

# Week Report 3

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## Summary of presentations:

### Introduction to Linux

**What is an operating system?** An operating system provides all fundamentals software of a computer, enabling you to use the computer's hardware.

**Aside from a kernel, what other parts make an operating system?** Aside from a kernel there is another part of an operating system, known as the shell, that allows a user to manage and command to the computer.

**What is a Linux distribution?** Linux distribution is a Linux operating system such as Ubuntu, Redhat, etc.

**What is Ubuntu?** Ubuntu is a Linux distribution, freely available with both community and professional support.

**Define the following terms: Open Source, Closed source, free software** Open source is a software that could be distributed for a fee or free. Closed source is a software that is not distributed with the source code, restricting the user from modifying the code. Free software is free software but the source code is not available

**What are the 4 freedoms defined by the free software foundation?** Freedom 0: use the software for any purpose Freedom 1: examine the source code and modify it as you see fit Freedom 2: redistribute the software Freedom 3: redistribute your modified software

### The Basics of Virtualization

**What is virtualization?** Virtualization is defined as creating virtual versions of something.

#### List 3 benefits of virtualization

1. Allows applications to be tested before installing them on a host machine
2. Reduces costs by decreasing the physical hardware that must be purchased for a network
3. Allows running multiple OSs on one machine without dual booting

**What is a hypervisor?** A hypervisor is a software or hardware in charge of creating, managing, and running virtual machines.

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

### Exploring Desktop Environments

**What is a desktop environment? (Provide 3 examples)** A desktop environment is an implementation of the desktop metaphor made of a bundle of programs running on top of a computer operating system.

1. Menus
2. Launcher

### 3. Panels

#### List 4 common elements of desktop environments

1. Desktop Settings
2. Display Manager
3. File Manager
4. Icons

**What is Ubuntu's default desktop environments?** Ubuntu's default desktop environment is GNOME 3.

**What are the official flavors of Ubuntu?** The official flavors of Ubuntu is Kubuntu, Xubuntu, Lubuntu, Ubuntu Budgie, and Ubuntu MATE.

What is a Shell?

**What is Bash?** Bash is a program that provides interactive access to the Linux system.

**How do you access the Linux CLI?** You can access the Linux CLI through Terminal Emulator and Linux Console.

**What is a console terminal?** A console terminal is a means of interacting with a computer program where the user issues commands to the program in the form of successive lines of text.

**What is a terminal emulator?** A terminal emulator is a program that allows you to access the Linux CLI.

**Provide 3 examples of Linux commands** date - displays the current time and date clear- clears the screen free - displays the amount of free memory

#### Managing Software

**Which command is used for updating ubuntu** `sudo apt update; sudo apt upgrade -y`

**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.** `sudo apt remove firefox -y`

**Which command is used for searching for software. Provide an example.** `apt search "web browser"`

**Definition of the following terms:** Package: archives that contain binaries of software, configurations 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