wr3.md 2023-10-13

# Week Report 3

## Summary of presentations

#### Introduction to Linux

## What is an operating system?

• provides all fundamentals software features of a computer

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

• command line shells, graphical user interfaces, utility and prouctivity programs and libraries

#### What is a Linux distribution?

any operating system that runs the linux kernel

#### What is Ubuntu?

• is a Linux distribution

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

- open source the sofware may be distributed for a fee or free. The source is not distributed with the software.
- closed source the software is not distributed with the source code. The user is restricted from modifying the code.
- free software the software is distributed with the source code. The software can be free of charge or obtained by a fee.

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

- Freedom 0: use the software for any purpose
- Freedom 1: exmaine 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?

• is defined as creating virtual versions of something

#### List 3 benefits of virtualization

- · allows running multiple OSs on ne machine without dual booting
- allows applications to be tested before installing them on a host machine
- reduces costs by decreasing the physical hardware that must be purchased for a network

#### What is a hypervisor?

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• software or hardware in charge of creating, managing, running virtual machines

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### What is virtualbox

is a powerful x86 and AMD/Intel64 virtualization product for enterprise as well as home use

## **Exploring Desktop Environments**

#### What is a desktop environment? (Provide 3 examples)

- GUI: A graphical user interface is a set of programs that allows a user to interact with the computer system
- DE: a desktop environment is an implementation of the desktop metaphor made of a bundle of prorams running on top a computer operating system

## List 4 common elements of desktop environments

- Desktop Settings
- · Display Manager
- File Manager
- Icons

## What is Ubuntu's default desktop environments?

GNOME 3

#### What are the official flavors of Ubuntu?

• Canonical offers an offical flavor of Ubuntu with the Mate DE called Ubuntu Mate

## What is a Shell?

#### What is Bash?

· a command-line interface shell program

#### How do you access the Linux CLI?

- terminal Emulator
- Linux Console

#### What is a console terminal?

• takes the linux system out og grapihical desktop mode and place it in text mode

## What is a terminal emulator?

• a terminal emulator is a program that allows you to access the linux CLI

#### Provide 3 examples of Linux commands

- Ctrl + A: go to the start of the command line
- Ctrl + E: go to the end of the command line

wr3.md 2023-10-13

• Ctrl + K: delete from cursor to the end of the command line

## Managing Software

## Which command is used for updating ubuntu

• sudo apt update; sudo spt upgrade -y

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

• sudo apt install

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

• sudo apt remove

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

· sudo apt search

## 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