

Week Report 3

Summary of presentations

Introduction to Linux

What is an operating system?

- An operating system provides all the fundamental software of a computer. An OS enables you to use the computer's hardware providing you the basic tools that make the computer.
- All of those features relay on the OS's kernel.

Aside from a kernel, what other parts make an operating system?

- Command-Line Shells
- Graphical User Interface(*GUI*)
- Utility and Productivity Programs
- Libraries

What is a Linux distribution? A complete linux package which includes:

- *A linux Kernel*
- *Core Unix Tools*
- *Supplemental Software*
- *Startup Scripts*
- *An installer*

What is Ubuntu?

- A linux distribution, freely available with both community and professional support.

Define the following terms: Open Source, Closed source, free software **Open Source:** Software that may be distributed for a fee or for free. The source code is distributed with the software.

Closed Source: Software that is not distributed with the source code. The user is restricted from modifying the code.

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?

- 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.
- Offers the ability to save state of machine at a given time and roll it back or forward. **What is a hypervisor?**
- A program used to run and manage one or more virtual machines on a computer. **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 -Icons -File manager -Panels -System Tray **What is Ubuntu's default desktop environments?**

- GNOME 3 **What are the official flavors of Ubuntu?**
- Ubuntu GNOME
- Kubuntu
- Lubuntu
- Ubuntu Budgie
- Ubuntu Kylin
- Ubuntu MATE
- Ubuntu Studio
- Xubuntu
- Edubuntu
- Mythbuntu

What is a Shell?

What is Bash?

- A program that provides interactive access to the Linux System.

How do you access the Linux CLI?

- Terminal emulator
- Linux Console **What is a console terminal?**
- Its used to interact with a computer. **What is a terminal emulator?**
- A program that allows you to access the Linux CLI. **Provide 3 examples of Linux commands**
- ls
- cut
- head

Managing Software

Which command is used for updating ubuntu

- sudo apt update; sudo apt upgrade. **Which command is used for installing software. Provide an example.**
- Sudo apt install Ex: sudo apt install curl **Which command is used for removing software. Provide an example.**
- Sudo remove Ex: sudo snap remove

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

- apt search "video player" Ex: apt search "video player"

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 one or more than one function or program. *Repository*: A large collection of software available for download.