Week Report 3

Summary of Presentations

Introduction to Linux

What is an operating system?
A program in charge of providing fundamental software features of a computer.

Aside from a kernel, what other parts make an operating system?
Command-line shells, graphical user interfaces, utility and productivity programs, and libraries.

What is a Linux distribution?
Any operating system that runs the Linux kernel.

What is Ubuntu?
Ubuntu is one of the Linux distributions available.

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

- Open source: software that can either have a price or be free of charge. Source code is included.
- Closed source: Source code is not shared. Can either be freeware (free of charge) or shareware (trial-based).
- Free software: software and source code are provided free of charge.

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?
The act of creating virtual versions of something.

List 3 benefits of virtualization

1. Allows running multiple OSs on one machine without the need of dual booting.
2. Allows applications to be tested before installing them on a host machine.
3. Reduces costs by decreasing the physical hardware that must be purchased for a network

What is a hypervisor?
Software (or hardware) in charge of creating, managing, and running virtual machines.

What is virtualbox
Software that allows for proper virtualization for enterprise and home use.

Exploring Desktop Environments

What is a desktop environment? (Provide 3 examples)
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 include: GNOME, KDE, and XFCE

List 4 common elements of desktop environments

1. Desktop Settings
2. Display Manager
3. File Manager
4. Icons

What is Ubuntu's default desktop environments?
Ubuntu's default DE is GNOME 3

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

What is a Shell?

What is Bash?
A program that provides interactive access to the Linux system.

How do you access the Linux CLI?

1. Terminal Emulator
2. Linux Console

What is a console terminal?
A terminal session that runs in the Linux system memory.

What is a terminal emulator?
A program that allows you to access the Linux CLI.

Provide 3 examples of Linux commands

1. date: current time and date
2. cal: calendar of current month
3. df: amount of free space on disk drives
4. free: amount of free memory

Managing Software

Which command is used for updating ubuntu
sudo apt update -y

Which command is used for installing software. Provide an example.
sudo apt install screenfetch

Which command is used for removing software. Provide an example.
sudo apt remove screenfetch

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

apt search "web browser"

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.