

# Week Report 3

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## Summary of presentations:

### Exploring Desktop Environments

#### 1. bulleted list of different desktop environments

- GNOME
- KDE
- XFCE
- MATE
- BUDGIE
- LXDE
- Cinamon
- OpenBox
- LXQT
- Pantheon
- Deeping DE
- Fluxbox

#### 2. Definitions for the following terms: **GUI**, **DE**

**GUI:** A graphical user interface is a set of programs that allows a user to interact with the computer system via icons, windows, and various other visual elements.

**DE:** 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.

#### 3. Bulleted list of the common elements of a desktop environment

- Desktop Settings
- Display Manager
- File Manager
- Icons
- Favorite Bar
- Launcher
- Menus
- Panels
- System Tray
- Widgets
- Window Manager

### The Bash Shell

## 1. What is a shell?

A **Shell** is a program that provides an interface between a user and an operating system kernel.

## 2. List different shells

- Bash Shell
- Zsh Shell
- Ksh Shell
- Fish Shell
- Csh Shell

## 3. List some bash shortcuts (no more than 10 and no less than 5)

**Alt + T** - go to the start of the command line

**Ctrl + E** - go to the end of the command line

**Ctrl + K** - delete from cursor to the end to the command line

**Ctrl + Y** - paste word or text that was cut using one of the deletion shortcuts (such as the one above) after the cursor

**Ctrl + C** - terminate the command

**Ctrl + Z** - suspend/stop the command

**!!** - run last command

## 4. List basic commands and their usage

**date** - displays the current time and date

**cal** - displays a calendar of the current month

**free** - displays the amount of free memory

**clear** - clears the screen

## Managing Software

- Command for updating ubuntu

`sudo apt update; sudo apt upgrade; sudo apt full-upgrade -y`

**I Go it! Apt is cool ... but how do I use it?**

- To update any Debian distro:
  - Update is used to download package information from all configured sources.
  - By terminating every command with a ; you can run multiple commands in a single line.
  - The -y option passes a yes answer to any question. Without this option apt will ask you if you want to install the upgrade. Using -y is optional and you should use it only if you are 100% sure about the upgrade.
- Managing software and updates requires root privileges. Sudo allows you to run any command as the root user.
- Apt is the program that we are using to manage software and updates.
- upgrade is used to install available upgrades of all packages currently installed on the system from the sources configured via sources.list

- Command for installing software

```
sudo apt install "package name" -y
```

## Install several programs in a single command

```
sudo apt install firefox flameshot caffeine -y
```

- Command for removing software

```
sudo apt remove "package name" -y
```

## Remove several programs in a single command

```
sudo apt remove firefox flameshot caffeine -y
```

- Command for searching for software

```
apt search "package name"
```

## Install and remove programs in a single command

```
sudo apt install firefox+ flameshot- caffeine- vlc+
```

Definition of the following terms:

**Package** - are archives that contain binaries of software, configuration files, and information about dependencies. (In Windows, there are commonly **.exe** files)

Think of a package as a box containing all the necessary stuff to install the program you want.



**Library** - reusable code that can be used by more than one function or program.

**Repository** - a large collection of software available for download.

- Command for updating ubuntu

```
sudo apt update; sudo apt upgrade; sudo apt full-upgrade -y
```

## I Go it! Apt is cool ... but how do I use it?

- To update any Debian distro:

Update is used to download package information from all configured sources.

By terminating every command with a ; you can run multiple commands in a single line.

Managing software and updates requires root privileges. Sudo allows you to run any command as the root user.

```
19:57:51 (adrian@G752VL2 ~)
sudo apt update; sudo apt upgrade -y
```

Apt is the program that we are using to manage software and updates.

upgrade is used to install available upgrades of all packages currently installed on the system from the sources configured via sources.list

The -y option passes a yes answer to any question. Without this option apt will ask you if you want to install the upgrade. Using -y is optional and you should use it only if you are 100% sure about the upgrade.