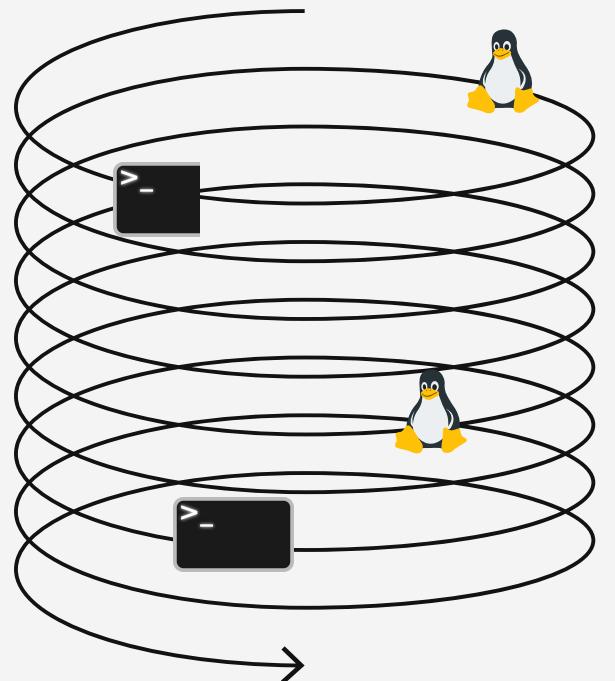


AN INTRODUCTORY
EVENT EXPLAINING
BASICS TO ADVANCED
LEVEL OF LINUX AND
COMMAND LINE.



14/02/2024
WEDNESDAY

INTRODUCTION

TO LINUX

& CLI



#TheFOSSclub



WHAT IS LINUX
EXACTLY AND IT'S
BASICS.

ASHWANY KUMAR SHARMA -

LET'S START WITH WHAT'S NOT LINUX 😊

Linux is very difficult
to use.

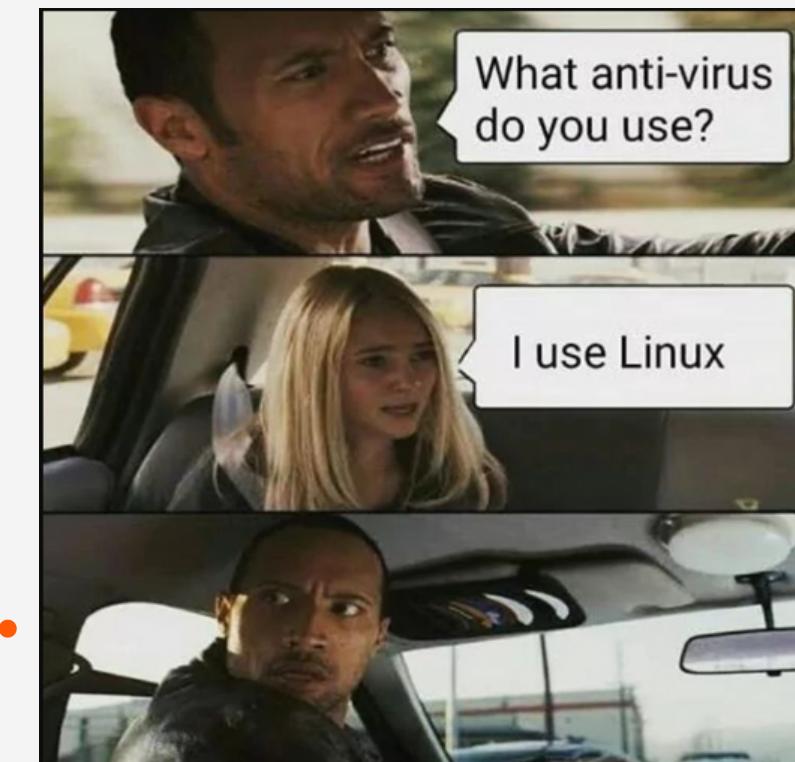
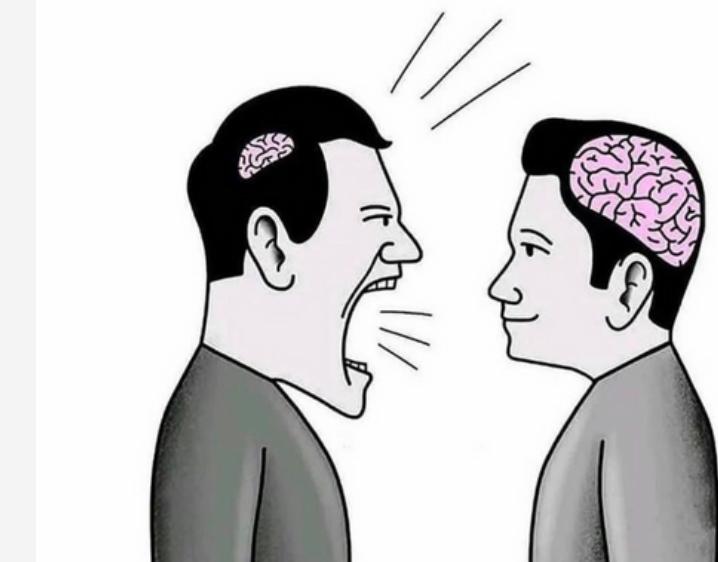


DUDE, WHAT DO YOU MEAN BY “LINUX IS HARD”?



**Linux is
the best OS**

Linux is not an OS, it's a kernel



WHEN WE SAY LINUX, THIS IS WHAT WE MEAN:



Linux is a family of open-source Unix-like operating systems based on the Linux kernel, an operating system kernel first released on September 17, 1991, by Linus Torvalds.



Linux is typically packaged as a Linux distribution (distro), which includes the kernel and supporting system software and libraries, many of which are provided by the GNU Project.



thanks god 🙏

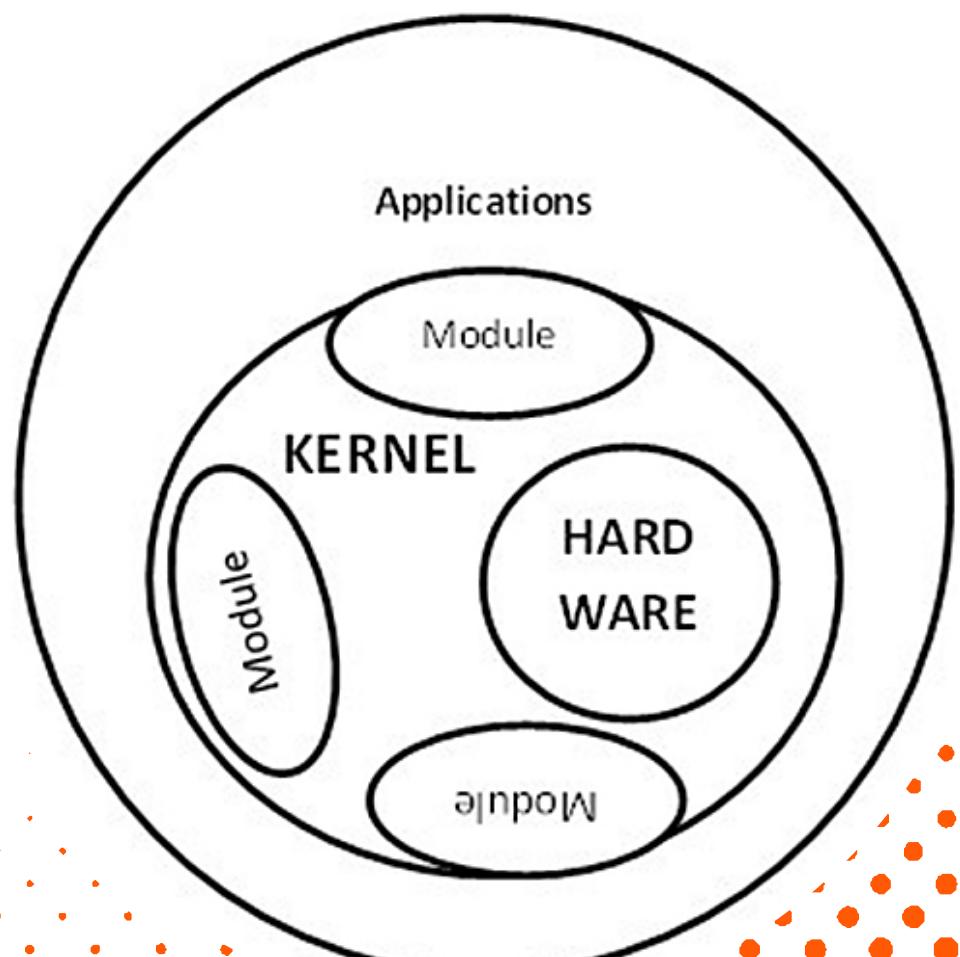
IF LINUX IS A KERNEL NOT OS, THEN WHAT IS A KERNEL?

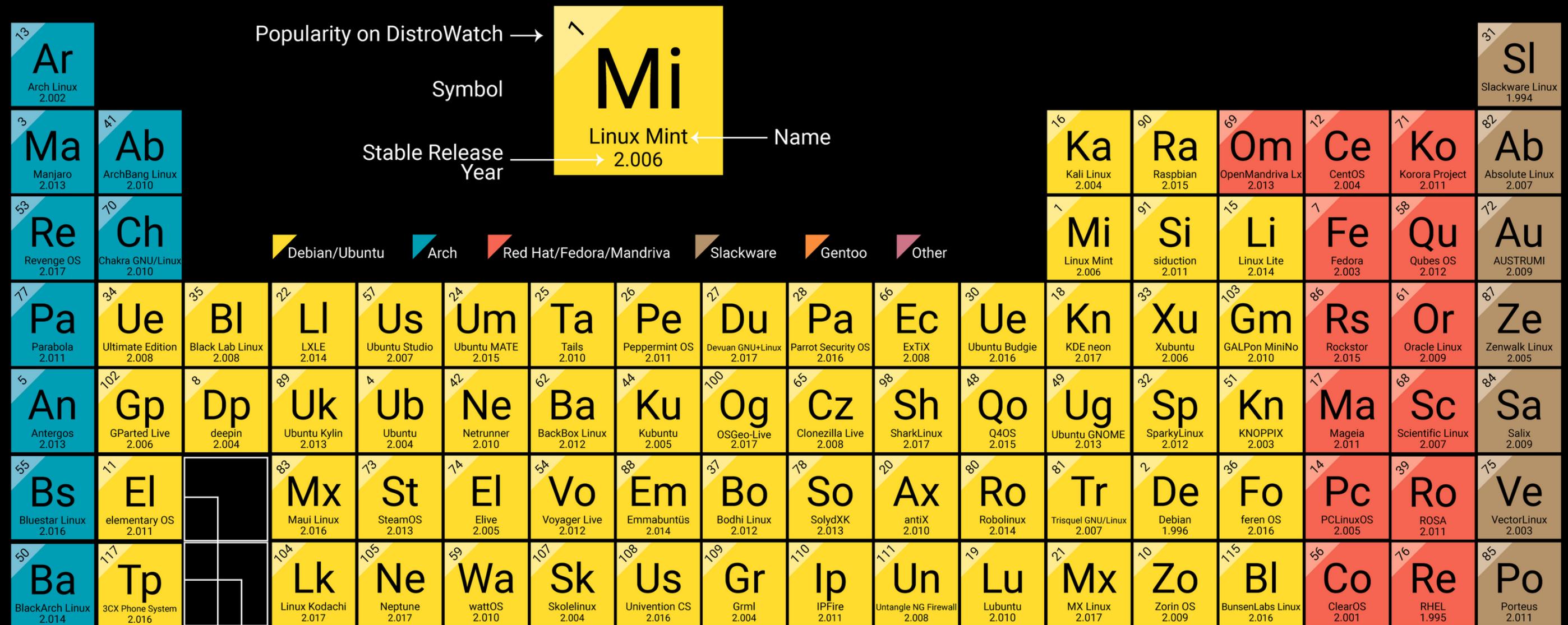


The kernel is a core component of an operating system and serves as the main interface between the computer's physical hardware and the processes running on it. The kernel enables multiple applications to share hardware resources by providing access to CPU, memory, disk I/O, and networking.

Objectives of **KERNEL**

- To establish communication between user level application
- To decide state of incoming
- To control disk
- To control memory
- To control task management.

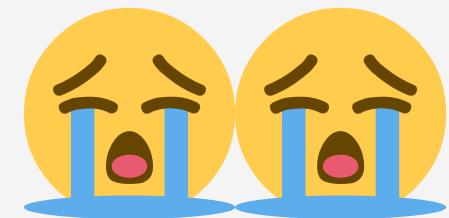




40 Ka KaOS 2.014	114 Bp blackPanther OS 2.003	106 Qu Quirky 2.010	60 Ra RancherOS 2.017	113 Ss SLES 2.004	101 Go GoboLinux 2.002	63 Ni NixOS 2.014	64 Nu NuTyX 2.010	47 Ap Alpine Linux 2.010	29 An Android-x86 2.009	67 Ge GeckoLinux 2.016	9 So Solus 2.016	38 Ge Gentoo Linux 2.002	43 Sa Sabayon 2.005	118 Pk Porteus Kiosk 2.014
23 Pu Puppy Linux 2.006	52 Fm 4MLinux 2.014	116 Di Devil-Linux 2.002	92 Ay AryaLinux 2.015	6 Su openSUSE 1.998	94 Le LibreELEC 2.017	95 Oe OpenELEC 2.012	96 St Slitaz GNU/Linux 2.008	97 Vd Void 2.015	46 La Lakka 2.016	99 Ov OpenMediaVault 2.014	45 Tc Tiny Core Linux 2.009	112 Rc Redcore Linux 2.017	93 Sc SystemRescueCd 2.004	79 Ca Calculate Linux 2.009

DIFFERENT TYPES OF OS YOU CAN TRY

WTF BRO?



TELL ME SOMETHING IN SHORT

- ★ Ubuntu
- ★ Debian
- ★ CentOS Linux
- ★ Gentoo
- ★ Fedora
- ★ Elementary OS
- ★ Linux Mint
- ★ Arch Linux btw :)
- ★ Slackware
- ★ Zorin OS

btw these are some popular distros ✨

HEADQUATERS



LINUX

LINUX KERNEL

LINUX is an open source operating system kernel created by Linus Torvald.

Now, what is this kernel ?

Kernel is a critical component of an operating system. It help to integrate the hardware and the software running on a computer.

Now, lets get back to linux

Its basically a core component of many different linux distributions or we can say distros (Bohat saare GUI'S or O.S)

Which works on
LINUX KERNEL

FUN FACT: write a fun fact

there is no fun, qt fun is a lie, learn cli!



DISTROS??

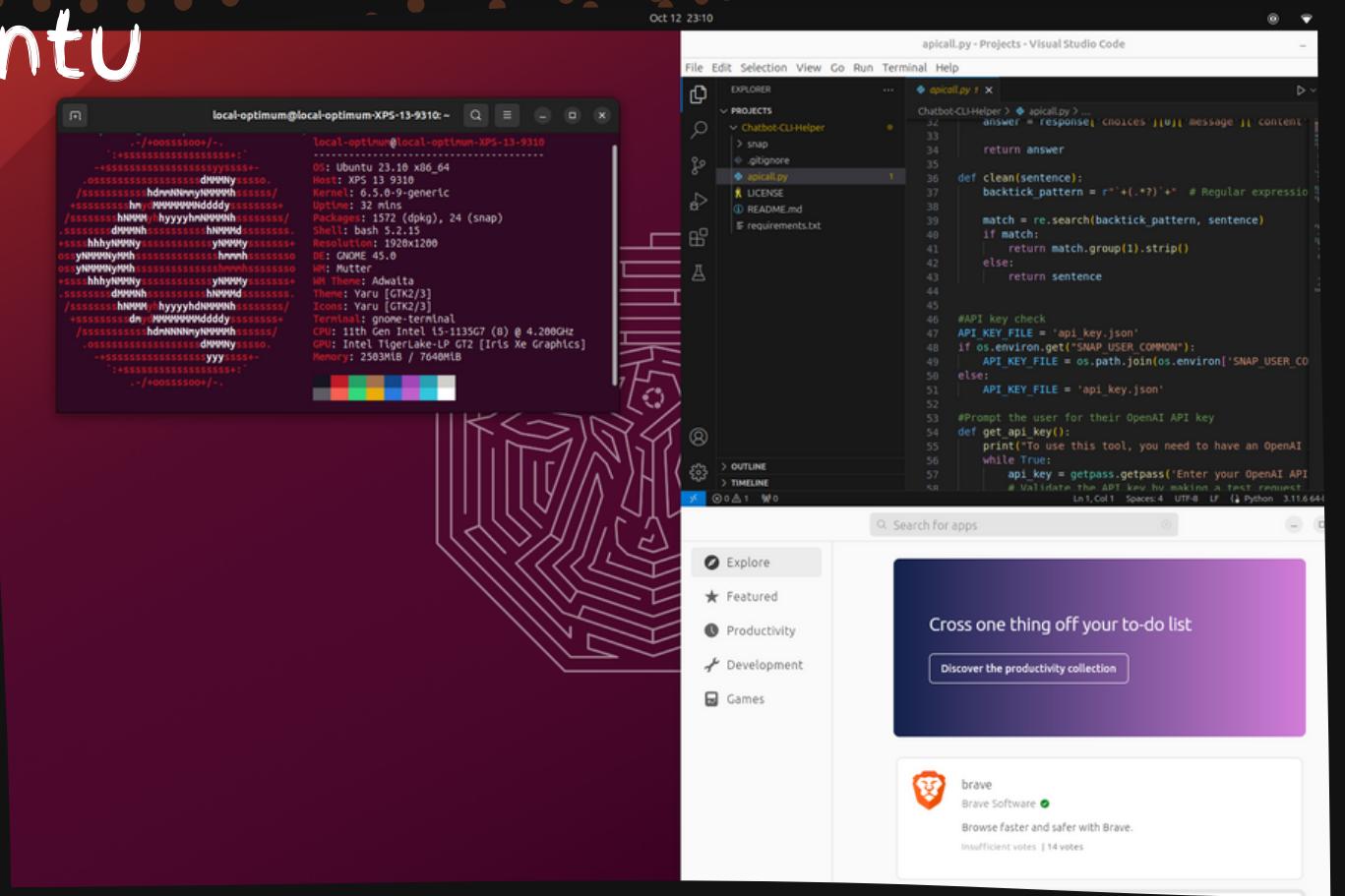
Distros, are basically distributions of linux kernel

Saaf bhasha mein linux kernel pe kaam karne waale alag alag prakaar
ke operating system

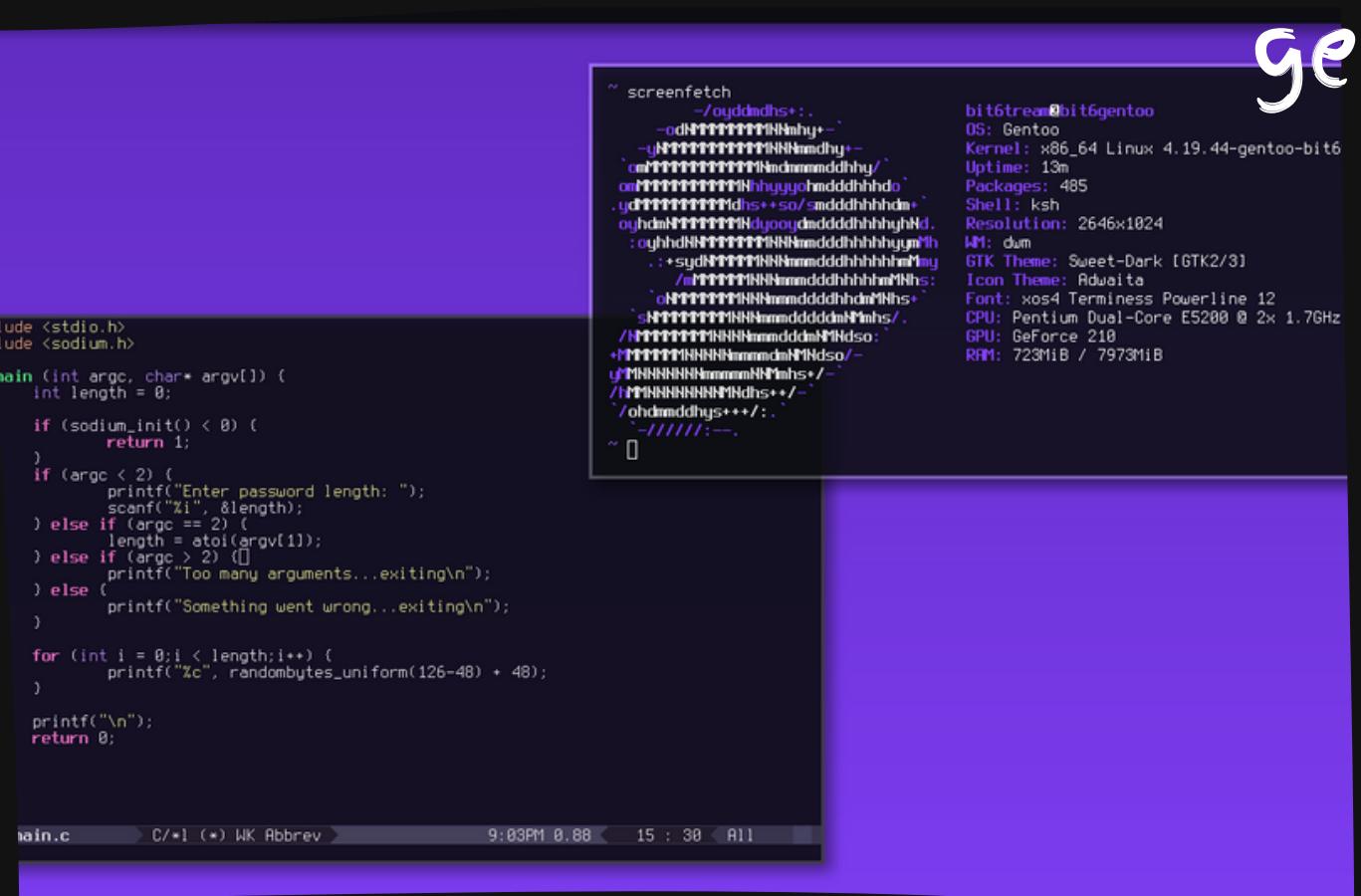
Jaise??

