

Week Report 3

Summary of Presentation

Introduction to Linux

What is an operating system? A software that manages computer hardware and provides common services for computer programs.

Aside from a kernel, what other parts make an operating system? Besides the kernel, an operating system typically consists of system libraries, system utilities, and user interfaces.

What is a Linux distribution? An operating system made up of the Linux kernel, system libraries, and various software applications.

What is Ubuntu? Ubuntu is a popular Linux distribution that is based on Debian and designed to be user-friendly.

Define the following terms: Open Source - Software that allows the source code to be freely available for anyone to view, modify, and distribute. **Closed source** - Software that does not allow the source code to be viewed or modified. **Free software** - Software that can be used, copied, modified, and distributed freely, with or without payment.

What are the 4 freedoms defined by the free software foundation? The freedom to run the software for any purpose, to study and modify the software, to redistribute copies, and to distribute modified versions.

The Basics of Virtualization

What is virtualization? The process of creating a virtual version of a computer system, including the hardware, operating system, and software applications.

List 3 benefits of virtualization Better hardware utilization, increased flexibility, and improved disaster recovery.

What is a hypervisor? A software layer that allows multiple virtual machines to run on the same physical machine.

What is virtualbox A free and open-source virtualization software that allows users to create and run virtual machines on their computer.

Exploring Desktop Environments

What is a desktop environment? (Provide 3 examples) A collection of software applications that provide a graphical user interface. Three examples of desktop environments in Ubuntu are GNOME, KDE, and Xfce.

List 4 common elements of desktop environments A window manager, file manager, panel or dock, and a system tray or notification area.

What is Ubuntu's default desktop environments? GNOME

What are the official flavors of Ubuntu? Ubuntu MATE, Kubuntu, Xubuntu, Ubuntu Budgie, Ubuntu Kylin, Ubuntu Studio, and Lubuntu.

What Is a Shell?

What is Bash? A command-line shell for Ubuntu that provides an interface for users to interact with the operating system.

How do you access the Linux CLI? The Linux CLI can be accessed by opening a terminal window.

What is a console terminal? The physical connection between a computer and a keyboard and screen.

What is a terminal emulator? A software application that allows users to access the command line interface from within a graphical user interface.

Provide 3 examples of Linux commands ls (list directory contents), mkdir (make directory), and touch (create a new file).

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 [package name]. An example would be sudo apt-get install firefox.

Which command is used for removing software. Provide an example. sudo apt-get remove [package name]. An example would be sudo apt-get remove gnome-shell.

Which command is used for searching for software. Provide an example. apt-cache search [keyword]. An example would be apt-cache search web browser.

Definition of the following terms: **Package** - a collection of software files that are bundled together for easy installation and management. **Library** - a collection of precompiled code that can be shared by multiple software applications. **Repository** - a collection of software packages that are available for installation and management via a package management system like APT (Advanced Package Tool).