Week Report 3

Summary of presentations

Introduction to Linux

What is an operating system?

An operating system provides all fundamental software features of a computer. An OS enables you to use the computers hardware providing you the basic tools that make the computer useful.

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

Other parts that make up an operating system include a command line shell, graphical user interface, utility and productivity program, and libraries

What is a Linux distribution?

A Unix-like operating system that runs on the Linux kernel. It is an open source software and available free of charge. It includes many Unix tools Consists of kernels, libraries and utilities that make up the entire operating system.

What is Ubuntu?

Ubuntu is a popular Linux distribution based on Debian.

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

Open source: A software whose source code is distributed with the software. Closed source: A software whose source code is not distributed with the software. User cannot modify the code. Free software: The software is distributed with the source code. The software can be obtained free of charge or obtained by a fee.

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

Use the software for any purpose Examine the source code and modify it as you see fit Redistribute the software Redistribute your modified software

The basics of virtualization

What is virtualization?

Creating virtual versions of something. In computing, it is used to allow multiple OSs run on one physical machine at the same time.

List 3 benefits of virtualization

Reduces costs by decreasing the physical hardware that must be purchased for a network Allows you to run legacy applications Allows running multiple OSs on one machine without dual booting Allows applications to be tested before installing them on a host machine

What is a hypervisor?

Software/Hardware in charge of creating, managing, and running virtual machines

What is virtualbox

A free virtualization software by Oracle

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, which shares a common GUI, sometimes described as a graphical shell. Examples: GNOME, KDE, MATE

List 4 common elements of desktop environments

File manager Icons Launcher Menus

What is Ubuntu's default desktop environments?

GNOME

What are the official flavors of Ubuntu?

Kubuntu, Lubuntu, Budgie, Kylin, MATE, Studio, Unity, Xubuntu

What is a Shell?

What is Bash?

Bash is a program that provides interactive access to the Linux system

How do you access the Linux CLI?

You can use a terminal emulator or the Linux console

What is a console terminal?

A console terminal is a way to communicate with your OS via text commands and not a GUI

What is a terminal emulator?

A program that allows you to access the Linux CLI. Mostly used with a GUI.

Provide 3 examples of Linux commands

date - displays current time and date cal - displays a calendar of the current month clear - clears the screen

Managing Software

Which command is used for updating ubuntu

sudo apr update; sudo apt upgrade

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

sudo apt install example: sudo apt install firefox

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

sudo apt remove example: sudo apt remove firefox

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

apt search example: apt search games

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