- ★ UBUNTU
- ★ FEDORA
- ★ DEBIAN
- ★ CENTOS
- ★ ARCH LINUX

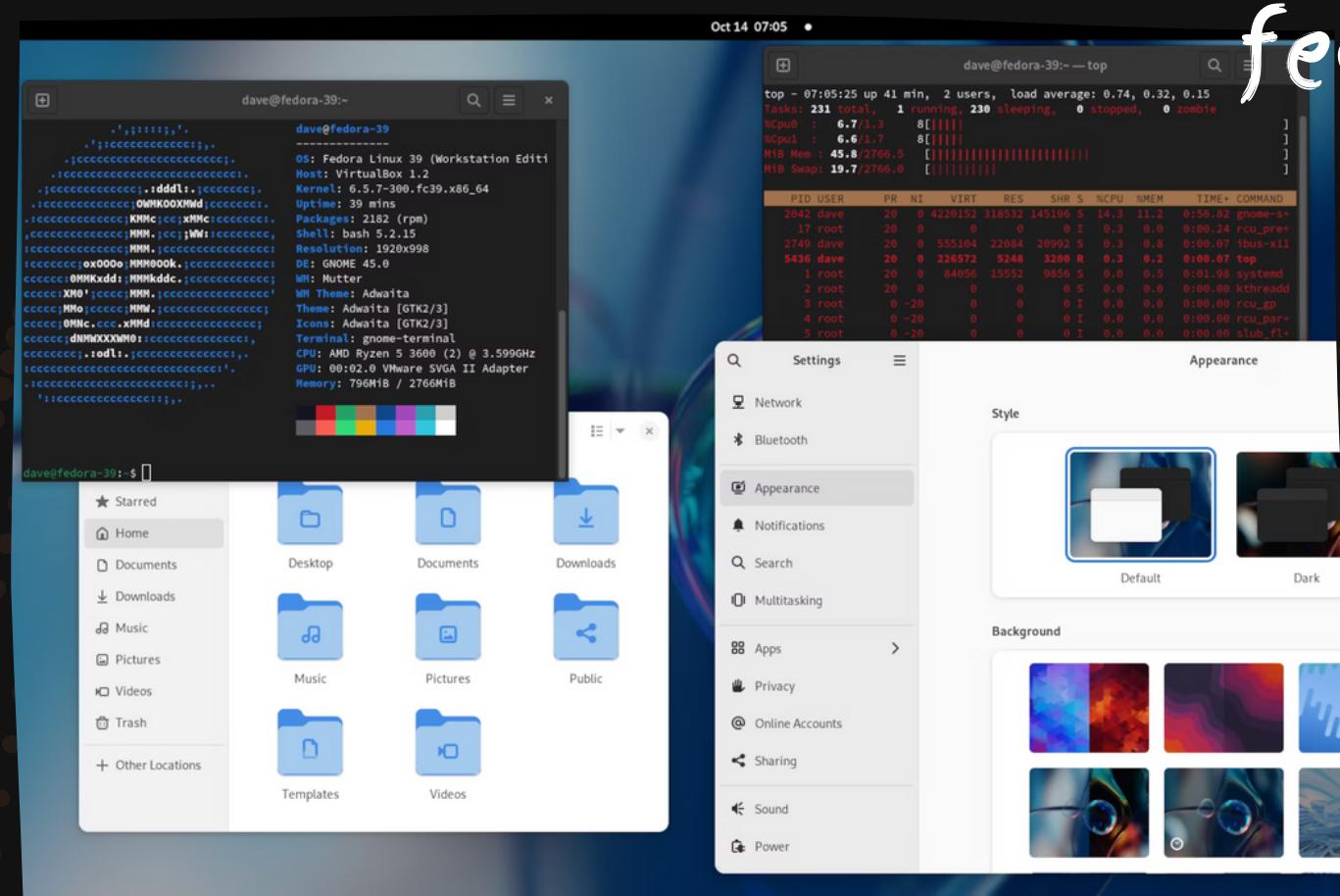
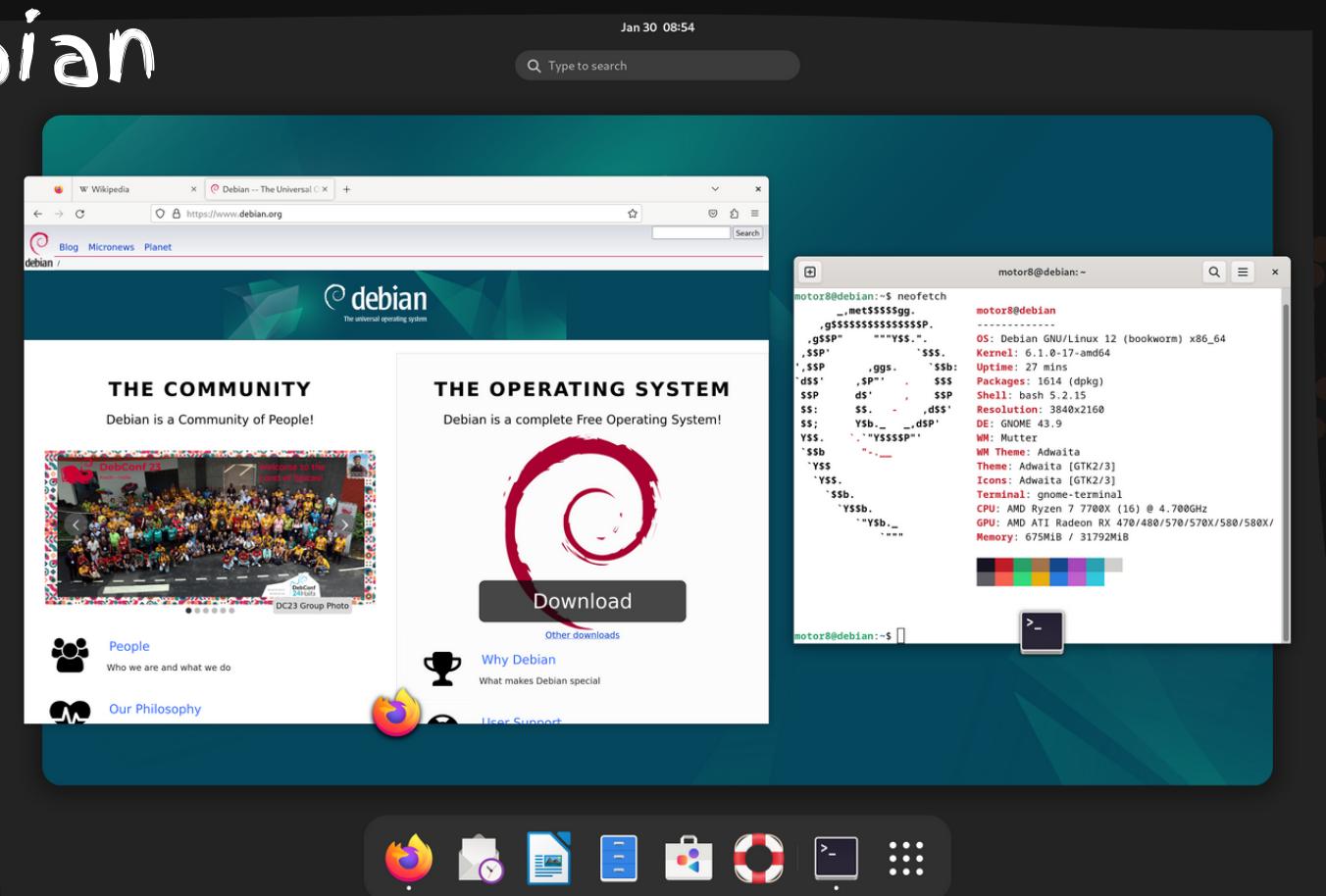
Ubuntu



gentoo

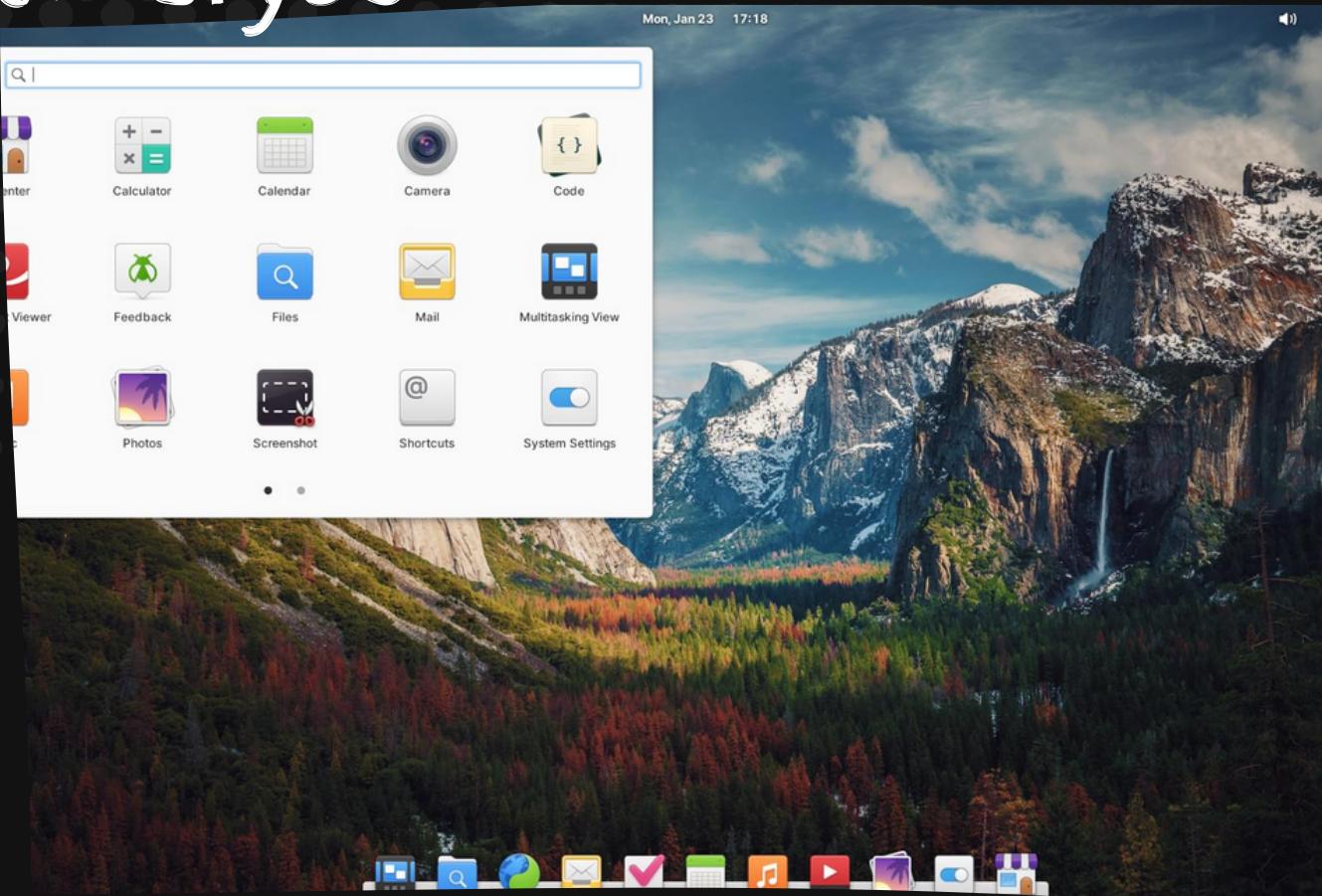


debian



fedora

elementaryos



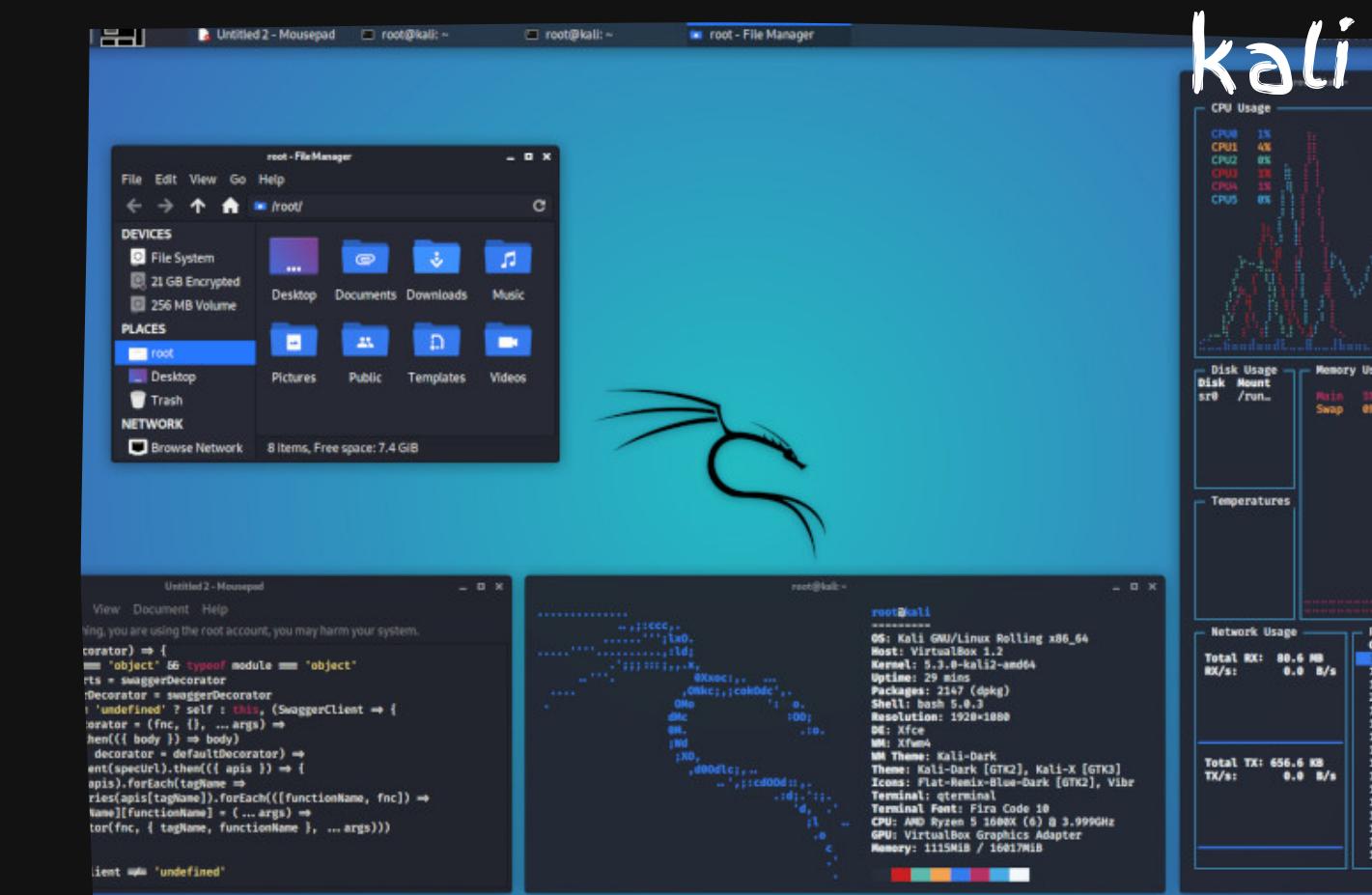
linux mint



arch linux



kali linux



DESKTOP ENVIRONMENTS

A desktop environment bundles together a variety of components to provide common graphical user interface elements such as icons, toolbars, wallpapers, and desktop widgets.

- ★ KDE
- ★ MATE
- ★ GNOME
- ★ CINNAMON
- ★ XFCE
- ★ DEEPIN
- ★ BUDGIE
- ★ LXDE



WHY LINUX WHEN WE HAVE WINDOWS & MACOS

reason#1

Linux based distros are lightweight in comparision to other OS in market.

reason#2

Free nature of Linux allows everyone to adapt to Linux easily

reason#3

Real Hackers use a system which allows them to tweek and modify their OS according to them

reason#4

Linux based system doesn't force update or crash without a proper error message.

reason#5

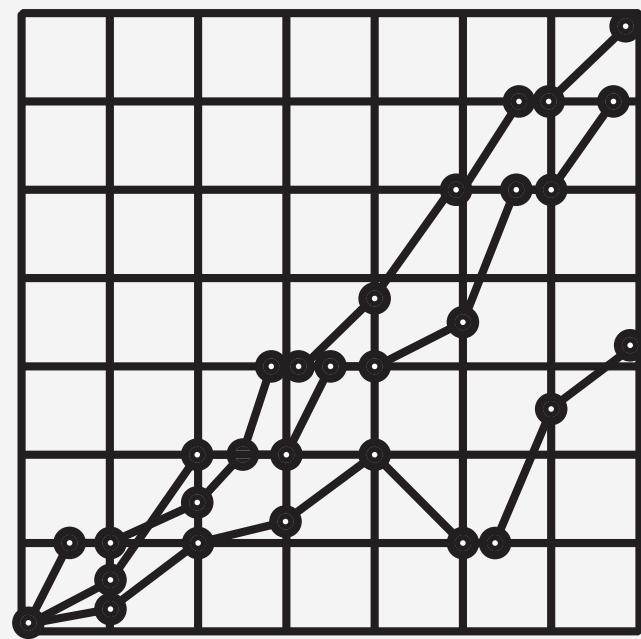
Highly secure nature of Linux distro makes them virus free.

HONESTLY, WE THINK LINUX POTENTIAL IS LIMITLESS.



MARKETING STATS

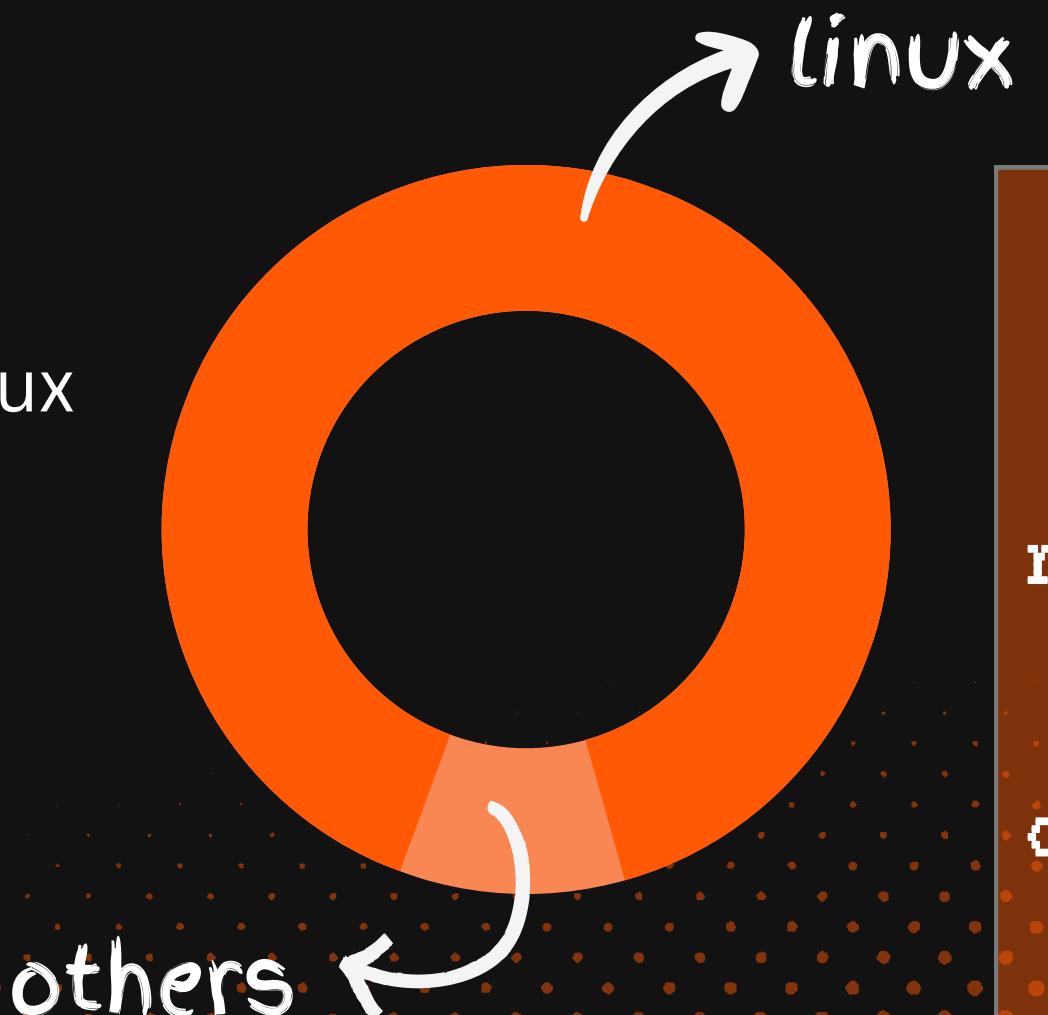
SHAMIULLAH KHAN



WHAT IS THE NEED FOR THE STUDENTS TO KNOW ABOUT THE MARKETING STATS OF LINUX

Understanding Demands :

helps students gauge career opportunities in fields like server administration, cloud computing, embedded systems, etc., where Linux proficiency is essential.



Cloud computing landscape heavily relies on Linux, with over 90% of public cloud workloads being Linux-based.

GOOGLE

Uses Linux for its entire server infrastructure, including search, Gmail, and Drive.

AMAZON

AWS, its cloud computing platform, runs on a customized version of Linux.

FACEBOOK

Runs its massive infrastructure on custom-built Linux distributions.

MICROSOFT

Surprisingly, Microsoft also uses Linux heavily, particularly in Azure, its cloud computing platform.



