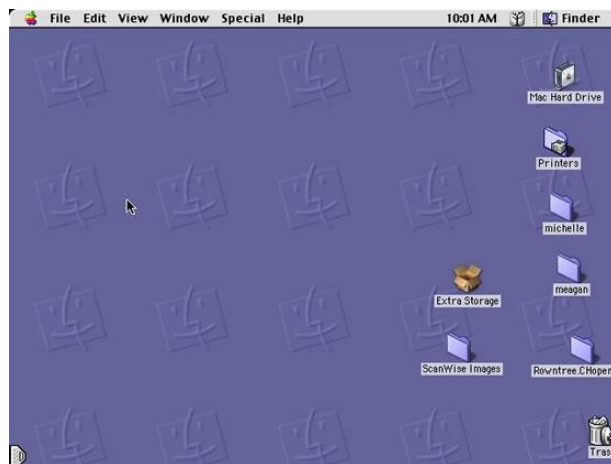
7-Windows Vista

8-Windows 7

9-Windows 10

3-MacOS - Macintosh, a product of Apple, has its own operating system with a GUI and WIMP features.

Mac Desktop



4-Unix - Linux (the PC version of Unix) - Unix and Linux were originally created with a command-line interface, but recently have added GUI enhancements.

Linux Desktop



what an operating system does

1- **Controls Computer's hardware:** Windows controls the different devices of your computer system. It's what makes printer print, what makes graphics and text appear on monitor, and what makes mouse point and click.

2- **Runs Computer's Programs:** An operating system is what runs all programs. Without an operating system, word processor, Web browser (Internet), and games wouldn't work. An operating system lets programs talk to hardware, so, for example, your word processor can print things to the printer.

3- Organizes Files An operating system stores information in files and folders on computer's local disk, just like you store files and folders in a filing cabinet.