

Week Report 3

Question 1: Exploring Desktop Environments

a. Examples of Linux desktop environments as given in the presentation are:

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

b. GUI (graphical user interface): programs that allow the user to use a computer with graphical aspects like icons

DE (desktop environment): programs running on an operating system that share a GUI.

c. The common elements of a desktop environment are:

- Icons - represents a program or file
- Panels - rectangle areas that can be configured to display various info such as notifications or the time
- File Manager - allows for manipulating files graphically
- Launcher - lets the user search for programs and files
- Window Manager - controls how windows appear on the desktop and manipulates their size, position, etc
- Desktop Settings - allows the user to configure the environment
- Display Manager - lets you choose between users and the desktop environment
- Favorites Bar - contains icons and programs that are used often
- Menus - opened by an icon and contain files or sublists of files
- System Tray - allows a user to do system operations like shutdown or logging out
- Widgets - provide information on the desktop

Question 2: The Bash Shell

a. A shell is what allows a user to access and interact with an operating system and its services.

b. Different shells exist such as:

- Tcsh Shell

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

c. Some bash shell shortcut commands include:

- Ctrl + A - move to start of command line
- Ctrl + Y - paste text that was cut using another shortcut
- Ctrl + F - move forward a character
- Alt + B - move backward a word
- Alt + F - move forward a word
- Alt + U - capitalize word starting at the cursor till its end

d. Basic bash commands include:

- !! - run last
- !\$ - last word of the previous command
- !blah - run the last command that starts with blah
- !* - run the previous command minus the last word

Question 3: Managing Software

a. sudo apt update; sudo apt upgrade

b. sudo apt install (name of software here)

c. sudo apt remove (name of software here)

d. apt search (name of software or "search term") or apt search -n (name of software) for searching by name

e. Package - archives that hold software, config files, and information about dependencies Library - code that can be used by functions and programs Repository - collection of software that can be downloaded

f.

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.

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