MOBILE STATS



Android

69.94%

iOS

29.32%

Samsung

0.36%

Unknown

0.16%

KaiOS

0.16%

Windows

0.02%

While not strictly Linux, Android, which uses the Linux kernel, dominates the mobile market

Mobile Operating System Market Share - January 2024

DESKTOP/LAPTOP



Windows	OS X	Unknown
72.99%	16.13%	5.33%
Linux	Chrome OS	FreeBSD
3.77%	1.76%	0.01%

As of 2024,
Linux has
3.77% for
desktop/laptop
lower than
Windows and
macOS

Desktop Operating System Market Share - January 2024

DESKTOP MARKET SHARE IN INDIA



Windows

73.77%

Linux

14.51%

Unknown

7.89%

OS X

3.58%

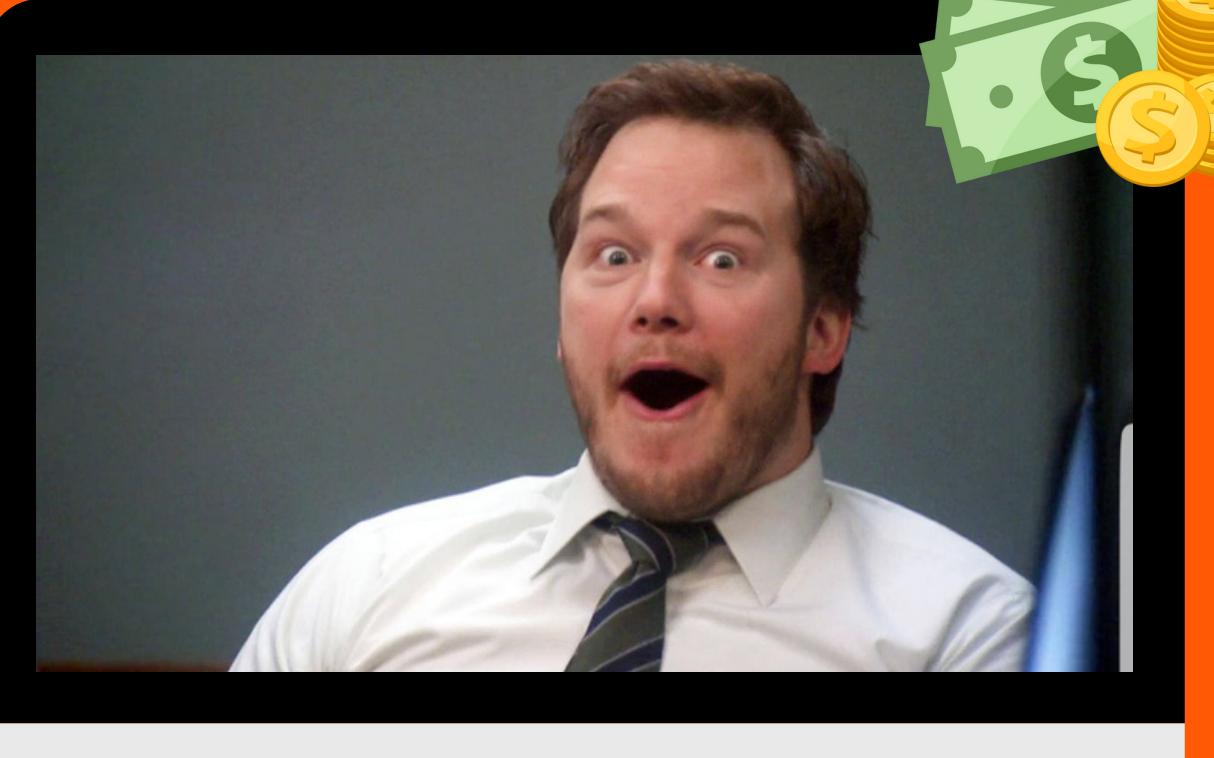
Chrome OS

0.25%

FreeBSD

0%





The global Linux operating system market was valued at USD 15.52 billion in 2022 and is projected to reach USD 66.28 billion by 2030, growing at a CAGR of 20.1%. 

INSTALLATION ON

VM & HARDWARE

SURYANSH SHARMA

VIRTUAL MACHINE INSTALLATION

So what is VM ?

A **virtual machine (VM)** is a virtual environment that functions as a virtual computer system with its own CPU, memory, network interface, and storage, created on a physical hardware system (located off- or on-premises). Software called a hypervisor separates the machine's resources from the hardware and provisions them appropriately so they can be used by the VM.

VMs allow multiple different operating systems to run simultaneously on a single computer.

STEP 1: DOWNLOAD VIRTUAL BOX

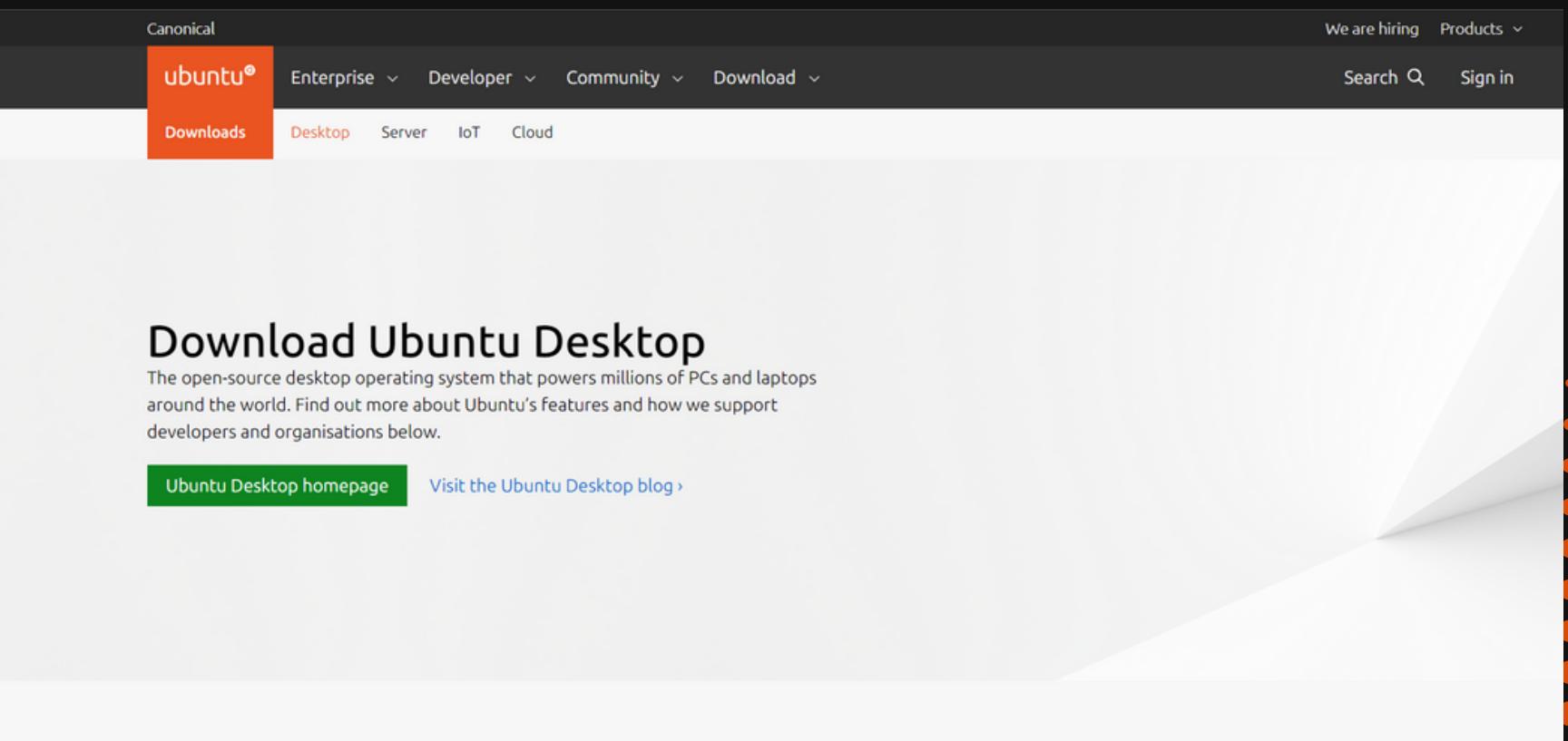
Go to the official Oracle VM VirtualBox website ([Oracle Virtual Box](#)) and download the version suitable for your operating system.



The screenshot shows the official Oracle VM VirtualBox website. The main navigation bar includes links for About, Screenshots, Downloads, Documentation, End-user docs, Technical docs, Contribute, and Community. The page title is "VirtualBox". The "Downloads" section is highlighted. It contains links for "VirtualBox binaries", "VirtualBox 7.0.14 platform packages" (listing Windows, macOS / Intel hosts, Linux distributions, Solaris hosts, and Solaris 11 IPS hosts), "VirtualBox 7.0.14 Oracle VM VirtualBox Extension Pack" (linking to All supported platforms), "VirtualBox 7.0.14 Software Developer Kit (SDK)" (linking to All platforms), and "User Manual" (linking to User Manual (HTML version)). A note at the bottom states: "The VirtualBox User Manual is included in the VirtualBox packages above. If, however, you would like to take a look at it without having to install the whole thing, you also access it here."

STEP 2: DOWNLOADING DISTRO

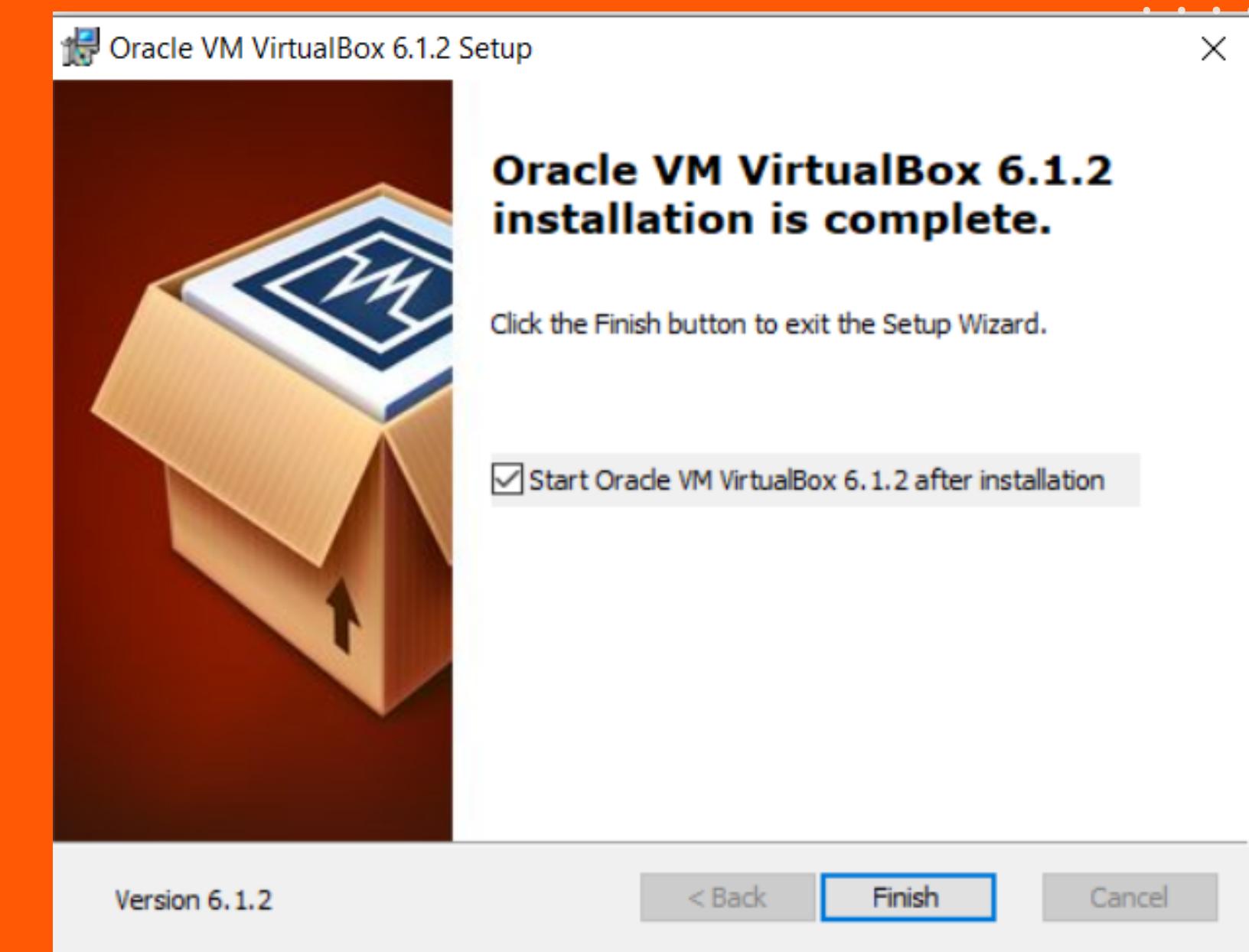
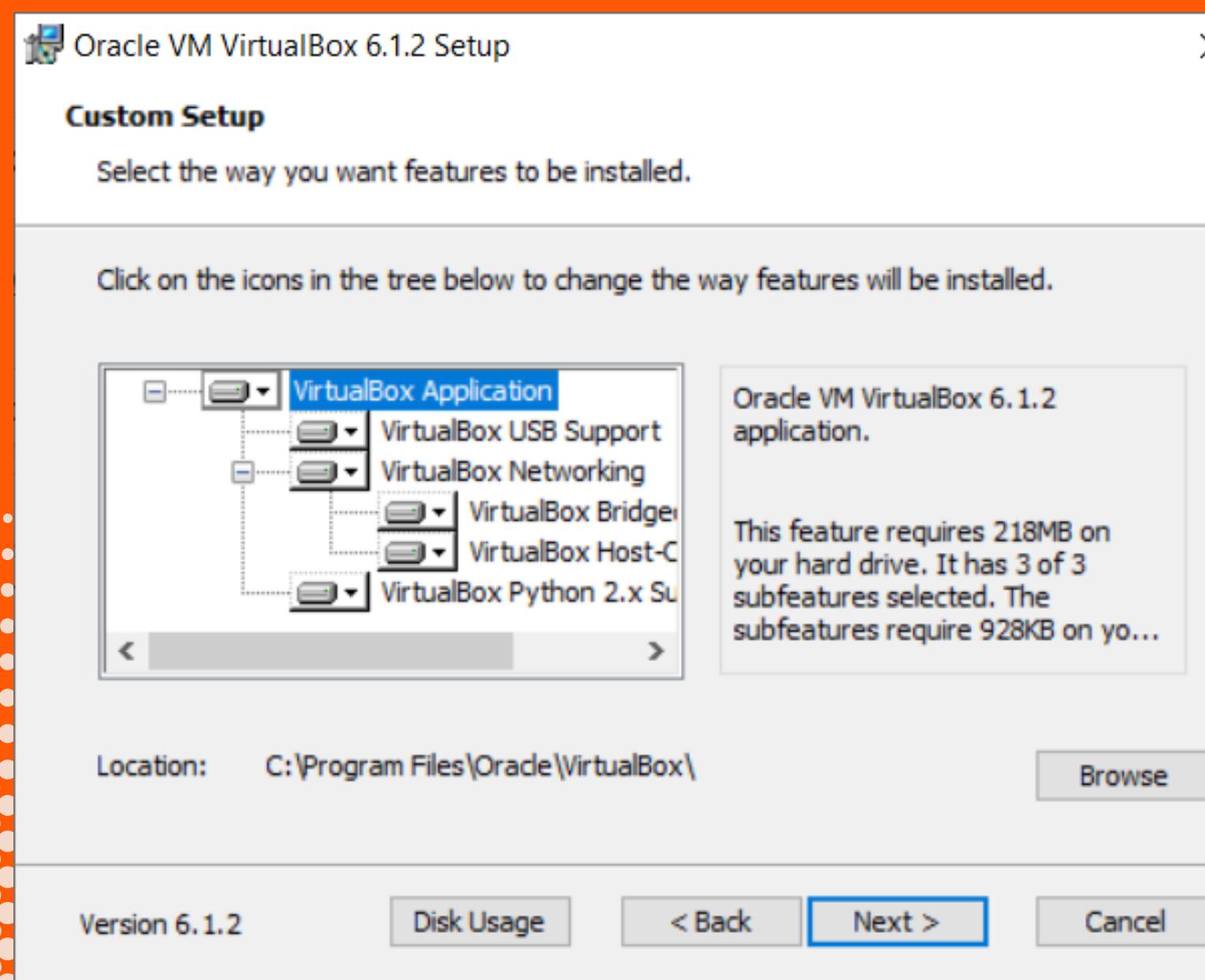
Visit the official Ubuntu website ([Ubuntu](#)) and download the ISO file for the Ubuntu Desktop edition.



The screenshot shows the official Ubuntu website. The header includes links for "We are hiring", "Products", "Search", and "Sign in". The main navigation bar has tabs for "Downloads" (which is selected and highlighted in orange), "Desktop", "Server", "IoT", and "Cloud". Below the navigation, there is a section titled "Download Ubuntu Desktop" with a sub-section "Ubuntu Desktop homepage". A note below the title says: "The open-source desktop operating system that powers millions of PCs and laptops around the world. Find out more about Ubuntu's features and how we support developers and organisations below." There are also links for "Visit the Ubuntu Desktop blog" and "Ubuntu Desktop 7.0.14".

STEP 3: INSTALL VIRTUAL BOX

Once the VirtualBox installer is downloaded, double-click on it and follow the on-screen instructions to install VirtualBox on your system.



STEP 4:

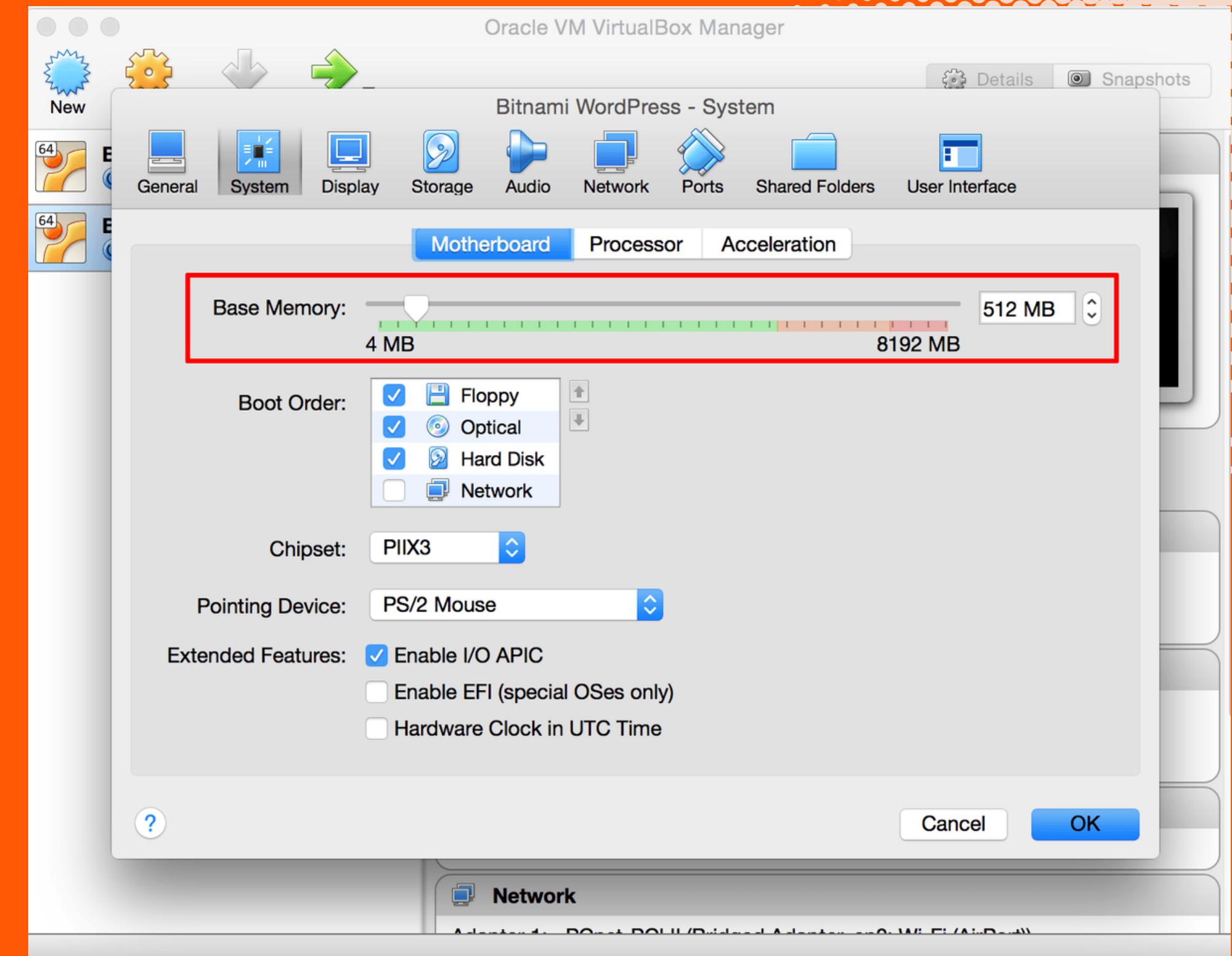
CREATE A NEW VIRTUAL MACHINE

- Launch VirtualBox.
- Click on the "New" button in the toolbar.
- Enter a name for your virtual machine (e.g., Ubuntu).
- Choose "Linux" as the type.
- Choose "Ubuntu (64-bit)" as the version (assuming you downloaded the 64-bit Ubuntu ISO).
- Click "Next."

