



Lecture title: Operating system

Lecturer Affiliation: *Iman Thannoon Sedeeq, BSc, MSc, PhD*
Assistant Professor, Department of Public Health
College of Veterinary Medicine, University of Mosul, Mosul, Iraq
<https://orcid.org/0000-0001-5903-3593>

Summary:

Operating system

It is a system program that controls, coordinates and manipulates overall desktop publishing operations.

It serves as an interface between the hardware and other software on the computer system.

Examples are:

1. Microsoft Windows 98/2000/Me/2003/Vista/xp/10
2. UNIX
3. Linux
4. MacOS, Apple iOS
5. Android OS

Operating system functions

1. Memory Management

It is also an important function of operating system. The memory cannot be managed without operating system. Different programs and data execute in memory at one time. if there is no operating system, the programs may mix with each other. The system will not work properly.

2. Disk Management

Operating system manages the disk space. It manages the stored files

and folders in a proper way.



3. Resources Management

It controls other computer resources like files and programs, input/output devices, computer memories etc. during data processing operations.

4. It also performs the hardware and software diagnosis to detect faults and errors.

5. **Data security:** Data is an important part of computer system. The operating system protects the data stored on computer from illegal use, modification or deletion.

MS-DOS and Windows

- One of the early operating system is MS-DOS Microsoft Disc Operating System.

- It used command line interface (CLI) in other words the keyboard for input.
- Modern OS's use a mouse for input with a graphical user interface (GUI) such as Windows operating system.
- Microsoft Windows family of operating systems originated as a graphical layer on top of the older MS- DOS environment for the IBM PC.

A directory vs A file

- A directory (folder) is used to store documents. It can be empty or contains files and sometimes subdirectories (subfolders).
- A file is a common storage unit.

Some Ms-DOS Commands

Commands for Directories:

- dir : list the contents of the current directory (the files and subdirectories).
- cd : change a directory
- md : make a directory
- rd : remove a directory



Commands for files:

- delete – delete a file
- copy – copy a file
- ren – rename a file

Comparison of Ms-DOS and Windows

- DOS can do only a single task whereas WINDOW is multitasking.
- DOS consist of (CLI) COMMAND LINE INTERFACE on the other hand window consist of (GUI) GRAPHICAL USER INTERFACE.
- DOS is not time sharing but WINDOW can share time.
- DOS consists of INPUT DEVICE KEYBOARD whereas WINDOW consists of STANDARD INPUT DEVICES.
- DOS is totally based on text in WINDOW by one click on an icon command can be given.
- In case of networking DOS is not supportive whereas WINDOW is supporting networking.
- In DOS there is need to remember all the commands. In WINDOWS all command is easily available or given at that time.
- In WINDOW multiple windows can open at a time but in DOS we can open only a single window at a time.

University of Mosul
Lecture No.: 5
College of Veterinary Medicine
Date: 2024- 2025
Unit of Scientific Affairs
Website: : <https://uomosul.edu.iq/veterinarymedicine/>

