

OPERATING SYSTEM 1

Lecture 1

Eng. Joud Khattab

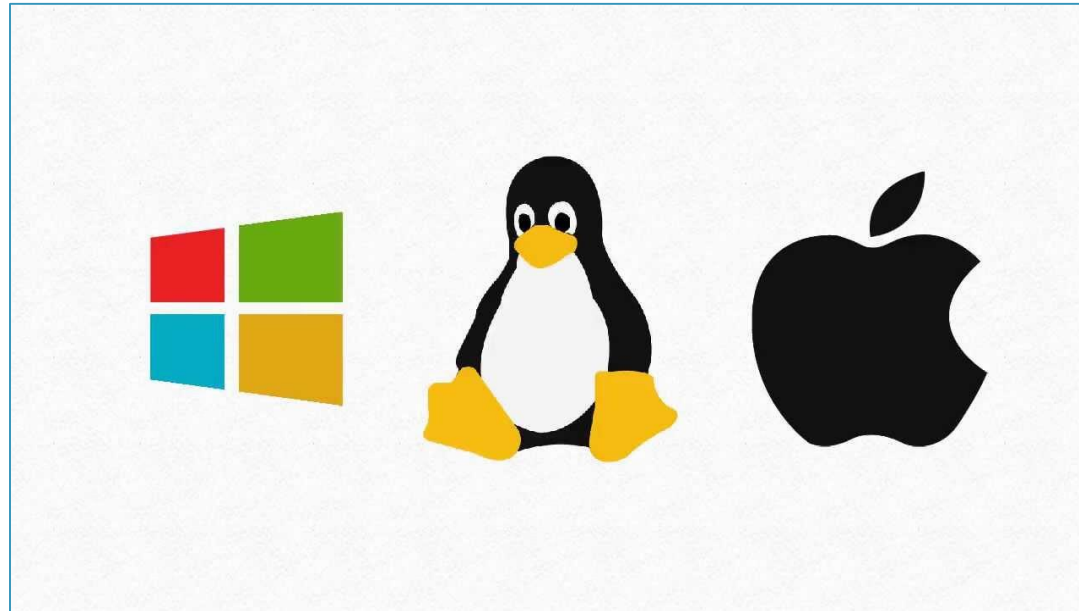
Course Overview

1. Introduction to Linux.
2. Directory Management.
3. File Management.
4. File Permissions.
5. Pipes.
6. Process Management.
7. Shell Script.
8. Remote Connection .

INTRO TO LINUX

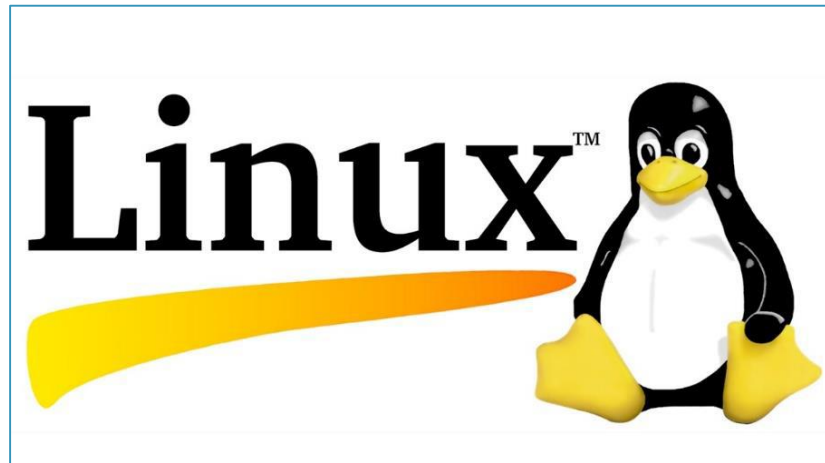
Definitions

- What is Operating System?
 - The Operating System is a software layer between hardware and software, it is what allow the software to talk to the hardware, to save a file to HDD, to print a file, etc.



What is Linux?

- Linux is an Operating System.
 - Developed by Linus Torvalds in 1991
 - Free
 - Open source.
 - Unix based.
 - Android core.



Linux Architecture

- Files and Directories:
 - All the data of Unix is organized into files.
 - All files are then organized into directories.
 - These directories are further organized into a tree-like structure called the filesystem.

Why to use Linux?

- Linux is widely used for server functionality:
 - Web Server.
 - Database Server.
 - Virtualization Server.
 - Mail Server.
 - File Sharing Server, etc.
- And used for embedded systems, routers and mobile phones.

Linux Distribution

- Because Linux is open source, overtime & over world a lot of Linux distribution have been released, each distribution was build to make things in a certain way.
- Most famous distributions:
 - **Ubuntu**
 - Kali
 - BackTrack
 - Red Hat
 - CentOS
 - Fedora



Windows VS Linux

	Windows	Linux
Price	Paid	Free
Source code	Closed source	Open source
Stability	Weak because of problems	Stable
Hardware	High hardware features	Simple hardware features
Easy to use	Easier	More difficult
Support	More	Less
Programs	More	Less
GUI	=	=
Control	Less	More
Drivers	More	Less