

Week Report 3

Summary of Presentations

Introduction to Linux

What is an operating system? An operating system is the most important software that runs on a computer.

Aside from a kernel, what other parts make an operating system? Other parts include device drivers, system libraries, and utilities.

What is a Linux distribution? A Linux distribution is an open-source operating system based on the Linux kernel.

What is Ubuntu? Ubuntu is a free, open source operating system based on Debian Linux.

Define the following terms: Open Source, Closed source, free software

- Open source: denoting software for which the original source code is made freely available and may be redistributed and modified.
- Closed source: Computer source code that is not made available to the general public by its creators.
- Free software: Free and open source software is a term used to refer to groups of software consisting of both free software and open source software where anyone is freely licensed to use, copy, study and change the software in any way.

What are the 4 freedoms defined by the free software foundation? Roughly it means that users have the freedom to run, study how the program works, change and improve the software, and redistribute copies.

The basics of Virtualization

What is virtualization? Virtualization is a technology that allows multiple virtual environments to run on a physical computer or a server.

List 3 benefits of virtualization

- Increased IT productivity and responsiveness.
- Simplified data center management.
- Lower total operational cost.

What is a hypervisor? A program used to run and manage one or more virtual machines on a computer.

What is virtualbox Virtualbox is an open-source software that lets its users create and manage virtual machines on their personal computers.

Exploring Desktop Environments

What is a desktop environment? (Provide 3 examples) A suite of applications and programs that make a distribution graphically usable. Three examples are GNOME, Cinnamon and MATE.

List 4 common elements of desktop environments

- Icons
- Windows
- Toolbars
- Folders

What is Ubuntu's default desktop environments? GNOME

What are the official flavors of Ubuntu? Official Ubuntu flavors are Ubuntu GNOME, Kubuntu, Lubuntu, Ubuntu Budgie, Ubuntu Kylin, Ubuntu MATE, Ubuntu Studio, Xubuntu, Edubuntu, and Mythbuntu

What is a Shell?

What is Bash? Bash is an acronym for Bourne Again Shell. A shell is a terminal application used to interface with an operating system through written commands. Bash is a popular default shell on Linux and macOS.

How do you access the Linux CLI? Ctrl-Alt-T

What is a console terminal? It is a window in which your text-mode programs are active.

What is a terminal emulator? A terminal emulator emulates the functionalities of classic computer terminals.

Provide 3 examples of Linux commands

- CD
- RM
- LS

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 install package_name`

Which command is used for removing software. Provide an example. `sudo apt-get purge`

Which command is used for searching for software. Provide an example. `apt search "name of software"`

Definition of the following terms: Package In a traditional sense, a software package is simply multiple applications or code modules that work together to meet various goals and objectives.

Library A library is a collection of pre-compiled pieces of code called functions.

Repository A Linux repository is a storage location that contains essential and popular software for different Linux distributions and, each distribution has its own official repositories (also called standard-repositories).