STEP 5:

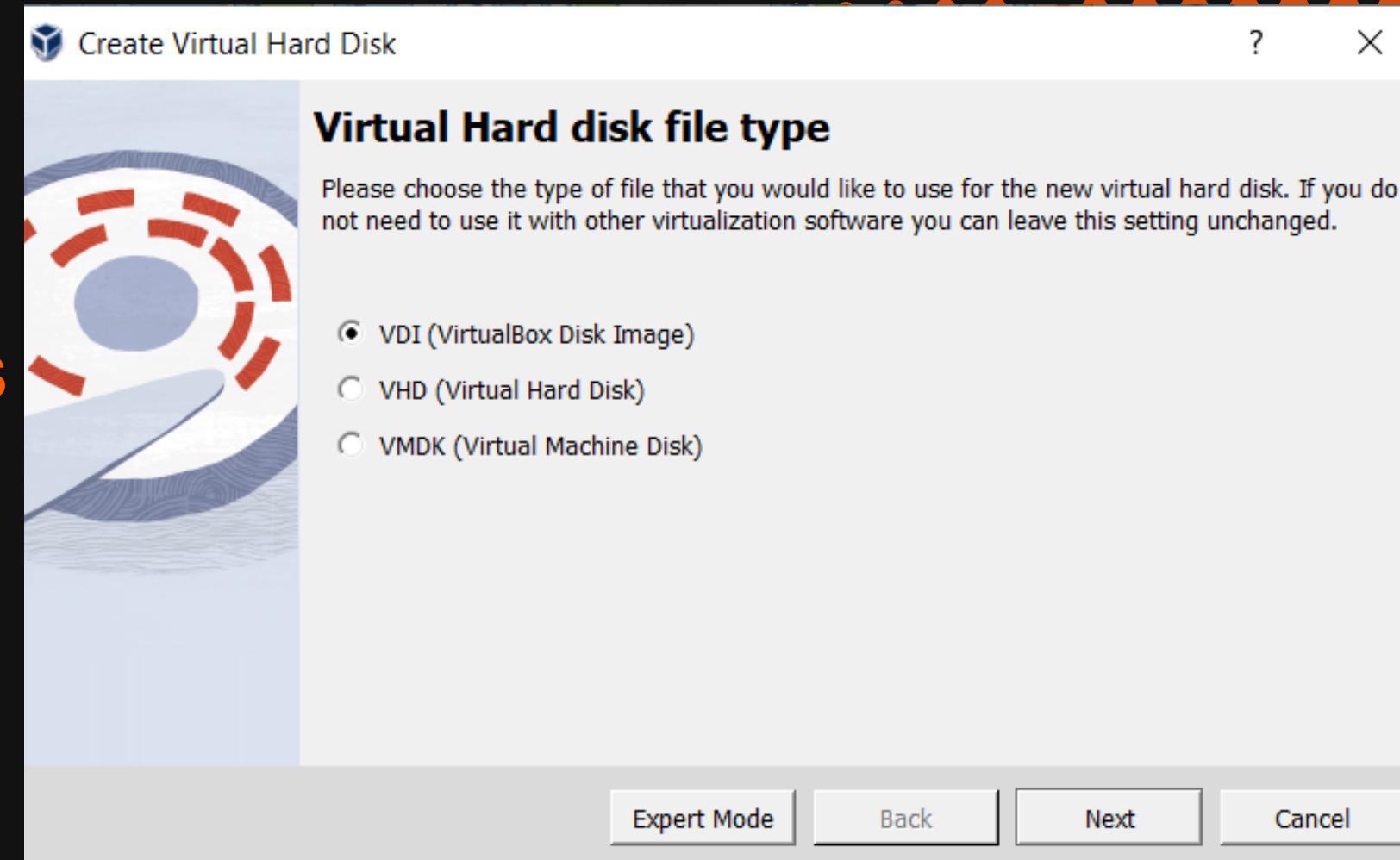
ALLOCATE MEMORY (RAM)

- Choose the amount of RAM to allocate to your virtual machine. Ubuntu generally runs well with at least 2 GB of RAM. Adjust as necessary based on your system's resources.
- Click "Next."



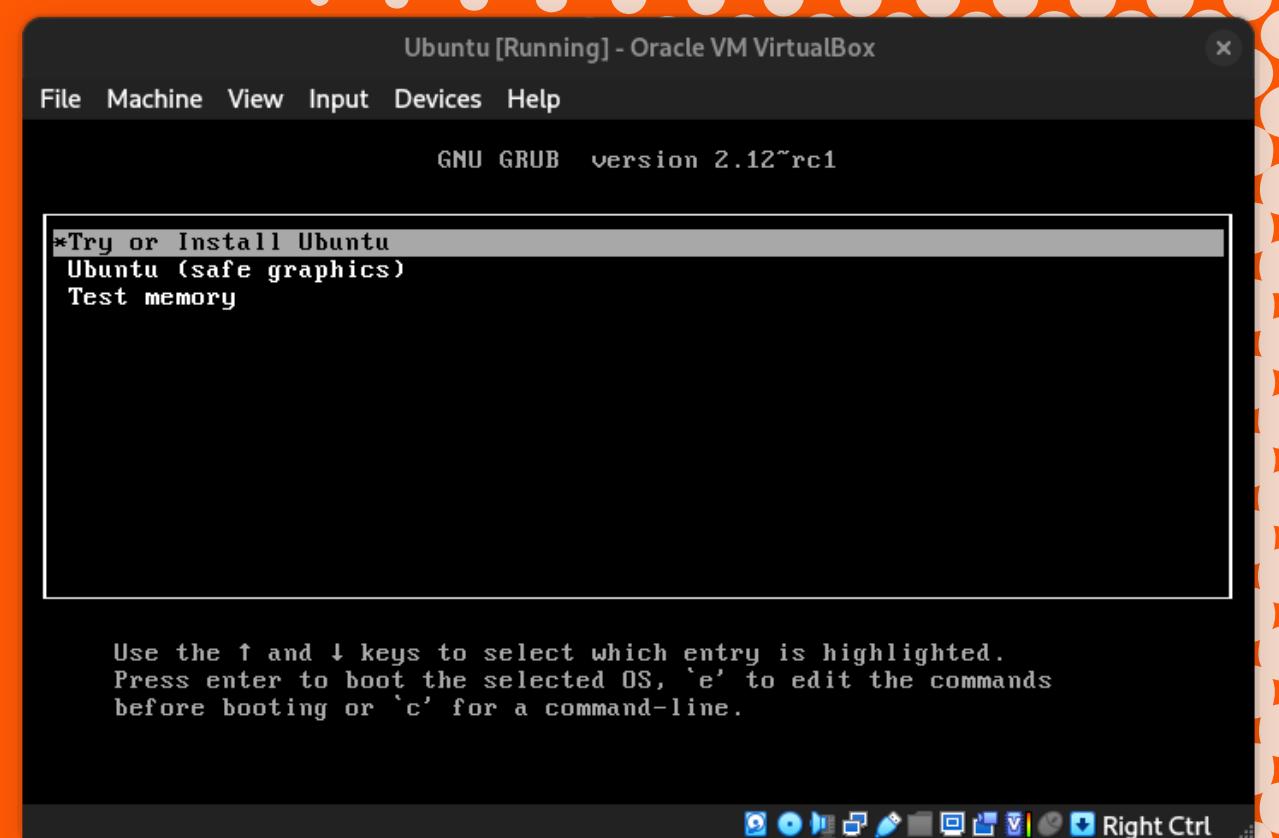
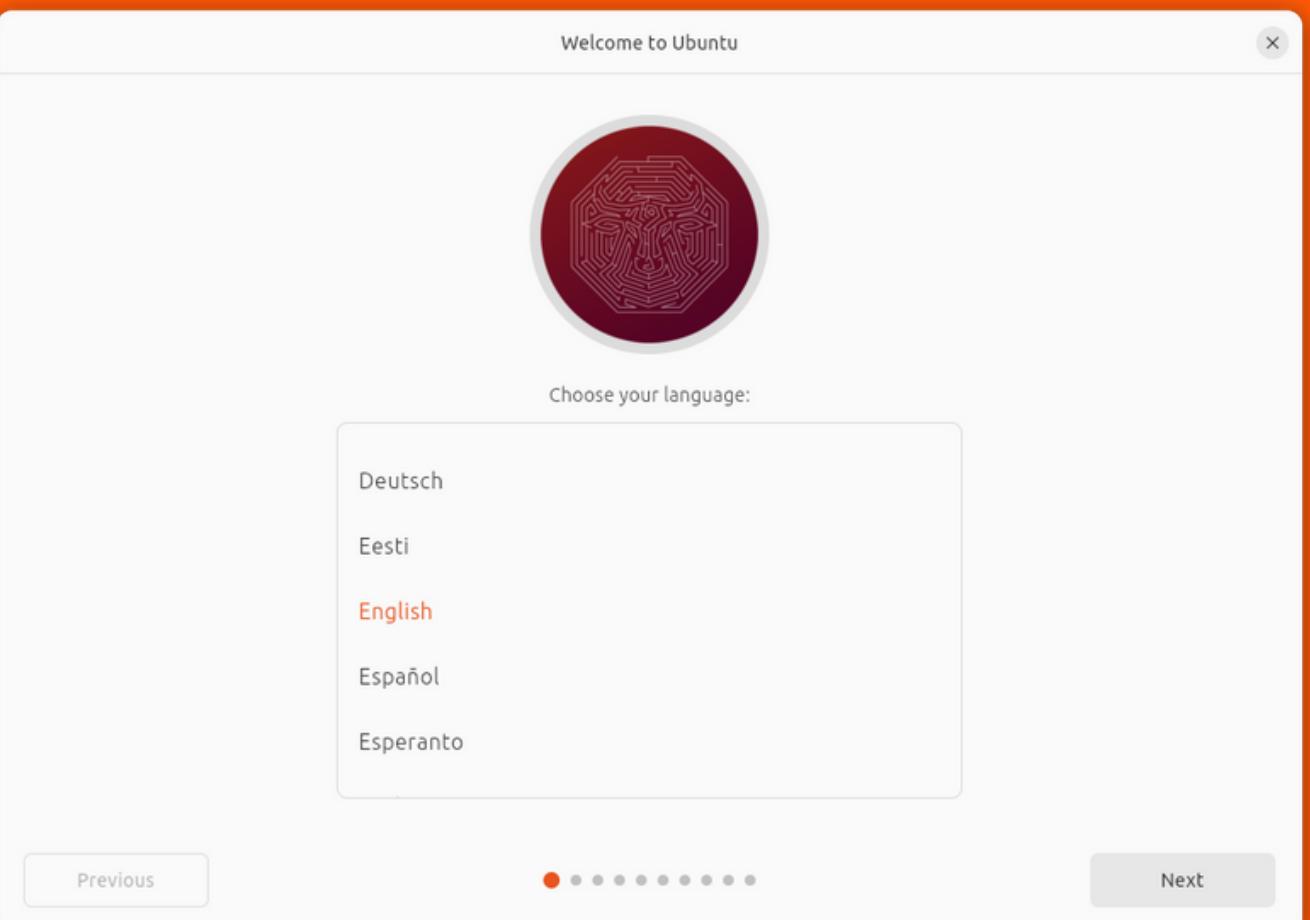
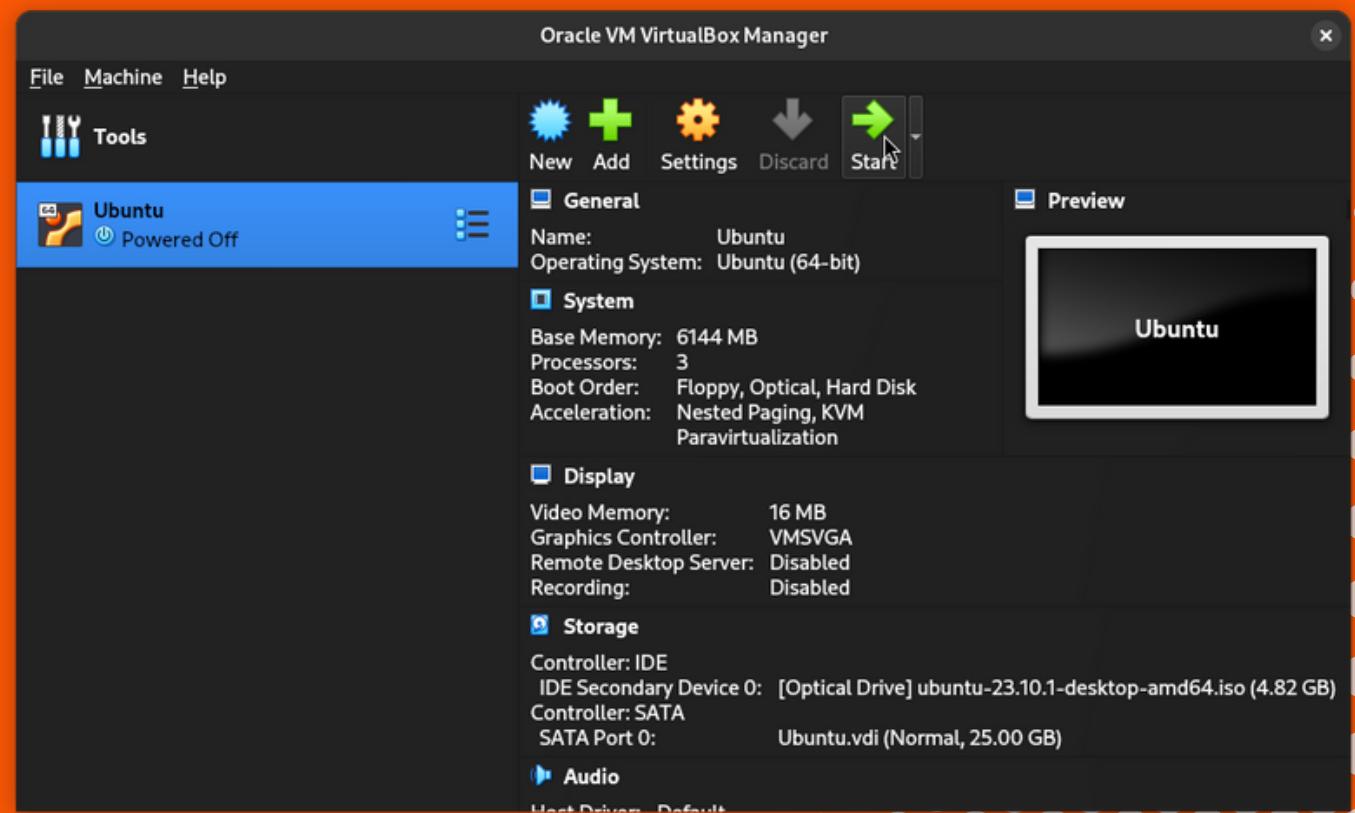
STEP 6: CREATE A VIRTUAL HARD DISK

- Choose "Create a virtual hard disk now" and click "Create."
- Select the hard disk file type (usually VDI).
- Choose whether to allocate dynamically or fixed size. Dynamic allocation uses space as needed, while fixed size immediately reserves the allocated space on your physical disk.
- Choose the size of the virtual hard disk. At least 20 GB is recommended for Ubuntu.
- Click "Create."



STEP 7: START THE VIRTUAL MACHINE

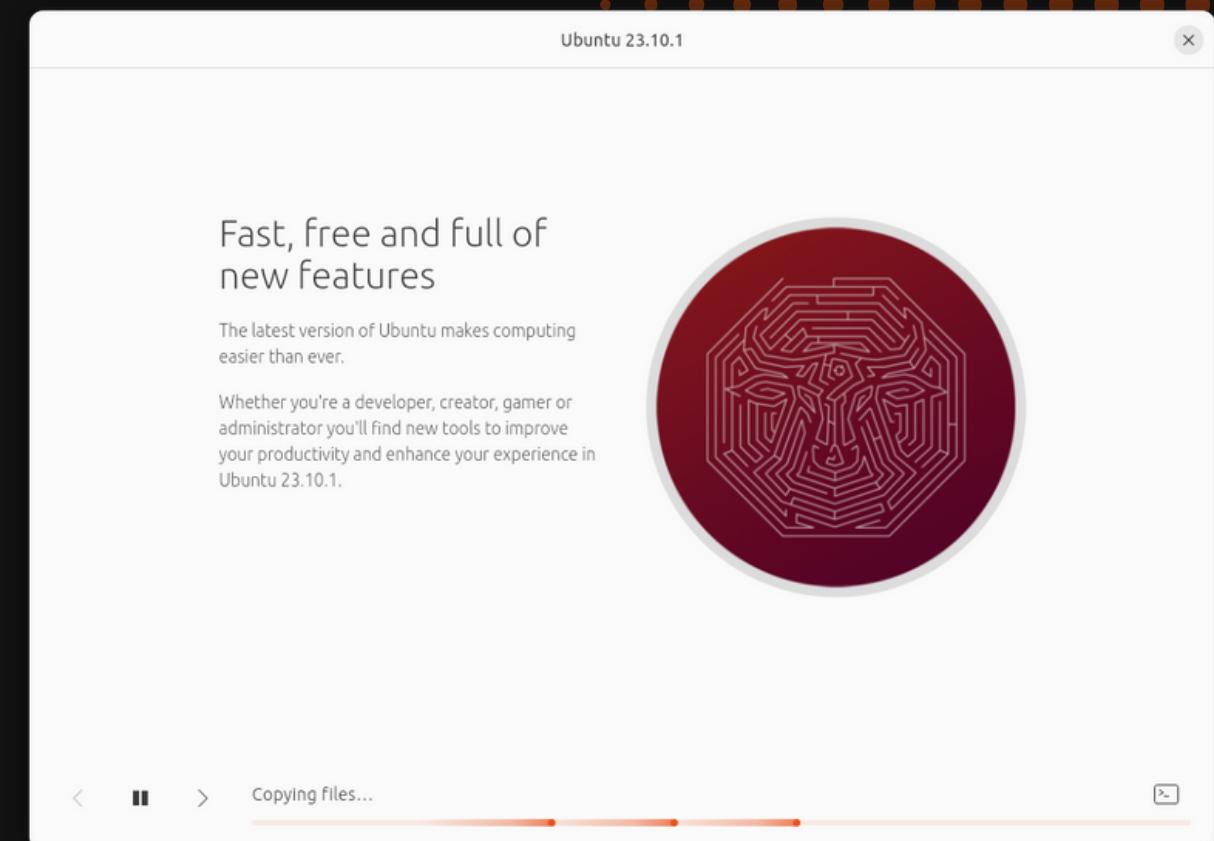
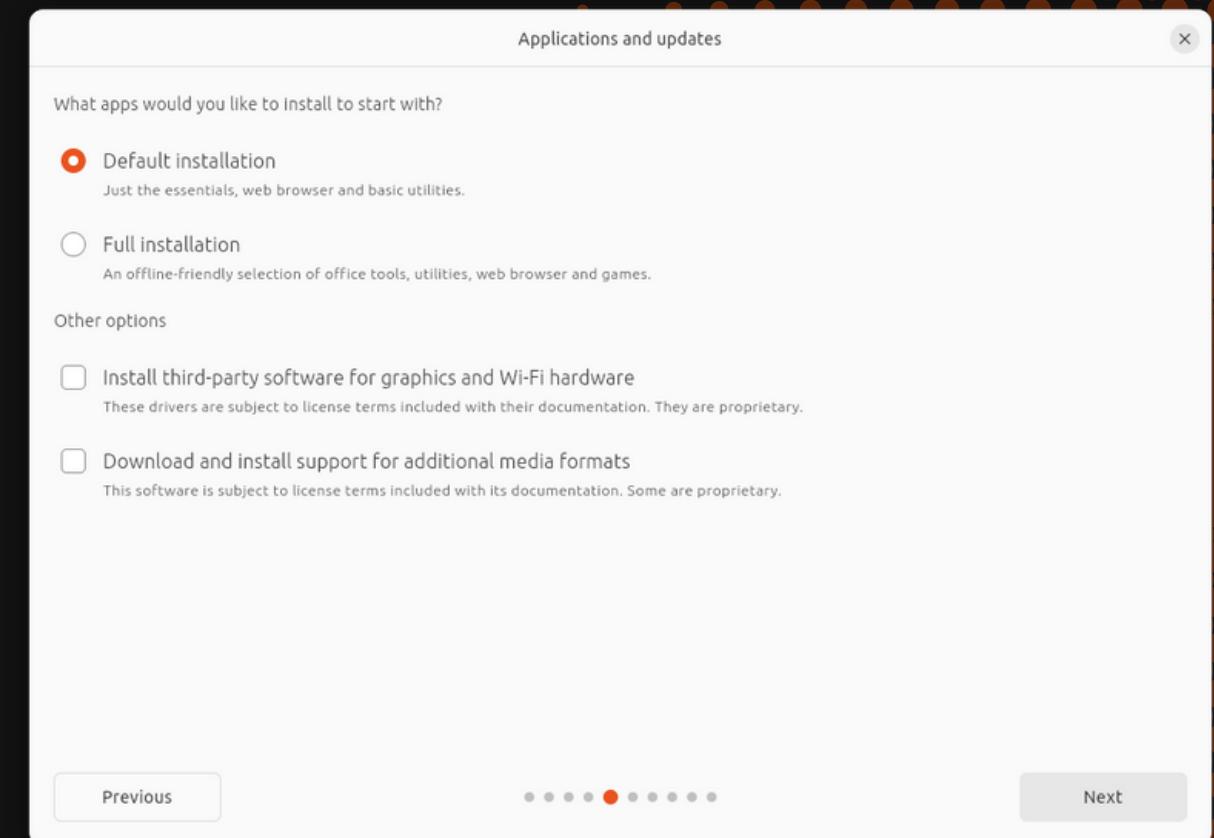
- With your virtual machine selected in VirtualBox, click "Start."
- The Ubuntu installation process should begin, and you'll boot into the Ubuntu installer.



STEP 8:

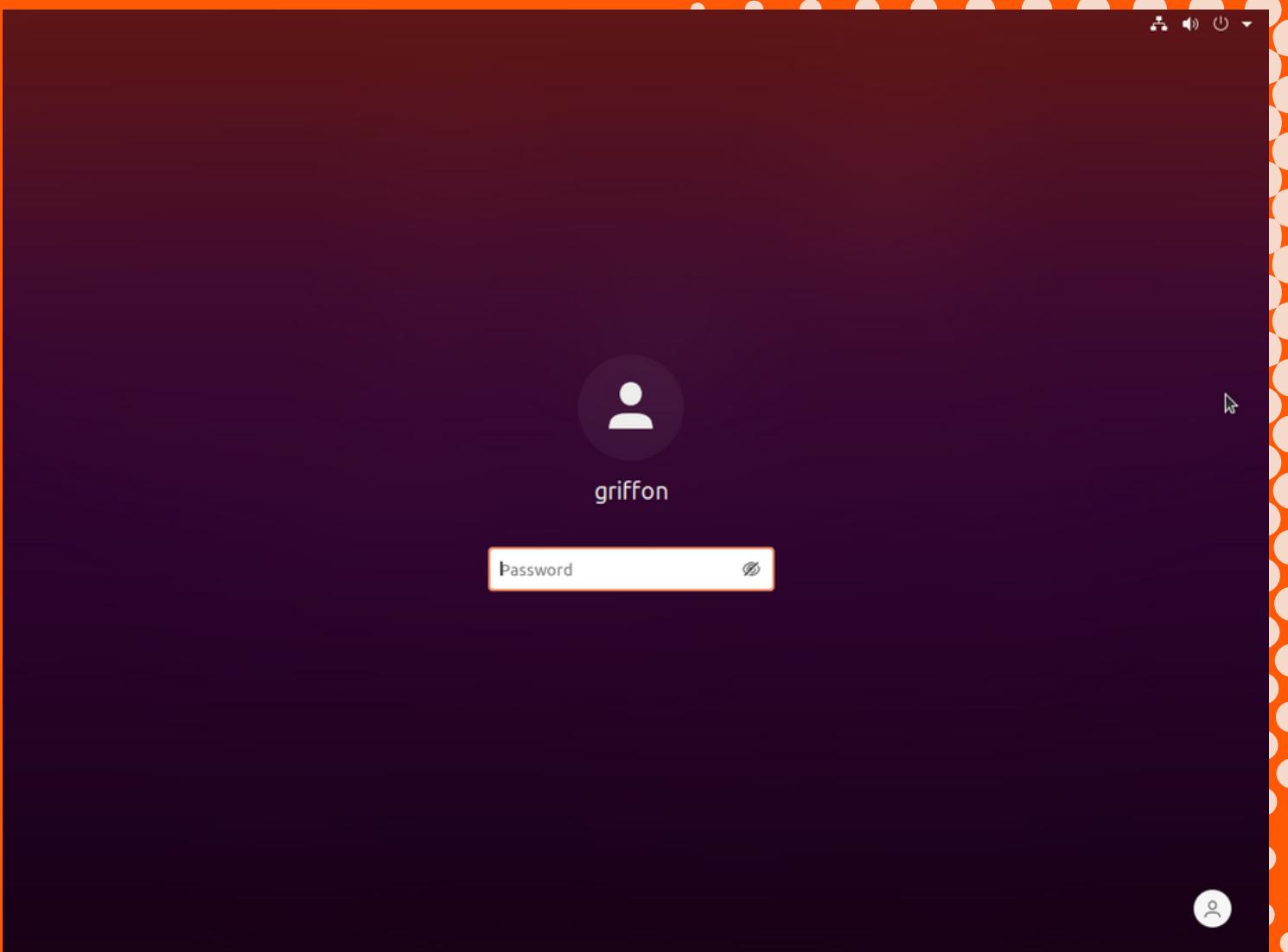
INSTALL UBUNTU:

- Follow the on-screen instructions provided by the Ubuntu installer.
- Choose your language and click "Install Ubuntu."
- Follow the prompts to select your keyboard layout, connect to a network, and choose installation options.
- When prompted, choose to install Ubuntu alongside VirtualBox's virtual disk.
- Create a user account and set up your password.
- Once the installation is complete, restart your virtual machine.



