

# Lecture 2 Introduction to Linux Notes

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## What is an Operating System?

An Operating System (OS) is system software that acts as an intermediary between computer hardware and the user. It manages hardware resources and provides essential services that allow applications and users to interact with the system efficiently and safely.

## What is a kernel?

Kernel is like the brains of the computer.

## Which other parts aside from the kernel identify an OS?

Other parts include System Library, system utilities, User Interface(UI), Device Drivers, Systems Daemons, and File systems.

## What is linux and linux distribution?

Linux is a kernel based off the open source version of UNIX. And linux distribution is a complete operating system built around the linux kernel.

## List at least 4 linux characteristics:

-Open Source -Multiuser System -Multitasking -Security and stability

## What is Debian?

Debian is the oldest and one of the most influential Linux distribution. It was built around 1993.

## List and define the different types of licensing agreements

-Proprietary License: Owned by a company, and can't be modified -Freeware: Means free to use, but not necessarily open source -Shareware: Means you get a limited time trial before it ends -Public Domain: The creator has given up all the rights

## What is Free Software? Define the 4 freedoms.

Free Software stems from the idea that the user should control the software, not the other way around. You should have the freedom to run the program, the freedom to see how the code works, the freedom to redistribute copies, and the freedom to distribute modified versions.

## What is virtualization?

Virtualization is simply running a program within a program. Or a computer within a computer.