

# Notes 2

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## What is an Operating System?

An operating system provides all fundamental software features of a computer

## What is a kernel?

A software component that's responsible for managing low-level features of the computer

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

system libraries, utilities, user interface, file system, device drivers, process and memory management, and security features.

## What is Linux and Linux distribution?

Linux is an open-source operating system kernel that manages hardware and system resources, serving as the core of many operating systems. A Linux distribution (or distro) is a complete operating system built around the Linux kernel, combined with system tools, libraries, a user interface, and applications—examples include Ubuntu, Fedora, and Debian.

## List at least 4 Linux characteristics:

Open source software, free of charge, Unix tools, and server applications

## What is Debian?

Is an all-volunteer organization dedicated to developing free software and promoting it

## List and define the different types of licensing agreements

- Open source-The software may be distributed for a fee or free
- Closed source- the software is not distributed with the source code
- freeware- The software is free but the source code is not available
- Shareware-software is free on trial basis
- Free software- software is distributed with source code

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

Free Software refers to software that grants users the four freedoms: to run, study, modify, and share the program, allowing full control over its use and distribution.

## What is virtualization?

creating virtual versions of something