STEP 9: FINALIZE UBUNTU INSTALLATION:

- After restarting, Ubuntu will boot up.
- Log in with the user account you created during the installation process.



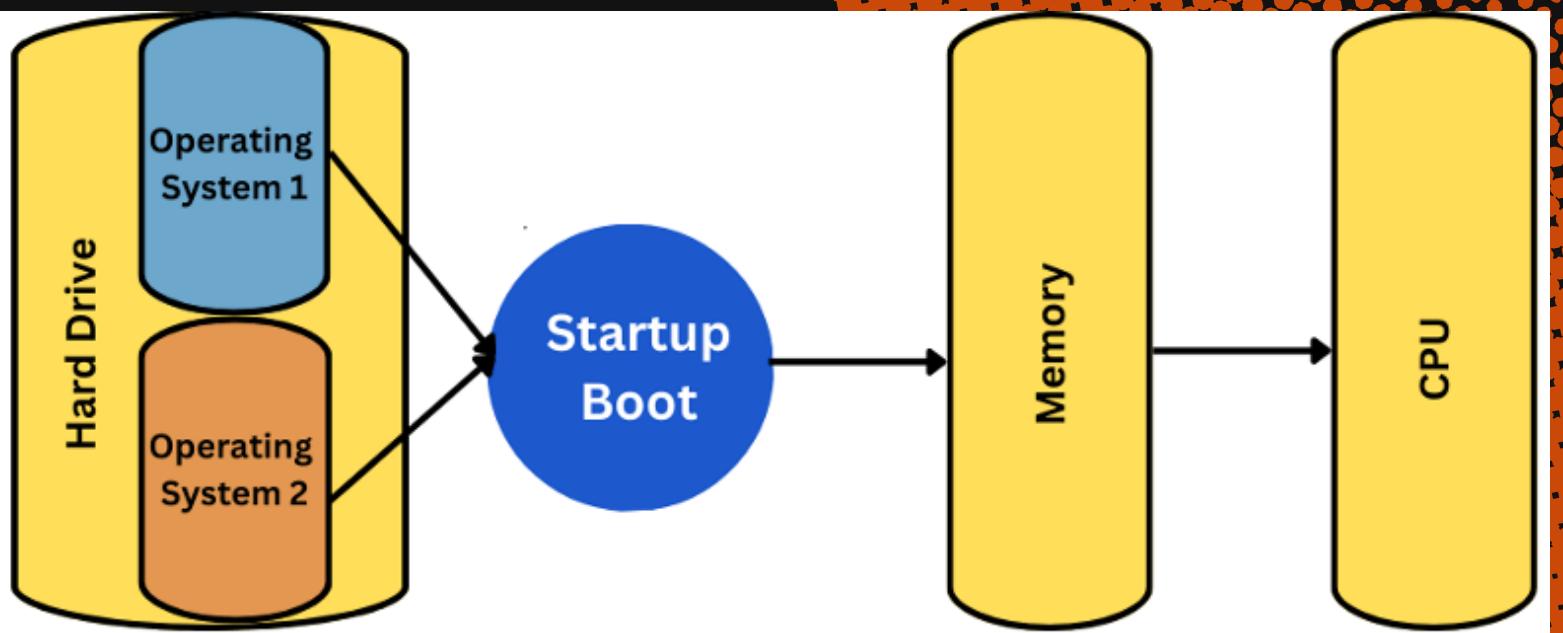
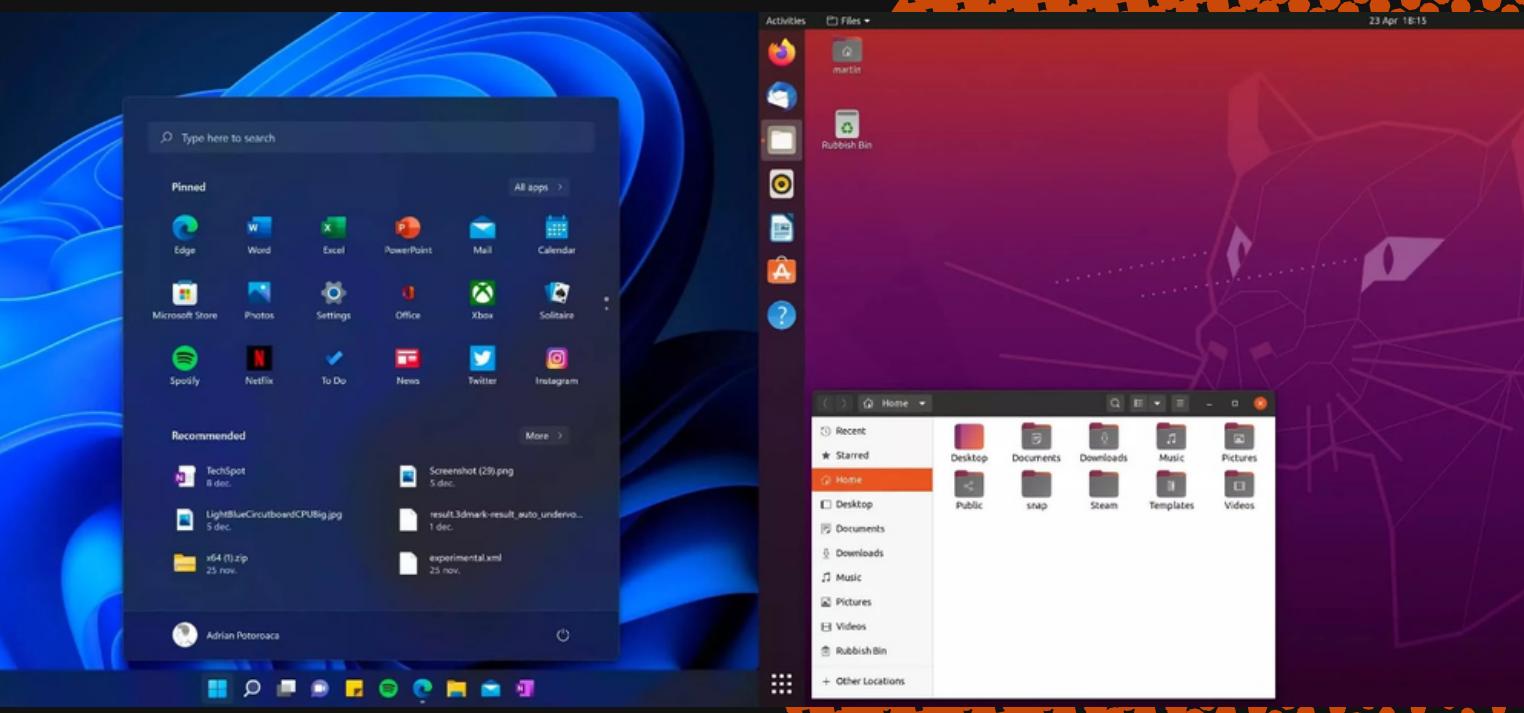
INSTALL LINUX ALONGSIDE WINDOWS

Dual Booting ? 🤔

In most operating systems, there is only one built-in OS, but in some machines, there is a possibility to operate on two operating systems simultaneously. The process of using two OS simultaneously on a single machine is called dual booting. This enables the user to switch between the operating systems depending on the tasks and programs that the user performs.

Benefit

- Avoid compatibility issues and conflicts
- Use native drivers and features of each operating system
- Access different system resources
- Quickly access the active operating system



SECTION 1:

ENSURE HAVING A BACKUP:

Before making any changes to your system, it's crucial to back up all important data to prevent data loss in case of any unexpected issues during the installation process.

BACKUP METHODS:

Utilize external hard drives, cloud storage, or dedicated backup software to create a comprehensive backup of your files.

SECTION 2:

STEP 1:

SELECTING THE LINUX DISTRIBUTION

Choose a Linux distribution that aligns with your preferences and requirements, such as Ubuntu, Linux Mint, or Fedora. But today we will install Ubuntu on our operating systems because it's also beginner-friendly and has a large and active community of users and developers.



Ubuntu

STEP 2:

DOWNLOADING THE ISO FILE:

Obtain the ISO file of any Distro you like from the official website or a trusted source.

Since we are installing Ubuntu Distro therefore, you can visit this link for the ISO file :

<https://ubuntu.com/download/desktop>

The screenshot shows the Ubuntu download page with two main sections:

- Ubuntu 22.04.3 LTS:** This section includes:
 - A purple circular icon with a white bird logo.
 - The text "Ubuntu 22.04.3 LTS".
 - A paragraph about the LTS version: "The latest LTS version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years of free security and maintenance updates, guaranteed until April 2027."
 - [Ubuntu 22.04 LTS release notes](#).
 - A "Recommended system requirements" list:
 - 2 GHz dual-core processor or better
 - 4 GB system memory
 - 25 GB of free hard drive space
 - Internet access is helpful
 - Either a DVD drive or a USB port for the installer media
 - A green "Download 22.04.3" button.
 - A note at the bottom: "For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors and past releases see our [alternative downloads](#)."
- Ubuntu 23.10:** This section includes:
 - A dark red circular icon with a white geometric logo.
 - The text "Ubuntu 23.10".
 - A paragraph about the latest version: "The latest version of the Ubuntu operating system for desktop PCs and laptops, Ubuntu 23.10 comes with nine months of security and maintenance updates, until July 2024."
 - [Ubuntu 23.10 release notes](#).
 - A green "Download 23.10" button.
 - A note at the bottom: "For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors and past releases see our [alternative downloads](#)."

STEP 3:

CREATING A BOOTABLE USB:

- Use dedicated software like Rufus to create a bootable USB drive with the downloaded ISO file.

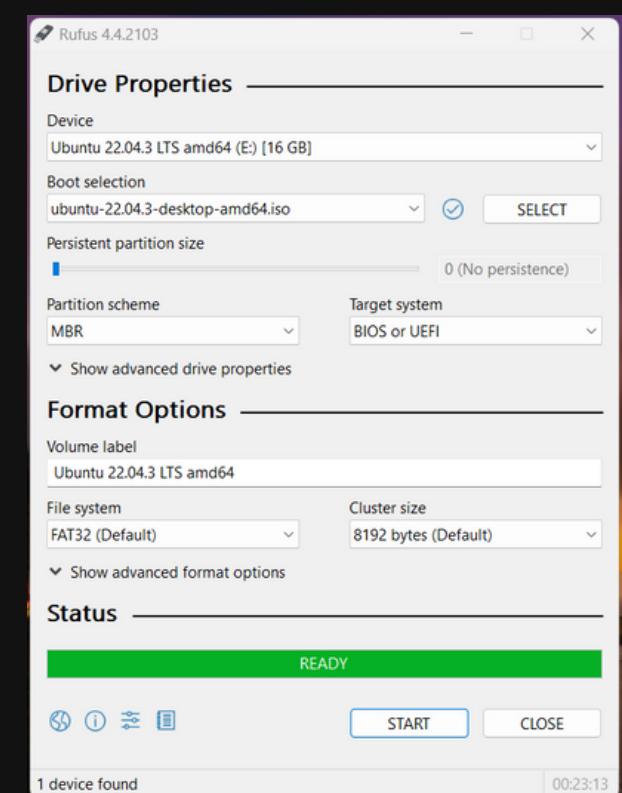
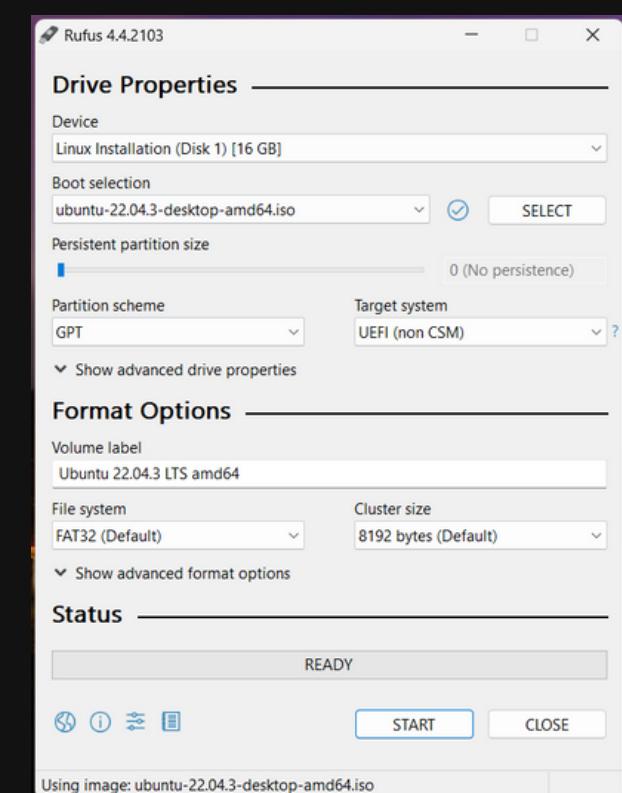
Link for the Rufus Application:

<https://github.com/pbatard/rufus/releases/download/v4.4/rufus-4.4.exe>

Steps to Create a Bootable USB Drive:

- Insert USB Drive:** Insert your USB drive into a USB port on your computer. Make sure it has enough space to accommodate the operating system or software you want to make bootable.
- Open Rufus:** Run the Rufus executable file that you downloaded.
- Select USB Drive:** In Rufus, it should automatically detect your USB drive. If you have multiple USB drives connected, make sure you select the correct one from the drop-down menu under "Device".

- Select Bootable Image:** Under "Boot selection", click on the "SELECT" button and navigate to the location where your bootable image file (ISO file) is stored. Select the file and click "Open".
- Volume Label:** You can optionally give your USB drive a volume label for easy identification.
- Start:** Once you've configured all the settings, click on the "START" button. A warning might appear stating that all data on the USB drive will be erased. Confirm and proceed.
- Wait for the creation of the bootable USB drive.**
- Done:** Once Rufus has finished creating the bootable USB drive, you'll see a "READY" message.

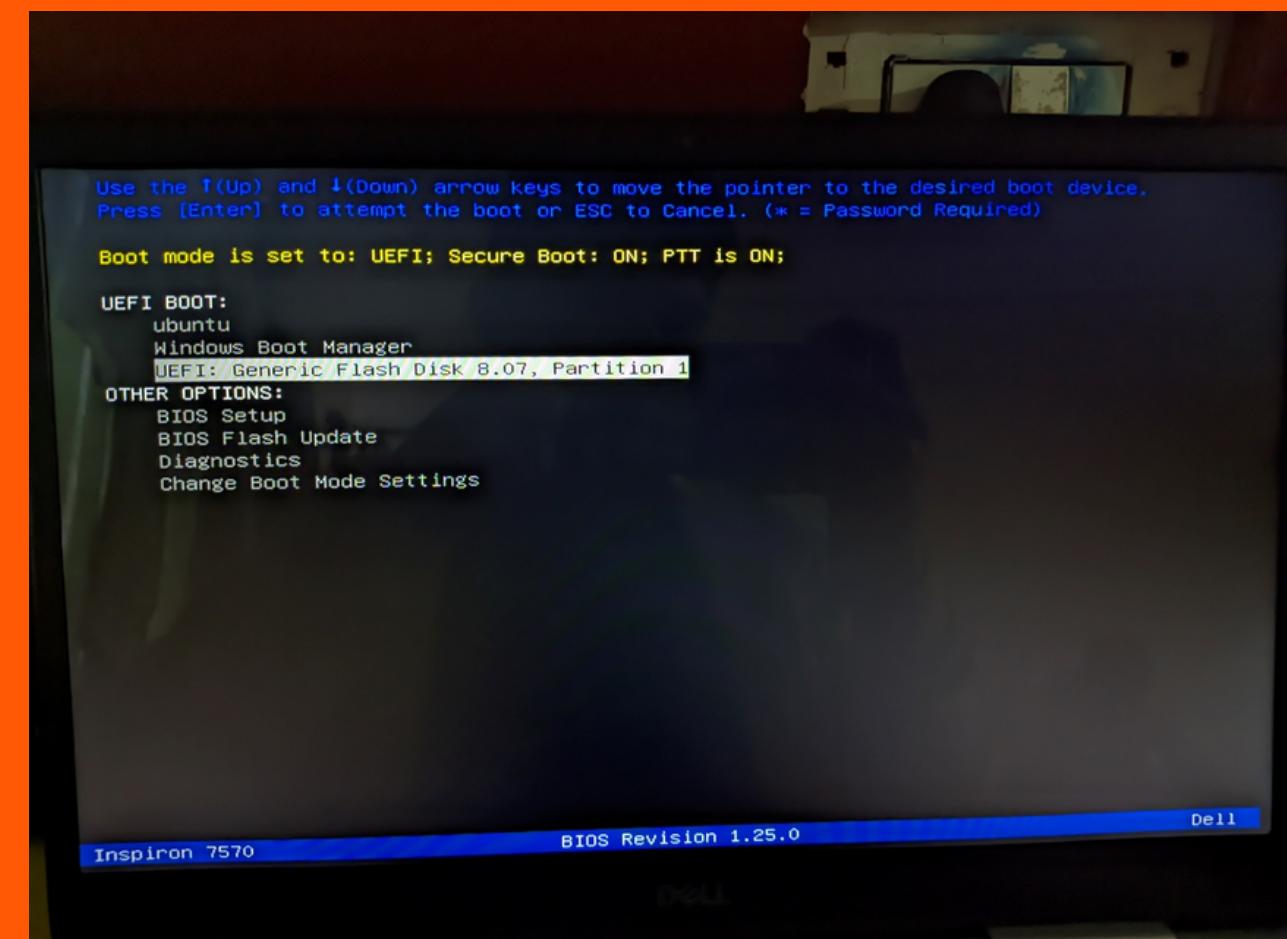
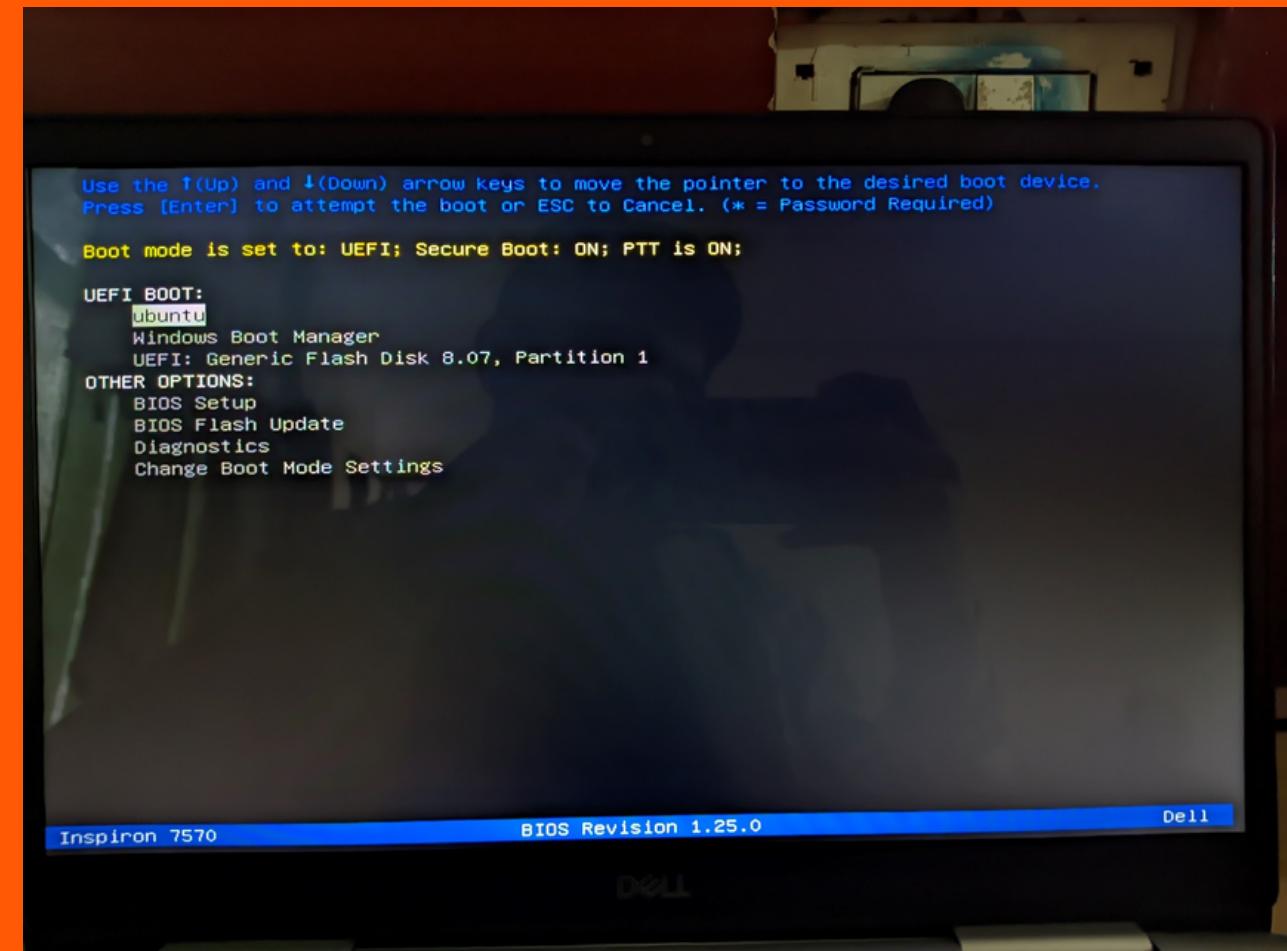


