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# Week Report 3

# Summary of presentations

Introduction to Linux

# what is an operating system?

An operating system provides all fundamental software features of a computer. An OS enables you to use the computer's hardware providing you the basic tools that make the computer useful. All of those features relay on the OS's kernel. Other OS features are owed to additional programs that run atop the kernel.

Aside from a kernel, what other parts make an operating system? System hardware, memory allocation, cpu time, and program to program interaction What is a Linux distribution?

A Linux distribution (often abbreviated as distro) is an operating system made from a software collection that includes the Linux kernel, and often a package management system.

#### What is Ubuntu?

Ubuntu is a Linux distro based on Debian. It is suitable for cloud computing, servers, desktops, and internet of things (IoT) devices.

#### Define the following terms: Open Source, Closed source, free software

With closed source software (also known as proprietary software), the public is not given access to the source code, so they can't see or modify it in any way. But with open source software, the source code is publicly available to anyone who wants it, and programmers can read or change that code if they desire.

#### What are the 4 freedoms defined by the free software foundation?

"Free software" means software that respects users' freedom and community. Roughly, it means that the users have the freedom to run, copy, distribute, study, change and improve the software.

The basics of Virtualization

# What is virtualization?

Virtualization is technology that you can use to create virtual representations of servers, storage, networks, and other physical machines.

**List 3 benefits of virtualization** Reduced upfront hardware and continuing operating costs. Minimized or eliminated downtime. Increased IT productivity and responsiveness.

What is a hypervisor? a program used to run and manage one or more virtual machines on a computer.

**What is virtualbox** VirtualBox is a powerful x86 and AMD64/Intel64 virtualization product for enterprise as well as home use.

# **Exploring Desktop Environments**

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#### What is a desktop environment? (Provide 3 examples)

A desktop environment bundles together a variety of components to provide common graphical user interface elements such as icons, toolbars, wallpapers, and desktop widgets. Additionally, most desktop environments include a set of integrated applications and utilities.

#### List 4 common elements of desktop environments

A desktop environment typically consists of icons, windows, toolbars, folders, wallpapers and desktop widgets.

#### What is Ubuntu's default desktop environments?

OS and Ubuntu both include the GNOME desktop environment by default. A desktop environment is responsible for the look and feel of the graphical desktop, and includes many of the key programs that get used every day.

#### What are the official flavors of Ubuntu?

Official Ubuntu flavors are Ubuntu GNOME, Kubuntu, Lubuntu, Ubuntu Budgie, Ubuntu Kylin, Ubuntu MATE, Ubuntu Studio, Xubuntu, Edubuntu, and Mythbuntu.

What is a Shell?

**What is Bash?** It can be your desktop, your word processor, your graphics editing application, and much, much more.

# How do you access the Linux CLI?

If you can't find a launcher, or if you just want a faster way to bring up the terminal, most Linux systems use the same default keyboard shortcut to start it: Ctrl-Alt-T.

**What is a console terminal?** — A terminal is a wrapper program that runs a shell and allows us to enter commands.

**What is a terminal emulator?** A terminal emulator, or terminal application, is a computer program that emulates a video terminal within some other display architecture.

# Provide 3 examples of Linux commands

sudo,man,pwd.

Managing Software

#### Which command is used for updating ubuntu

In the terminal, enter "sudo -get update;" in the command line, enter in your admin password, and press the Enter key.

Which command is used for installing software. Provide an example. sudo apt install (package name)

Which command is used for removing software. Provide an example.

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sudo apt-get --purge remove (program) into Terminal.

Which command is used for searching for software. Provide an example. sudo apt search "program".

# Definition of the following terms:

**Package** Archives that contain binaries of software, configuration files, and information about dependencies.

**Library** Reusable code that can be used by more than one function or program.

**Repository** A large collection of software available for download.