

# Week Report 3

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## Summary of Presentations

### Introduction to Linux

**What is an operating system?** An operating system provides all fundamental software features of a computer. **Aside from a kernel, what other parts make an operating system?** Applications, Hardware, Graphical Desktop Environment, Shells, Daemons, and Hardware. **What is a Linux distribution?** An OS that uses the Linux Kernel, it includes software, tools, scripts, and an installer. **What is Ubuntu?** It is a Linux distribution that is free for community and professional users. **Define the following terms: Open Source, Closed source, free software** Open Source: free or premium software that includes a source code. Closed Source: software not distributed with a source code. Free Software: software distributed with the source code and is completely free. **What are the 4 freedoms defined by the free software foundation?** Freedom 1: use the software for any purpose. Freedom 2: examine the source code and modify it as you wish. Freedom 3: Redistribute the software Freedom 4: Redistribute modified software

### The Basics of Virtualization

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

**List 3 benefits of virtualization** Allows running multiple OSs on one machine without dual booting. Allows applications to be tested before installing them on a host machine. Reduces costs by decreasing the physical hardware that must be purchased for a network. **What is a hypervisor?** Software/Hardware in charge of creating, managing, and running virtual machines.

**What is virtualbox** 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 typically consists of icons, windows, toolbars, folders, wallpapers and desktop widgets. Examples: GNOME, KDE, XFCE

**List 4 common elements of desktop environments** Display Manager File Manager Icons Favorites Bar

**What is Ubuntu's default desktop environments?** GNOME **What are the official flavors of Ubuntu?** GNOME, Xfce, KDE, LXDE, MATE

### What is a Shell?

**What is Bash?** A program that provides interactive access to the Linux system. **How do you access the Linux CLI?** You open a terminal emulator. **What is a console terminal?** The terminal is a device that gives you access to the console of your computer. **What is a terminal emulator?** A program that lets you access the Linux CLI if you have a GUI installed. **Provide 3 examples of Linux commands** cal install purge

### Managing Software

**Which command is used for updating ubuntu** the apt command **Which command is used for installing software. Provide an example.** the install command. Ex: sudo apt install dragonplayer **Which command is used for removing software. Provide an example.** the purge command Ex: sudo purge juk **Which command is used for searching for software. Provide an example.** the search command Ex: apt search tetris **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.