SECTION 3:

BOOTING FROM THE USB DRIVE

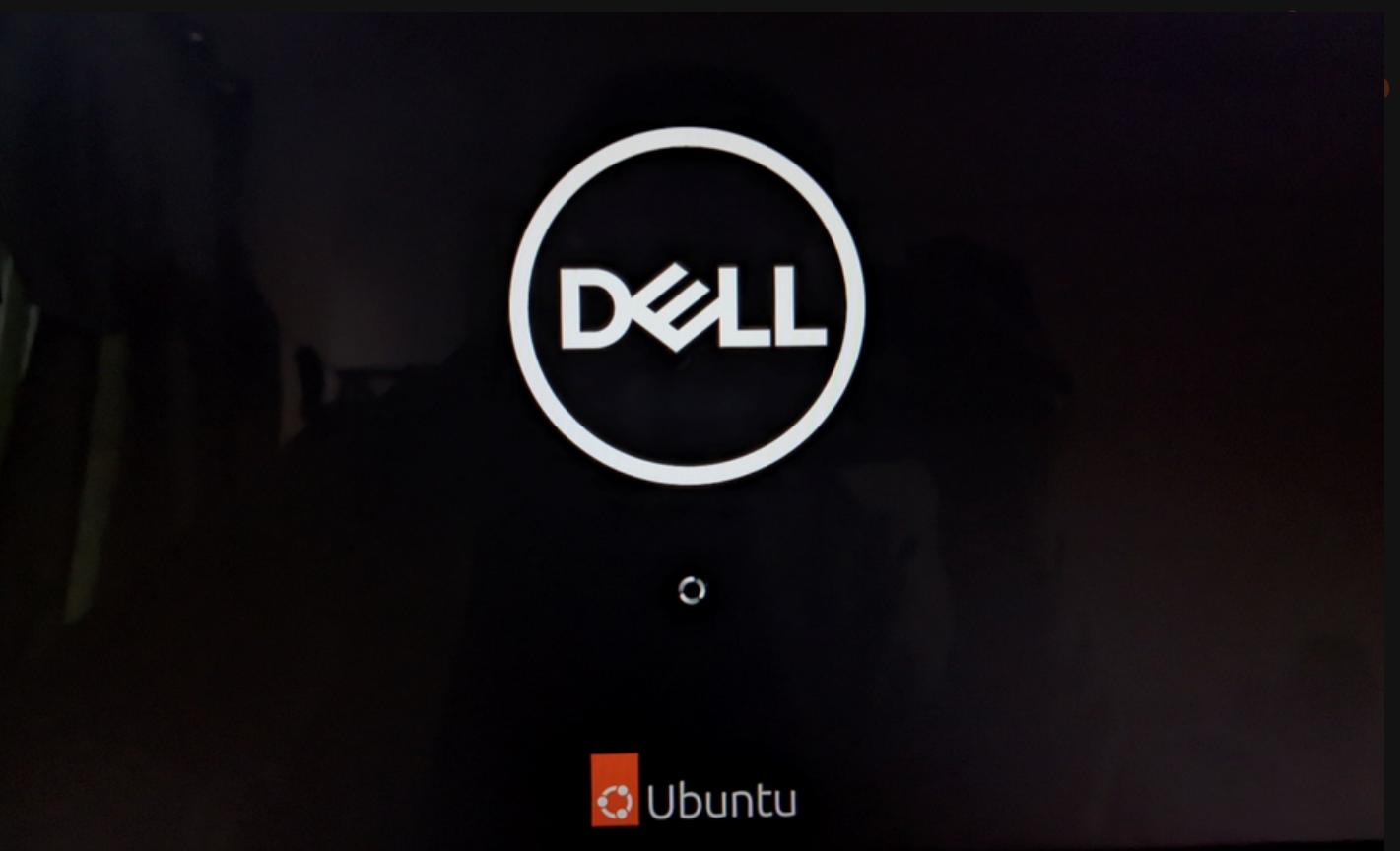
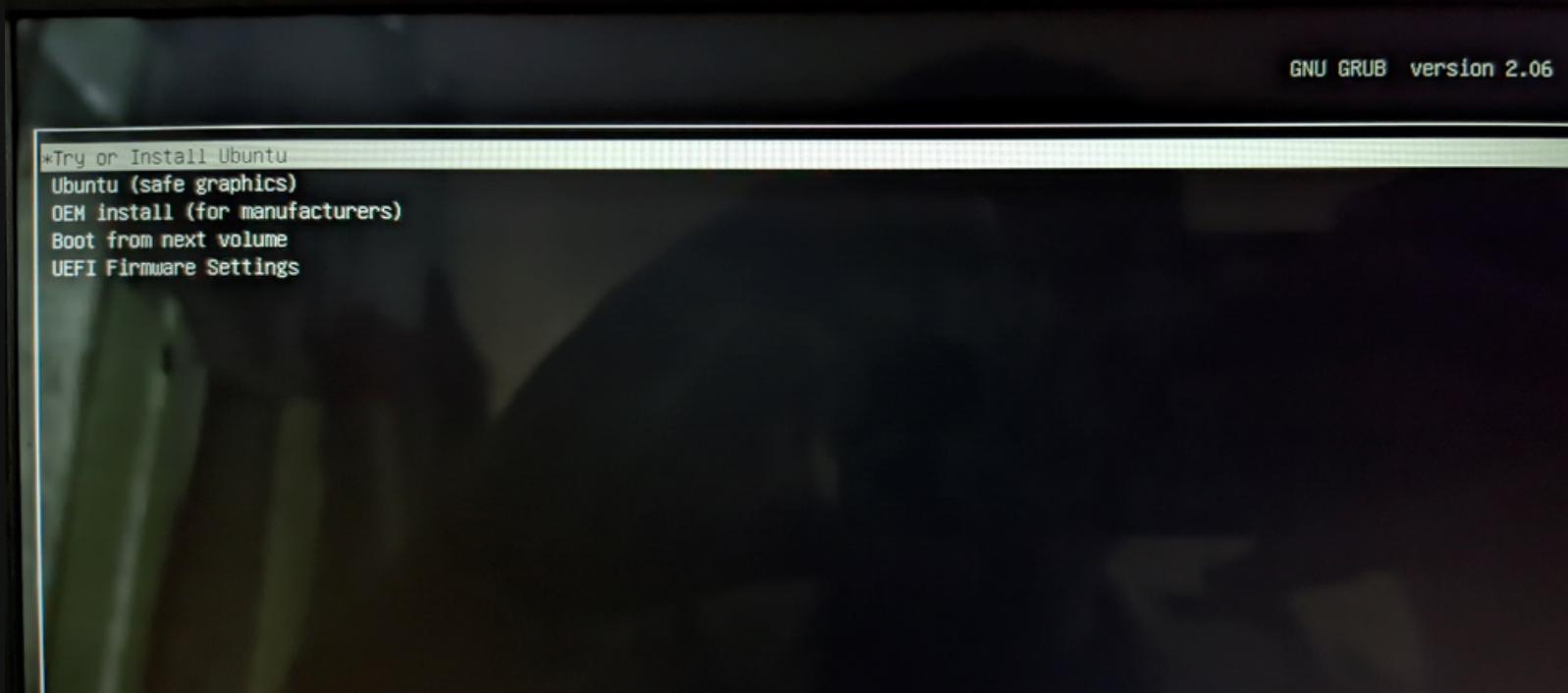
Accessing BIOS/UEFI Settings

Restart the computer and access the BIOS or UEFI settings by pressing the designated key during the startup process. BOOTING FROM THE USB DRIVE.



Setting Boot Priority

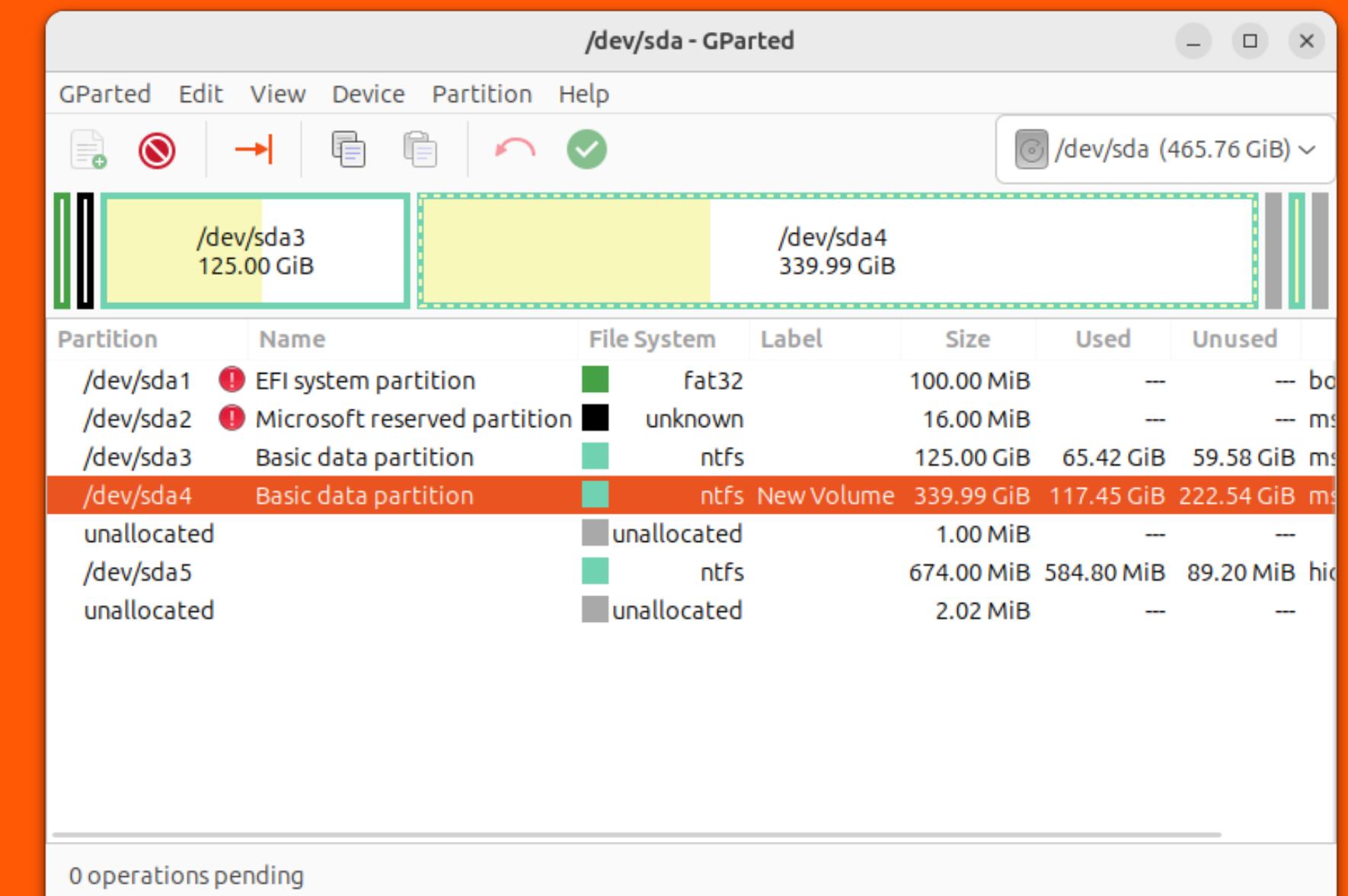
- Select the TRY OR INSTALL option on the grub boot menu displayed on the screen and click ENTER.
- Now you will be booting into the live boot image of the Ubuntu Distro. and the installation windows will pop up.



Adjusting Disk Partitioning

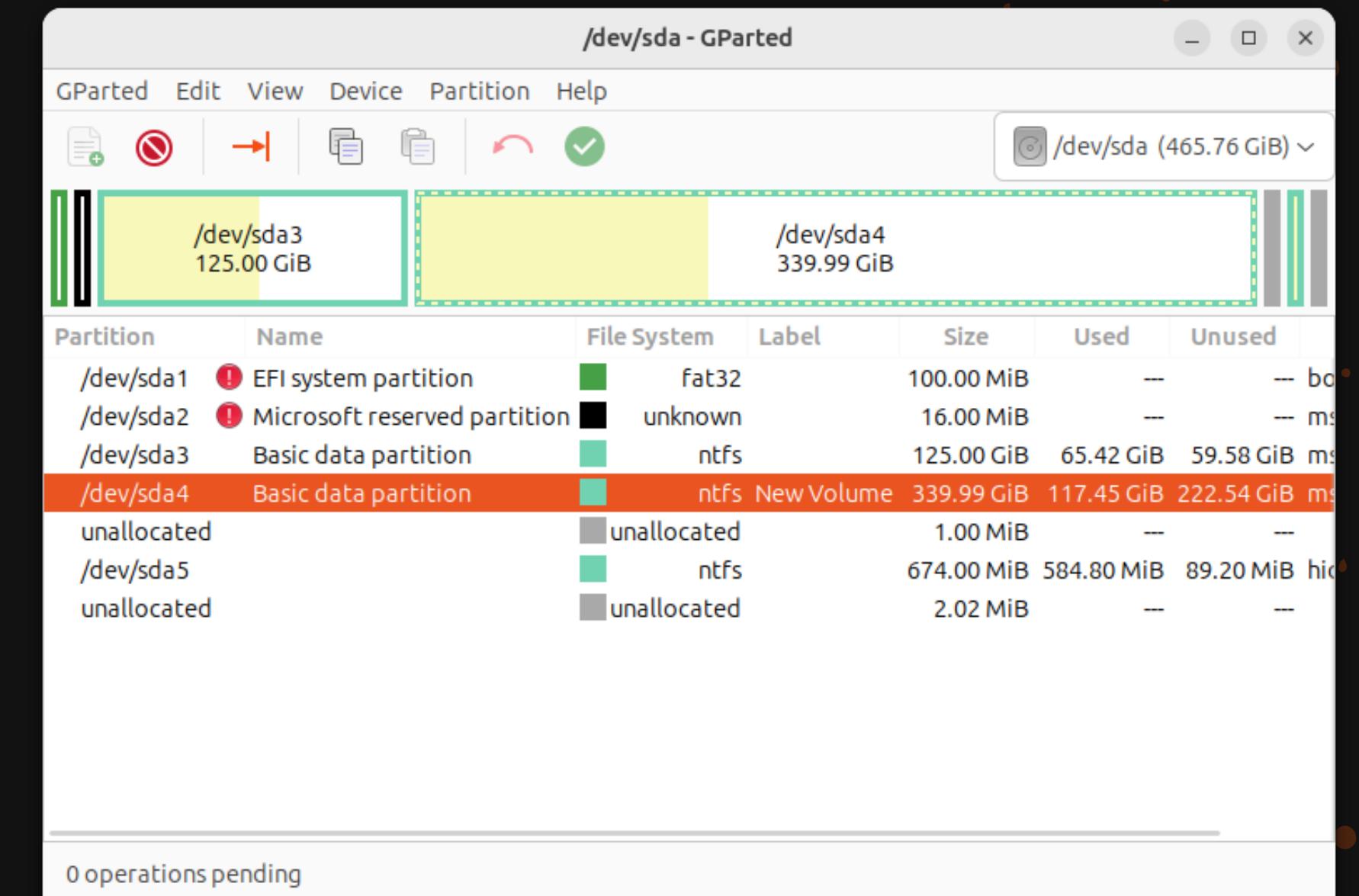
Understanding Disk Partitioning:

Familiarize yourself with the concept of disk partitioning and the allocation of storage space for each operating system.



Resizing Windows Partition

- Use the Disk Management tool in Ubuntu to shrink the existing partition and create unallocated space for the Linux installation.
- And for Ubuntu we will be giving around 60 GB of Free Space.
- But Ubuntu requires minimum of 20 GB of space so you can give any amount of space as per your Disk space.

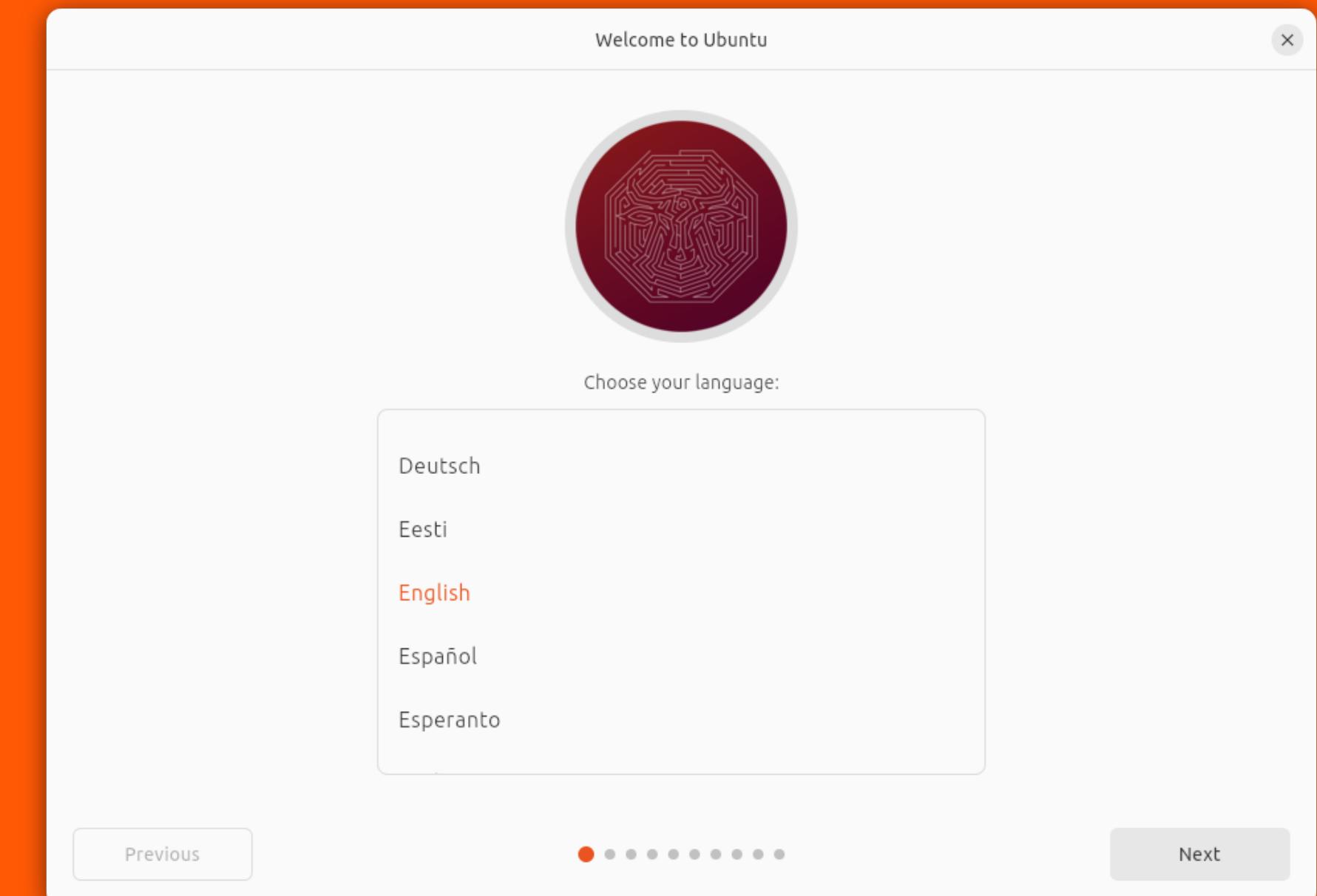


SECTION 4: INITIATING THE INSTALLATION PROCESS

STEP 1:

