

# Week Report 3

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## Summary of Presentations

### Introduction to Linux

**What is an operating system?** The software that supports a computer's basic functions, such as scheduling tasks, executing applications, and controlling peripherals. **Aside from a kernel, what other parts make an operating system?** device drivers, system libraries, and utilities. **What is a Linux distribution?** An operating system that uses the Linux Kernel **What is Ubuntu?** The open source operating system on Linux **Define the following terms: Open Source, Closed source, free software** Open Source - any program whose source code is made available for use or modification as users or other developers see fit Closed Source - intellectual property, esp computer source code, that is not made available to the general public by its creators. Free Software - software that is typically proprietary and is offered at no cost to users. Its legal use is dictated by the license under which a piece of freeware is released. **What are the 4 freedoms defined by the free software foundation?** to run, copy, distribute, study, change and improve the software.

### The basics of Virtualization

**What is virtualization?** the hardware resources of a single computer to be divided into multiple virtual computers, called virtual machines (VMs). **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

**What is a desktop environment? (Provide 3 examples)** Gnome, KDE, XFCE **List 4 common elements of desktop environments** icons, toolbars, wallpapers, and desktop widgets **What is Ubuntu's default desktop environments?** Ubuntu's GNOME desktop environment is the default **What are the official flavors of Ubuntu?** Ubuntu GNOME, Kubuntu, Lubuntu, Ubuntu Budgie, Ubuntu Kylin, Ubuntu MATE, Ubuntu Studio, Xubuntu, Edubuntu, and Mythbuntu

### What is a Shell?

**What is Bash?** to automate software development tasks such as code compilation, debugging source code, change management and software testing. **How do you access the Linux CLI?** CTRL-Alt-T **What is a console terminal?** a wrapper program that runs a shell and allows us to enter commands **What is a terminal emulator?** a computer program that emulates a video terminal within some other display architecture **Provide 3 examples of Linux commands** pwd, cat, cp

### Managing Software

**Which command is used for updating ubuntu** sudo apt-get update **Which command is used for installing software. Provide an example.** sudo apt-get install vim installs a package/software to use on Linux **Which**

**command is used for removing software. Provide an example.** `sudo apt-get remove vim` deletes a package/software on Linux **Which command is used for searching for software. Provide an example** `find /path -type f -iname vim` finds the directory that vim is installed on

## Definitions

**Package** - a compressed software archive file containing all the files included with a software application that provides any functionality. **Library** - collections of data and functions written to be reused by other programmers or programs **Repository** - a storage location that contains essential and popular software for different Linux distributions