

# Week Report 3

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## Exploring Desktop Environments

### 1. Types of Desktop Environment:

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

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

- **Graphical user interface/GUI** -- is a set of programs that allows a user to interact with the computer system via icons, windows, and various of other visual elements
- **Desktop Environment** -- 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. Common Elements of a Desktop Environment:

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

## The bash Shell

1. What is a shell? **Shell** -- a program that provides interactive access to the operating system (OS)

### 2. Different shells:

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

### 3. 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 the cursor to the start of the command line
- Ctrl + Y -> Paste word or text that was cut using one of the deletion shortcuts after the cursor
- Ctrl + L -> clear the screen
- Ctrl + C -> terminate the command
- Ctrl + H -> delete character before the cursor

### 4. Basic Commands and their Usage:

- !! -> run the last command
- !blah -> run the most recent command that starts with 'blah'
- !blah:p -> print out the command that !blah would run (also adds it as the latest command in the command history)
- !\$ -> the last word of the previous command
- !\$:p -> print out the word that !\$ would substitute
- !\* -> the previous command except for the last word
- !:p -> print out what ! would substitute

## Managing Software

### 1. Command for updating ubuntu

`sudo apt update; sudo apt upgrade -y`

- 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

### 2. Command for installing software

```
sudo apt install 'package name'
```

### 3. Command for removing software

```
sudo apt remove 'package name'
```

### 4. Command for searching for software

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

- 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