Starting the Installation Wizard

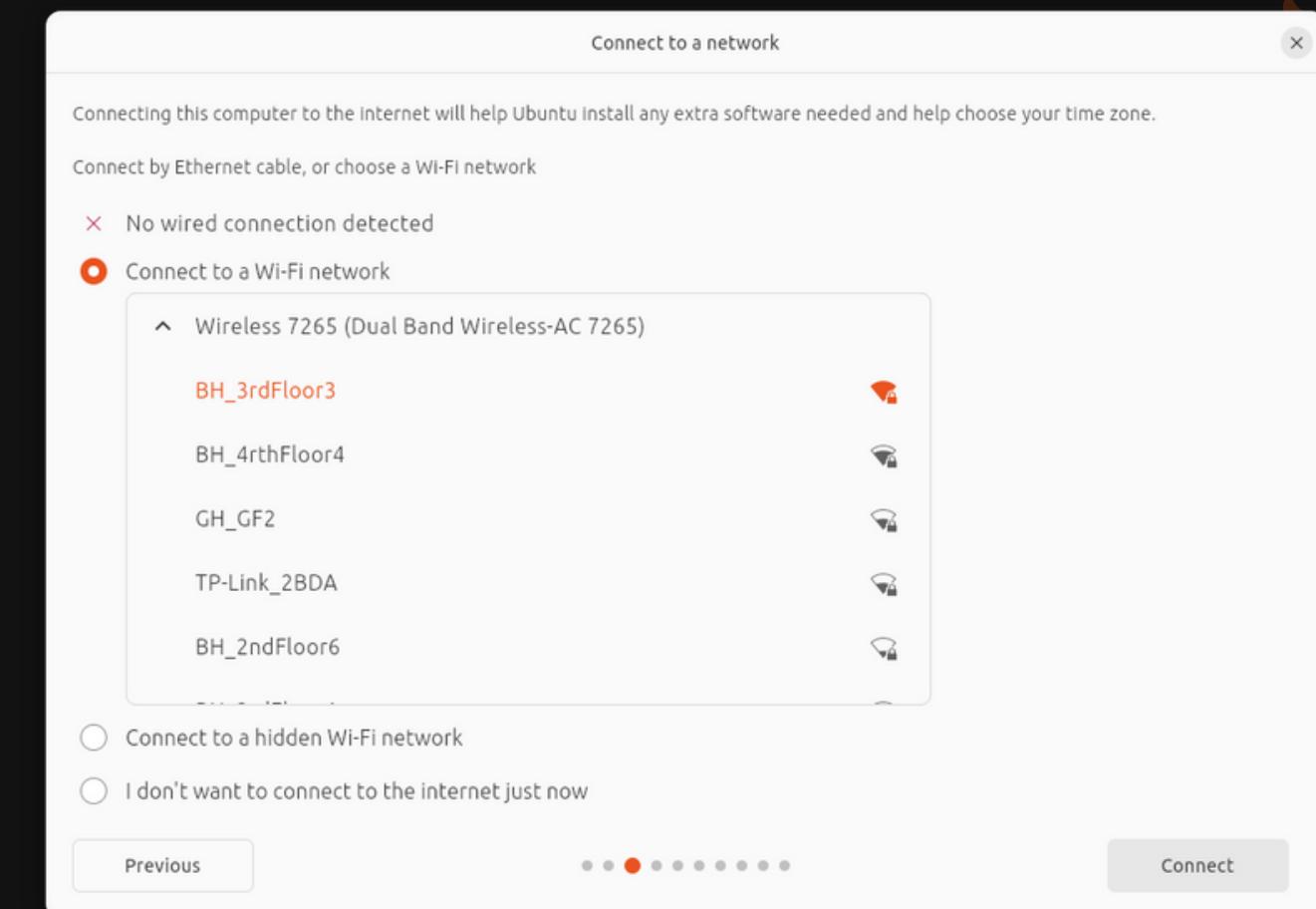
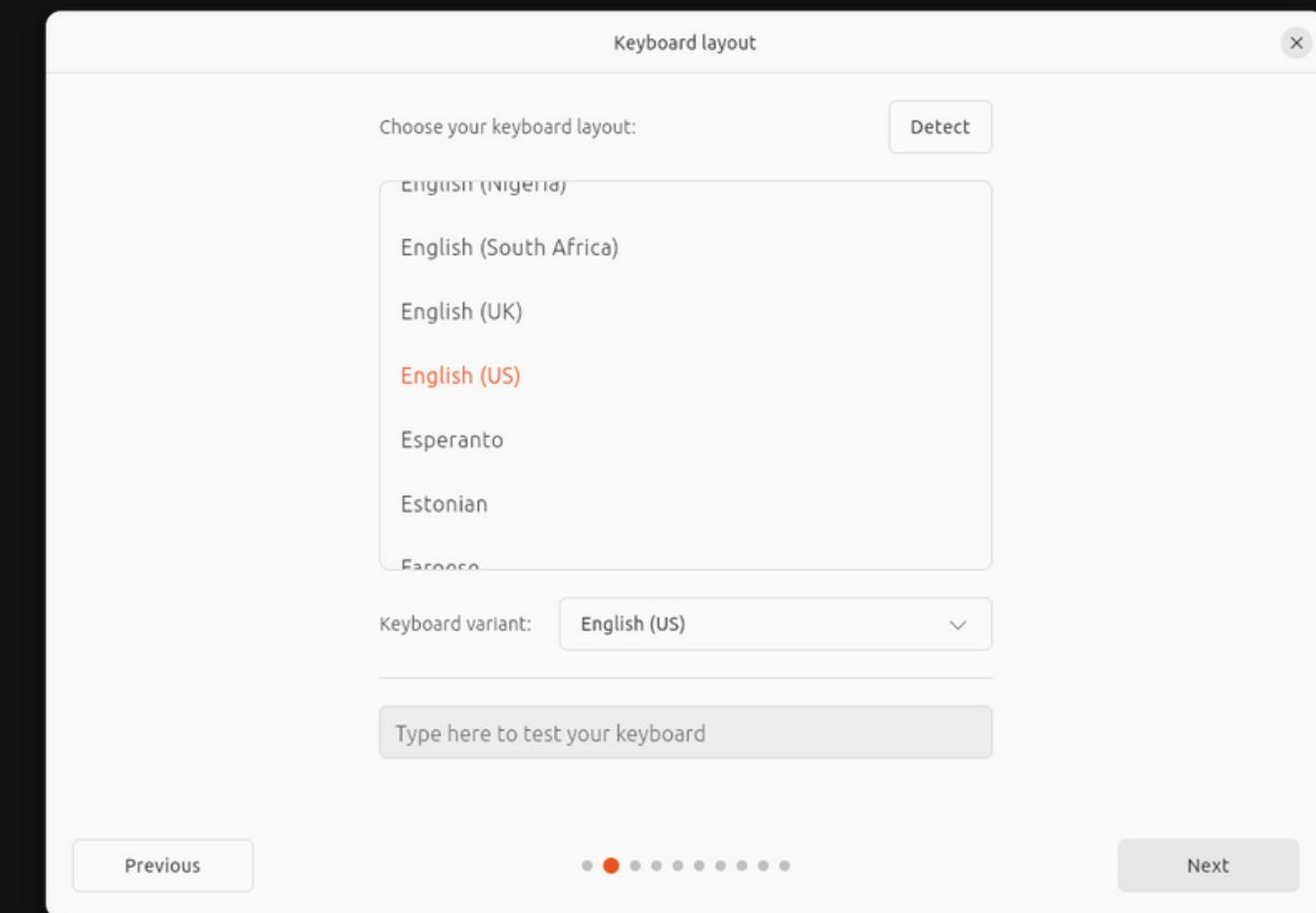
- Launch the installation wizard from the live environment.
- And the installation wizard will pop up on the live boot Linux screen.
- Now, you just have to select the language of your choice and carry on with the installation.



STEP 2:

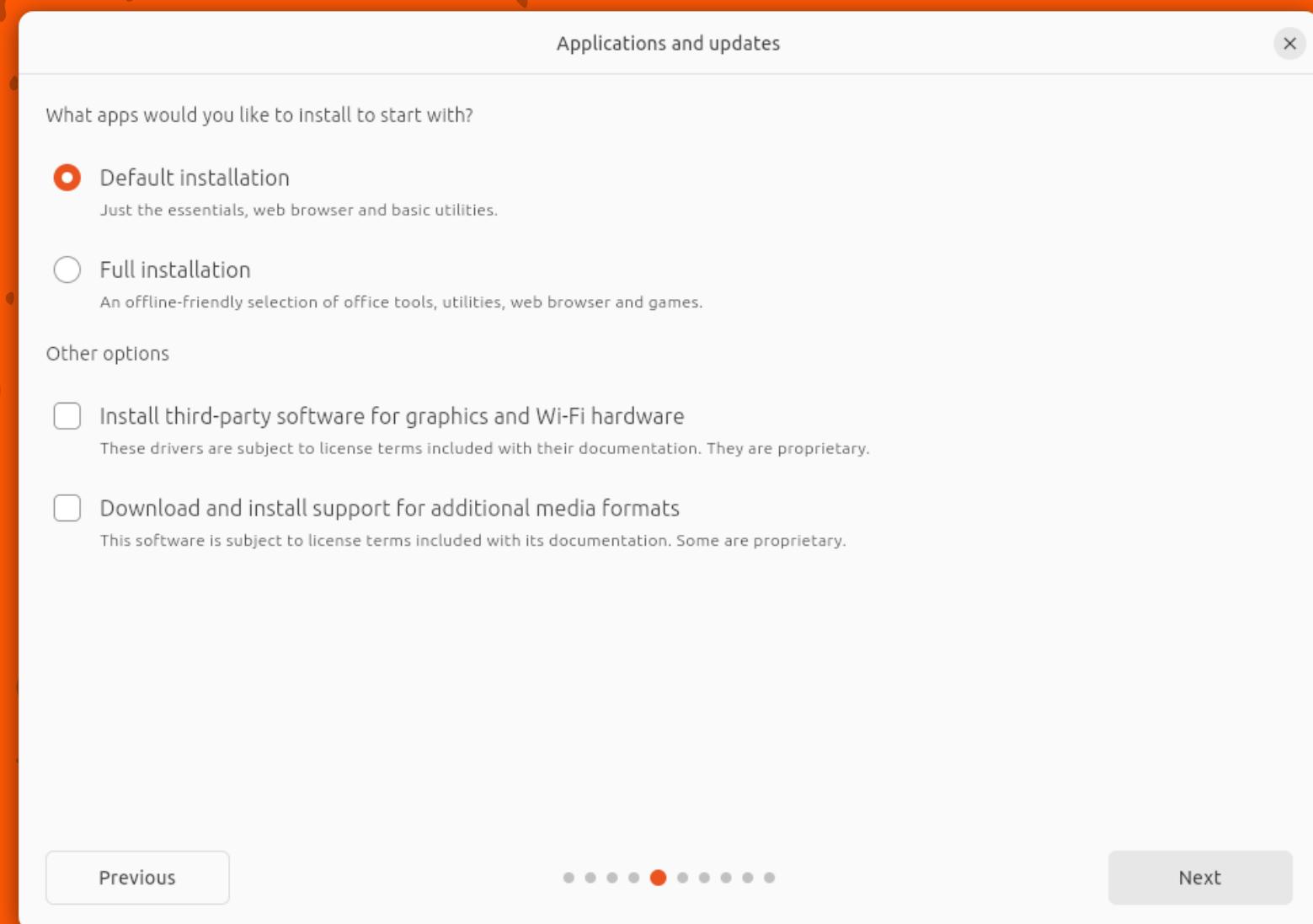
Selecting Installation Options

- Choose the preferred language, keyboard layout, and other regional settings before proceeding with the installation.
- After selecting your desired options in the installation wizard just click on NEXT.



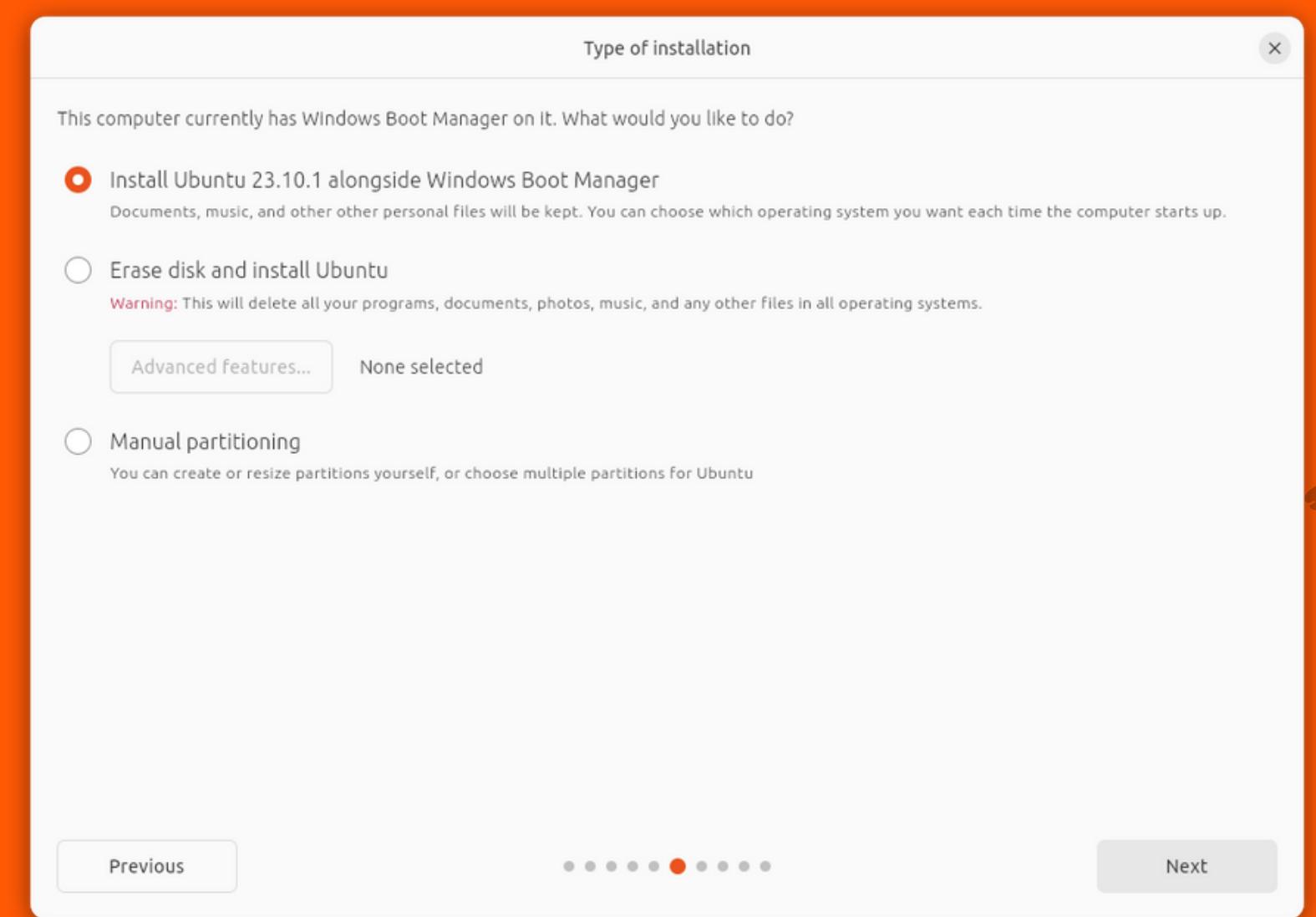
STEP 3:

- Select the Default Installation option in the menu.
- And if you have a Discrete Graphics card on your laptop than Check the Install third party software option under other options.



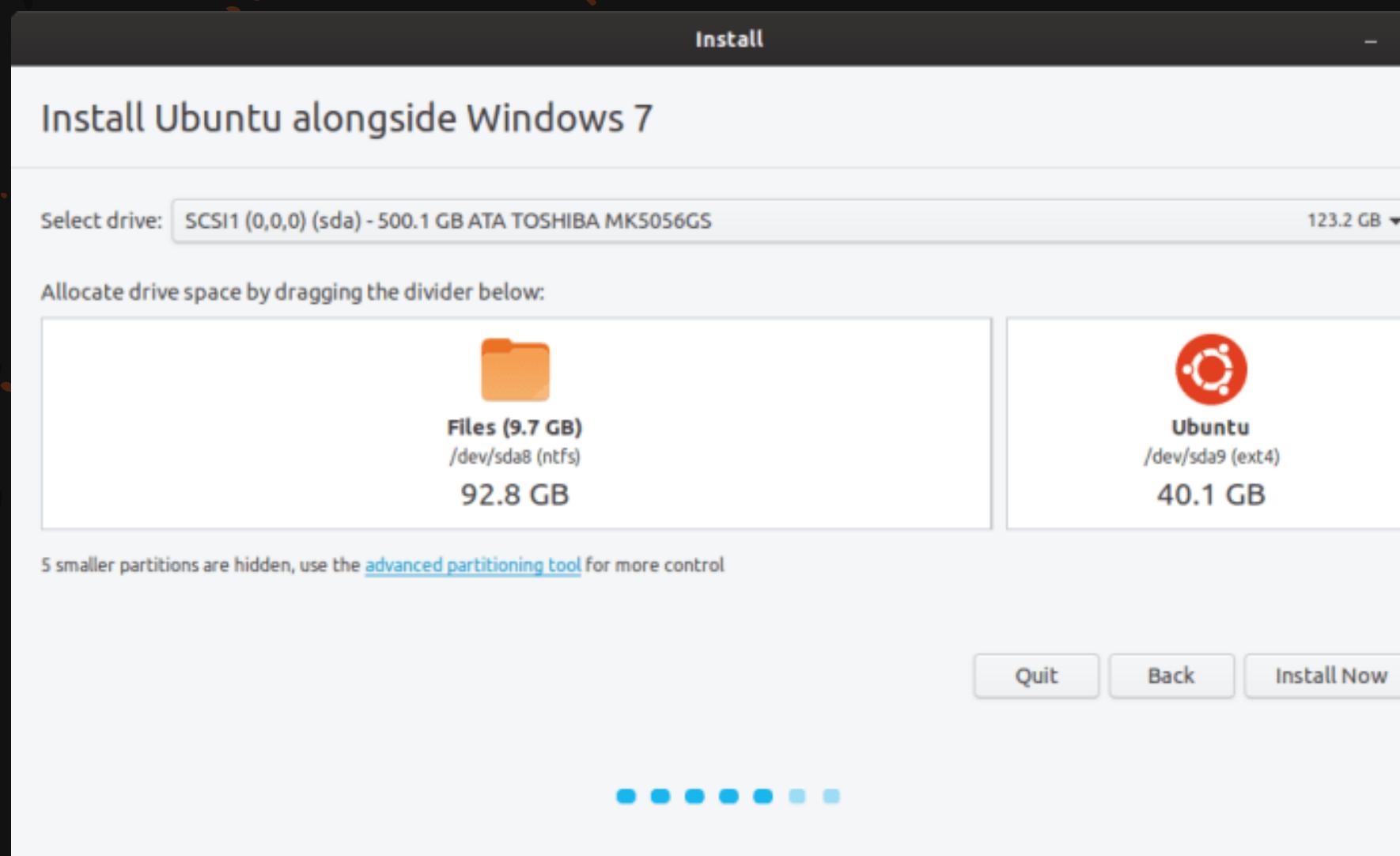
STEP 4:

- Since, we need to install Linux alongside Windows so we have to select the first option that says, "Install Ubuntu 23.10 alongside Windows Boot Manager."



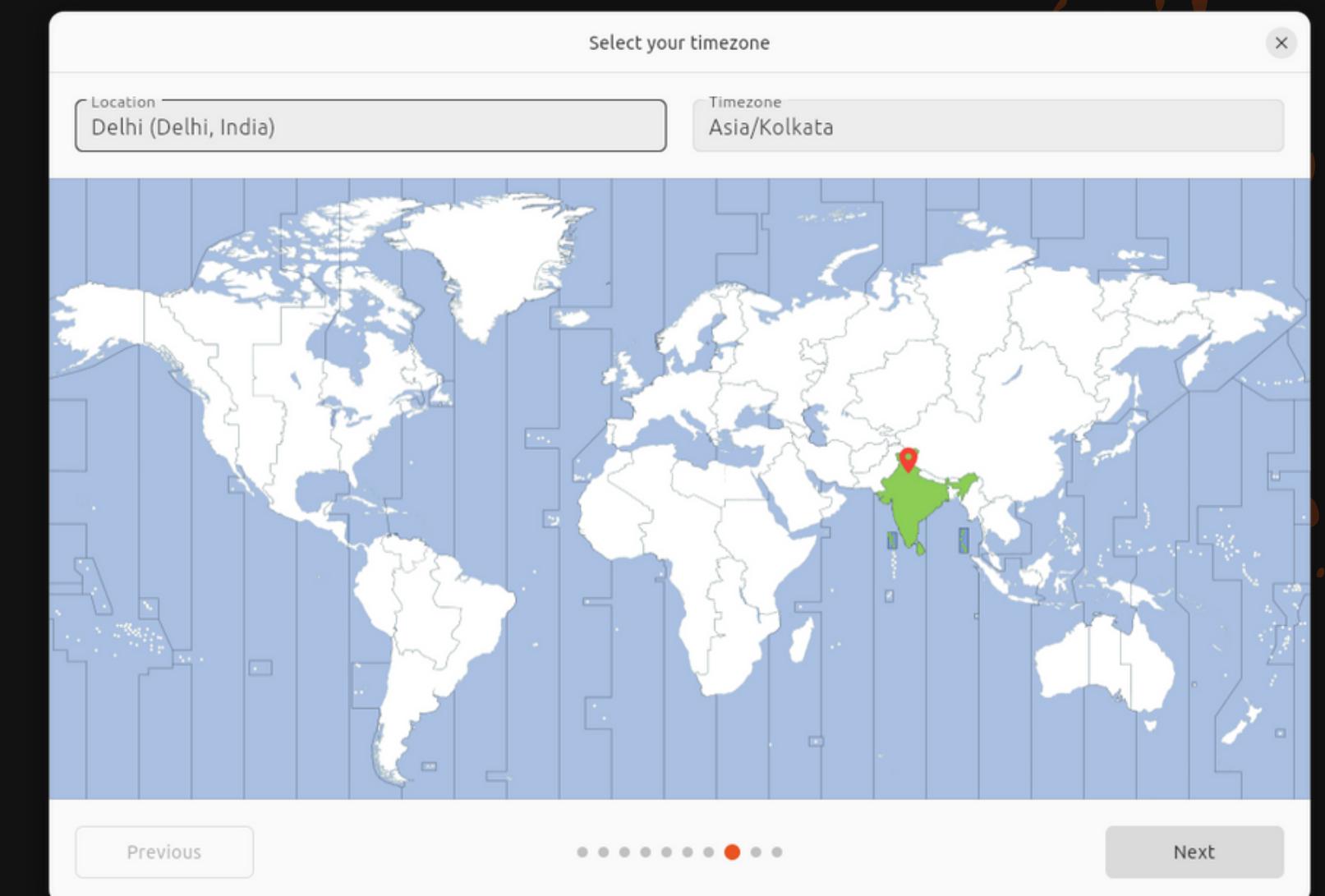
STEP 5:

- Select the Drive where we have created the Free Space.
- And the Automatic partitioning tool we do the partitioning job for you.
- And you just have to click on INSTALL NOW.



