

Linux 101

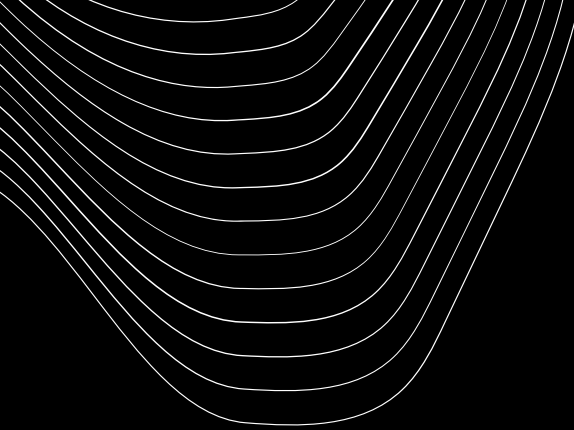
By: CyberTee



Welcome!

Are you excited about this fun learning session?





Make Sure You Have the Following Before We Start:



Book and Notes

They are the most essential tools for this lesson since you need to write down important points.



Stationery

Prepare your stationery to be able to highlight or label important points.



Sticky Notes

This is also a crucial tool for you that works as a reminder of each lesson.



Class Rules



Be Respectful

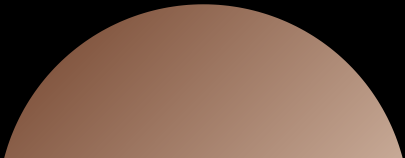
Listen to your instructor and allow other students to ask questions.

Be Open

Allow yourself to be open and collect the information presented.

No Phone

Be alive, respectful and courteous of your instructor and students.



Class Objectives



Expectations and Outcomes

Objective:

Students will learn what Linux is. Students will walk away with an idea of Linux functions and commands.

Today's Topic



Understanding Linux



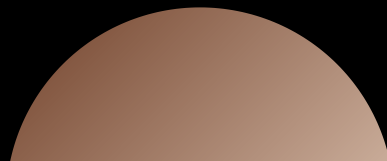
Concept and Definition

Linux is an open-source operating system (OS)

What is an operating system?

An operating system is a software that directly manages system hardware and resources.

Examples of a system's hardware and resources: Computer, memory, and storage.



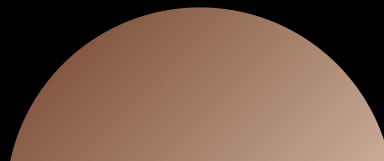
Understanding Linux



What does the Linux system do?

Linux OS can be found in many different settings such as:

- Server OS (web servers, databases)
- Desktop OS for personal usage
- Network OS (routers, switches) *Cisco uses the Linux Kernel
- Software OS (programming languages)
- Cloud OS (cloud servers) GCP





Linux Types

Ubuntu
Red Hat Enterprise
Linux
Oracle
Chrome OS
Kali Linux
Linux Mint
Debian
Fedora
and many more.

How much is



FREE!



Linux Commands

Basic

ls- lists all files and directories

ls -a- hidden files

cd- navigate to the home directory

cd . .- move one level up

man- information on a command

clear- clears the terminal

rmdir- deletes a directory

cat > filename - create a new file

mv- renames a directory

sudo -run programs with the security of the superuser

rm filename- deletes a file

Linux Commands

File Permission

`ls -l` - show file type and access permission

r- read permission

w- write permission

x- execute permission

--no permission

`chown user` - changing ownership of file/directory

Examples:

`chmod 777` – read, write, execute for all

`chmod 755` – rwx for owner, rx for group and world

For more options, see `man chmod`.

Linux Process Management Commands

ps – display your currently active processes
top – display all running processes
kill pid – kill process id pid
killall proc – kill all processes named proc *
bg – lists stopped or background jobs; resume a
stopped job in the background
fg – brings the most recent job to foreground
fg n – brings job n to the foreground

Linux Searching Commands

`grep pattern files` – search for pattern in files

`grep -r pattern dir` – search recursively for
pattern in dir

`command | grep pattern` – search for pattern in the
output of command

`locate file` – find all instances of file

TAKEAWAYS

Free and Open Source



Extremely Flexible

Portable Environment

Customized keyboard



Lightweight Infrastructure

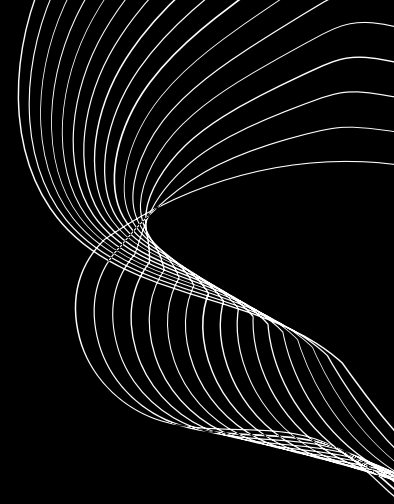
Graphical User Interface





**Do You Have
Any Questions So Far?**





Worksheet

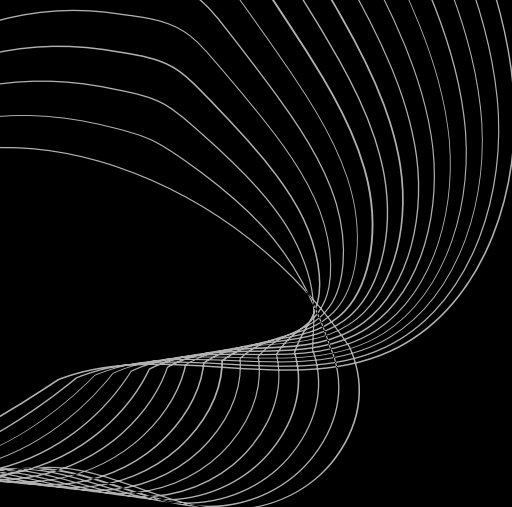
Please answer the following questions below.

What did you learn today?



How can you apply today's knowledge to real life experiences?





Summary of Class

What?

A large, empty white rectangular box intended for notes or answers related to the 'What?' question.

How?

A large, empty white rectangular box intended for notes or answers related to the 'How?' question.



Thank you for
Participating!

