

week Report 3

summary of presentations

Introduction to Linux

What is an operating system? An OS is a software program that manages computer hardware and provides a set of services for computer programs. It acts as an intermediary between the hardware and software, serving as the core software component of a computer system

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

Command-line Shells Graphical User Interfaces Utility and Productivity Programs Libraries

What is a Linux distribution?

any operating system that runs the Linux Kernel

What is Ubuntu?

Ubuntu is a linux distribution.

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

Closed source: it is the software that is not distributed with source code.

Free software: Free software refers to software that is distributed with certain freedoms and rights granted to users, primarily the freedom to use, modify, and distribute the software as they see fit

What are the 4 freedoms defined by the free software foundation?

Freedom 0 (Freedom to Run) Freedom 1 (Freedom to Study and Modify) Freedom 2 (Freedom to Redistribute) Freedom 3 (Freedom to Distribute Modified Copies)

The basics of Virtualization

What is virtualization?

Virtualization is defined as creating virtual versions of something, in this case virtualize an os.

List 3 benefits of virtualization

Reduces costs (less hardware to purchase) Allows to test without break your physical machine Allows running multiple OSs on one machine without dual booting.

What is a hypervisor?

software or Hardware in charge of creating, managing, and running virtual machines.

What is virtualbox

Virtualbox is a free and open-source virtualization software that allows users to create and run virtual machines

Exploring Desktop Environments

What is a desktop environment? (Provide 3 examples)

A desktop environment is an implementation of the desktop metaphor made of a bundle of programs running on top of a computer operating system.

Example GNOME KDE XFCE

List 4 common elements of desktop environments

Desktop settings File Manager Launcher Display Manager

What is Ubuntu's default desktop environments?

the default desktop in ubuntu is GNOME 3.

What are the official flavors of Ubuntu?

GNOME KDE XFCE MATE CINNAMON LXQT DEEPIN PANTHEON RASPBERRY PI

What is a Shell?

What is Bash?

Bash is a command-line interface for interacting with the operating system.

How do you access the Linux CLI?

There are two ways to access the CLI

- Terminal Emulator
- Linux Console (Ctrl+Alt then press a function key (F1 through F7))

What is a console terminal?

Console terminal is a text-based interface that allows users to interact with a computer or a computer system using text commands.

What is a terminal emulator?

A terminal emulator is a program that allows you to access the Linux Command Line Interface.

Provide 3 examples of Linux commands

-clear -free -cal

Managing Software

Which command is used for updating ubuntu

sudo apt update

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

`sudo apt install tetris`

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

`sudo apt remove tetris`

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

`apt search music 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 more than one function or program. **Repository:** a large collection of software available for download.