

Week Report 3

Summary of Presentation

1. Exploring Desktop Environments

a. List of desktop Environment:

- GNOME
- MATE
- Cinnamon
- Pantheon
- KDE
- BUDGIE
- Openbox
- Deeping DE
- XFCE
- LXDE
- LXQT
- Fluxbox

b. Definition of the following terms:

- 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

c. List of common elements of a desktop environment:

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

2. The Bash Shell

a. What is a shell?

- The GNU shell is a program that provides interactive access to the Linux System.
- It runs as a regular program and is normally started whenever a user logs in into a terminal.

b. List of different shells:

- Tcsh Shell
- Csh Shell
- Ksh Shell
- Zsh Sell
- Fish Shell

c. List of some bash shortcuts:

- Ctrl+A: 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 of the command line
- Ctrl+U: delete from cursor to the start of the command line
- Ctrl+W: delete from cursor to start of word
- Ctrl+Y: paste word or text that was cut using one of the deletion shortcuts after the cursor
- Ctrl+XX: move between start of command line and current cursor position

d. List of basic commands and their usage:

- date: displays the current time and date
- cal: displays a calender of the current month
- df: displays the current amount of free space on our disk drives
- free: displays the amount of free memory
- uname: displays information about your system
- clear: clears the screen

3. Managing Software**a. Command for updating Ubuntu**

```
sudo + apt + update + Ubuntu
```

b. Command for installing software

```
sudo + apt + install + package name
```

c. Command for removing software

```
sudo + apt + remove + package name
```

d. Command for searching software

```
sudo + apt + search + "web browser"
```

e. 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

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.

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.

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

Here are some useful examples

Install several programs in a single command

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

Remove several programs in a single command

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

Install and remove programs in a single command

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

Remove programs and all remaining traces

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

More useful options of Apt

To obtain information about a package

```
apt-cache showpkg firefox
```

Install packages without upgrading

```
sudo apt install firefox --no-upgrade
```

Only upgrade packages

```
sudo apt install firefox --only-upgrade
```

Clean your system

```
sudo apt clean; sudo apt autoclean; sudo apt autoremove
```