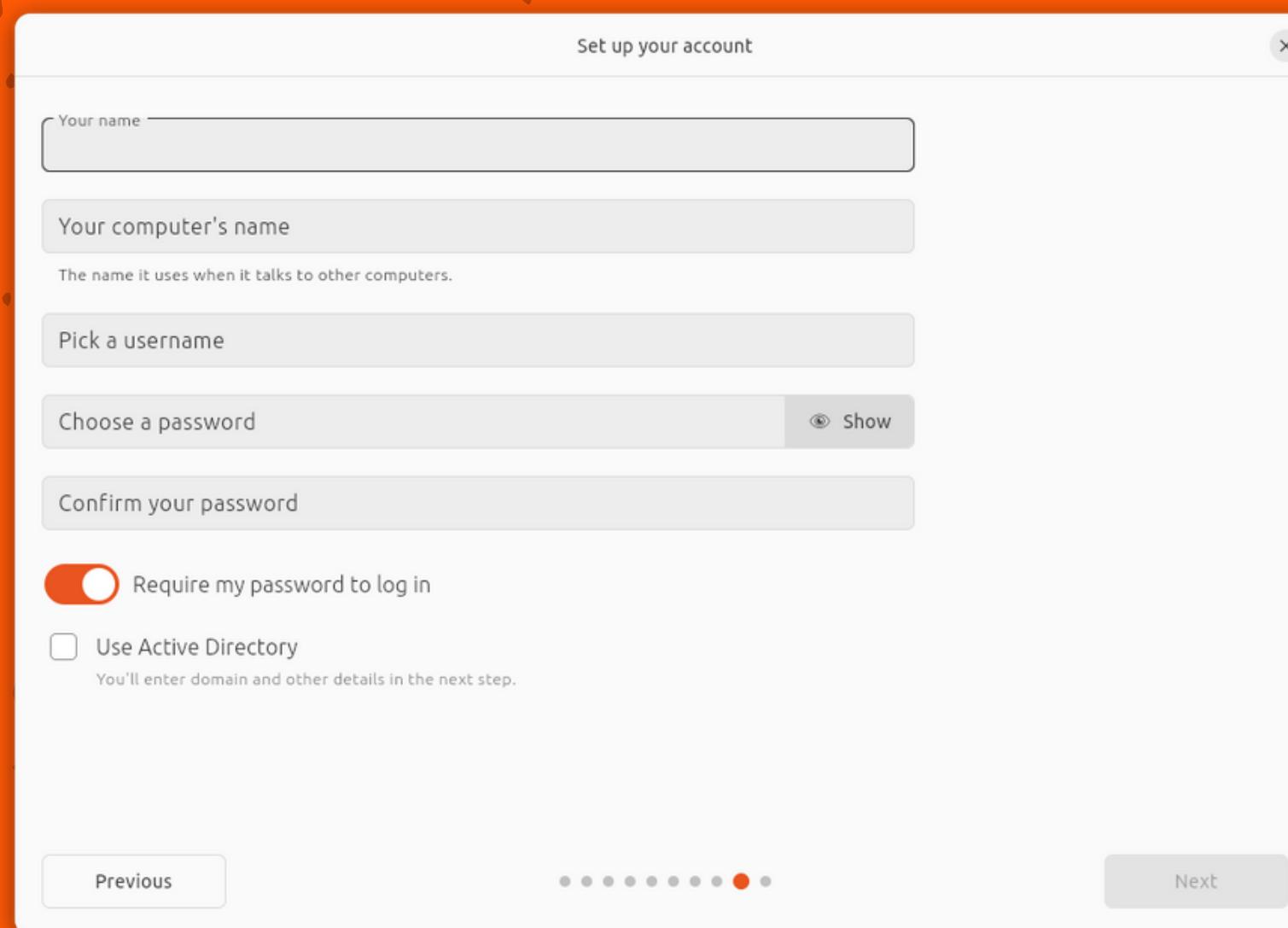
STEP 6:

- Now choose the desired time zone you want to have on your Ubuntu OS.
- We will Select Delhi for now as per our location.



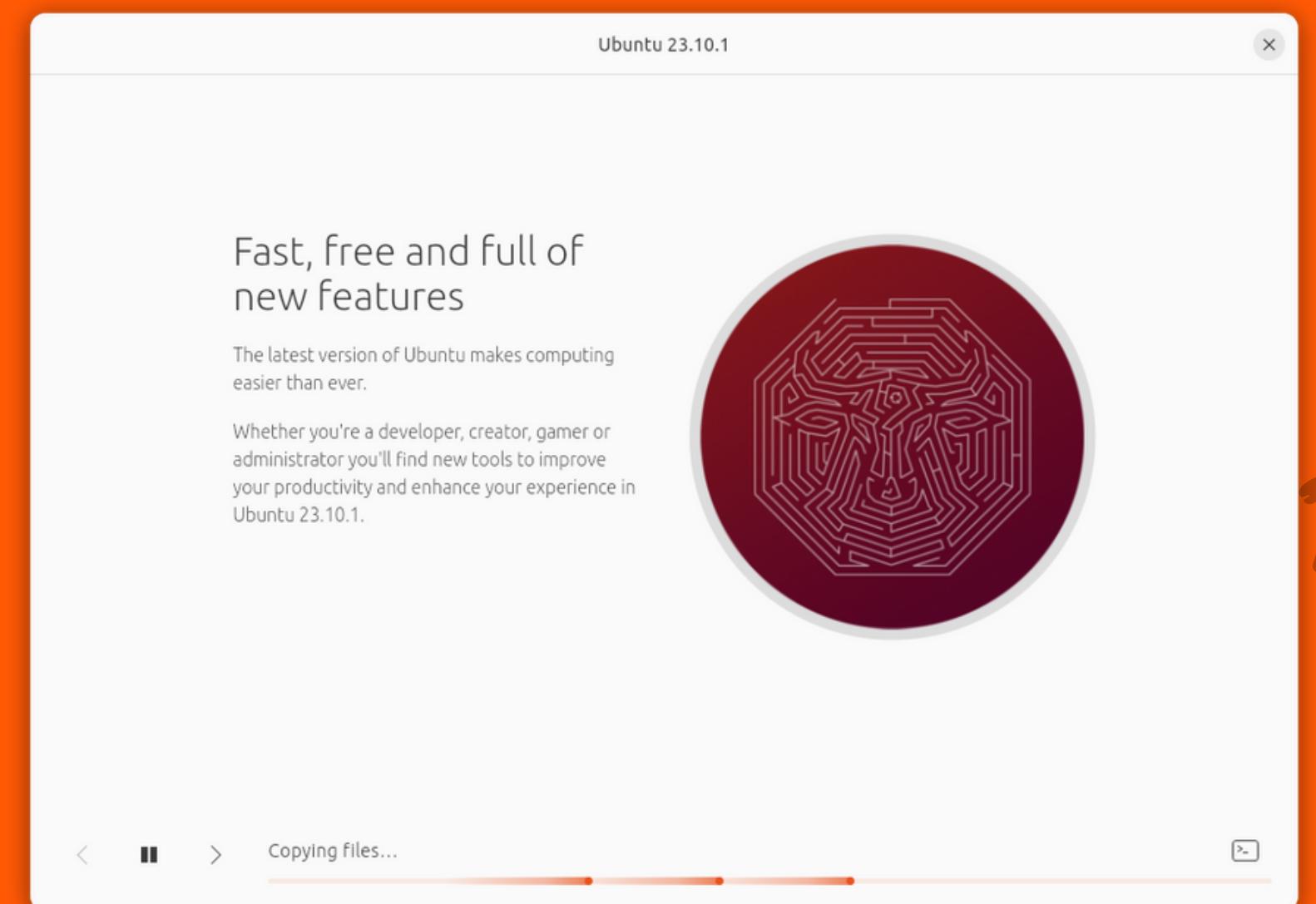
STEP 7:

- Now, fill up all the information like Username, Your computers name, Password as per your need. and click NEXT.



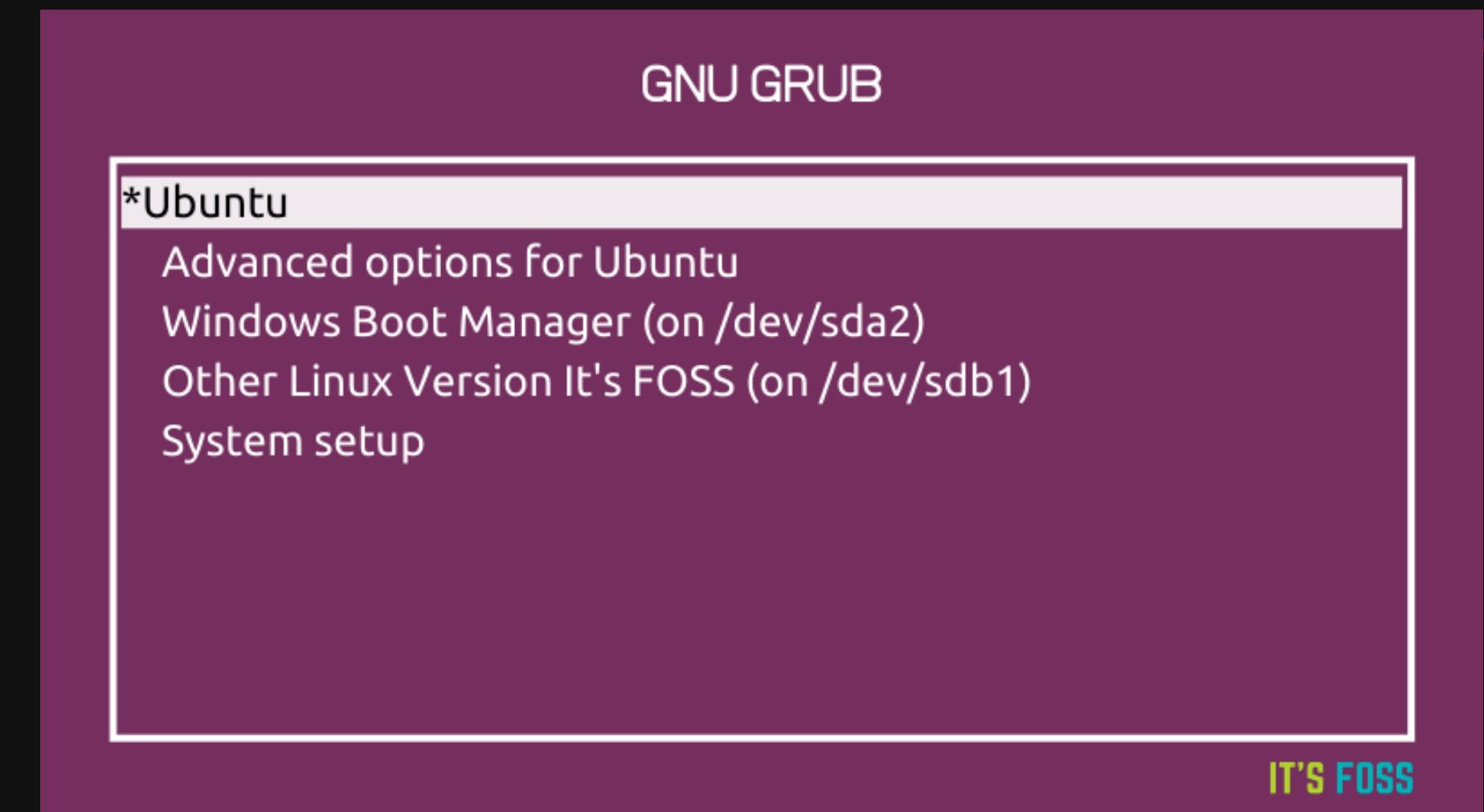
STEP 8:

- Initiating the Installation: Begin the installation process and wait for the Linux distribution to be installed alongside the existing Windows operating system.



Verifying Dual Boot Functionality

- Test the dual boot functionality by booting into both Windows and Linux to ensure that both operating systems are accessible.
- You will find the GRUB Boot menu when you Restart after completion of the installation.



INSTALLING

ARCH LINUX BTW :)

VAIBHAV PRATAP SINGH



UNDERSTANDING ARCH LINUX PHILOSOPHY

1. Simplicity and User Control:

- **Minimalist base:** Arch starts with a bare-bones system, allowing users to choose and install only what they need.
- **Do-It-Yourself (DIY) approach:** Users configure the system through text files, fostering deeper understanding and control.
- **KISS principle:** Keep It Simple, Stupid. Focuses on clean, efficient design and avoids unnecessary complexity.

2. Modernity and Bleeding Edge:

- **Rolling release model:** Continuous updates ensure access to the latest stable software versions.
- **Focus on new features and technologies:** Embraces modern advancements in the Linux ecosystem.
- **Kernel and package updates:** Regular updates keep the system secure and performant.

3. Pragmatism and Openness:

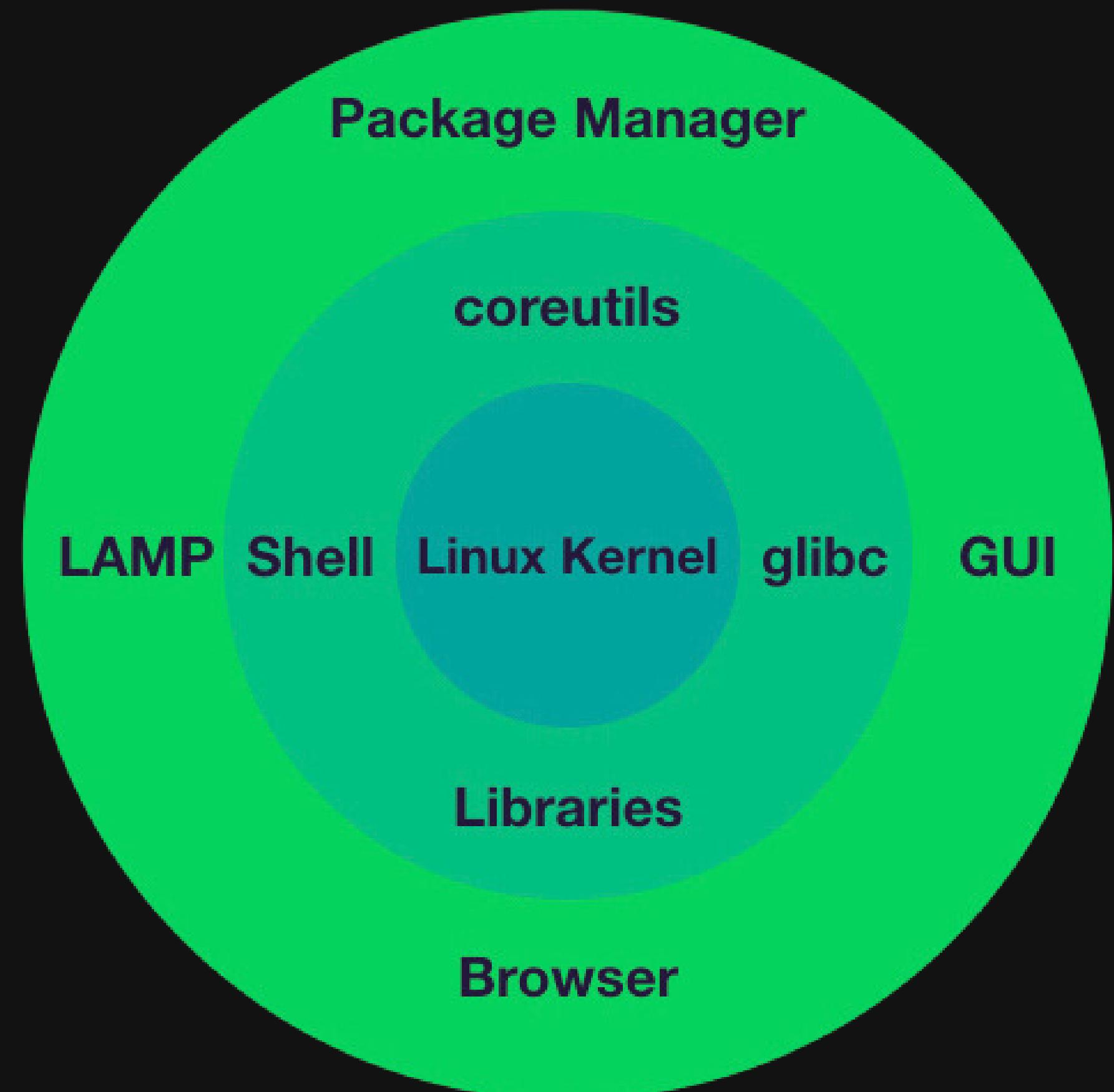
- **Evidence-based decisions:** Technical analysis and debate guide development, not ideology or popularity.
- **Free and open source software (FOSS) preferred:** Aligns with the principles of transparency and community collaboration.
- **Openness to non open source software:** Recognizes user choice and functionality over strict ideological adherence.

4. Community and Learning:

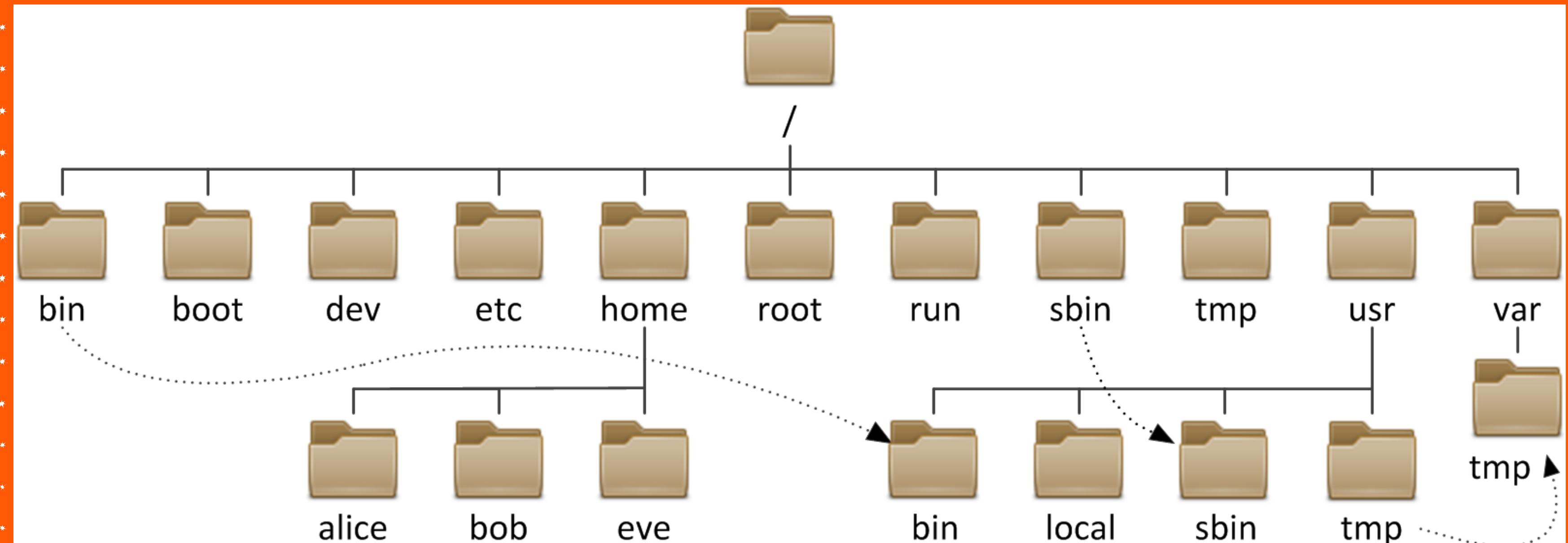
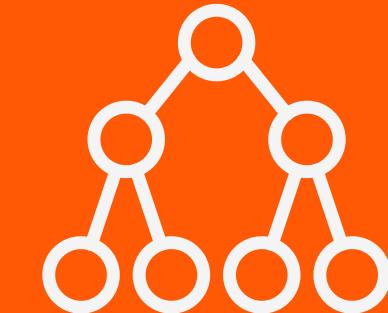
- **Strong community support:** Active forums, wiki, and user-contributed packages provide resources and assistance.
- **Learning through experience:** Users actively engage with the system, fostering deeper understanding of Linux.
- **Contribution encouraged:** Welcomes involvement in development and documentation.



LINUX DISTRO ARCHITECTURE



LINUX DIRECTORY TREE



EXPLANATION

ROOT DIRECTORY (/)

Represented by a forward slash /, this is the topmost directory in the hierarchy and contains everything else. Think of it as the tree's trunk from which all other branches stem.

Essential Directories:

/bin: Stores essential executable programs for system administration and daily tasks, accessible to all users.

/sbin: Similar to /bin but contains system administration programs typically requiring root privileges.

/etc: Houses configuration files for the system and various applications.

/dev: Holds special files representing devices like hard drives, printers, and network interfaces.

/proc: Provides a virtual filesystem containing information about running processes.

/tmp: Used for temporary files that are automatically deleted upon reboot or system inactivity.

/usr: Contains subdirectories for user-related programs, libraries, and data.

/usr/bin: Holds user executable binaries, similar to /bin but for non-essential programs.

/usr/lib: Stores shared libraries used by applications.

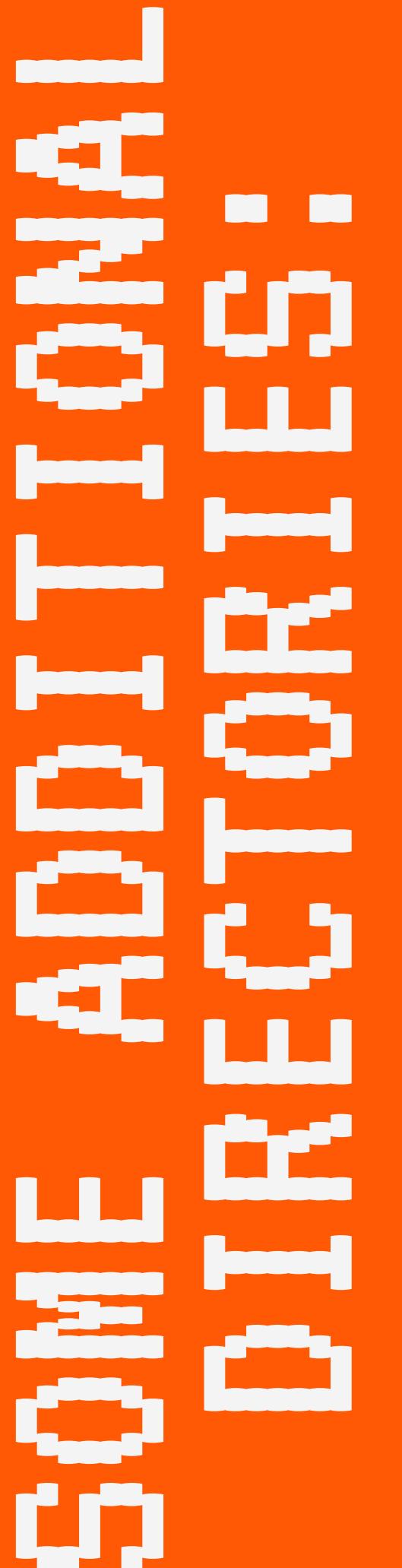
/usr/share: Contains architecture-independent shared data like documentation and icons.

/var: Houses variable data files that change frequently, like logs, caches, and mailboxes.

/boot: Contains files essential for booting the system, including the kernel and bootloader configuration.

/root: The home directory of the root user, typically containing system administration tools and configurations.

/home: Houses individual user home directories, containing their personal files, documents, and settings.



/media: Often used as a mount point for removable media like USB drives and external hard drives.

/mnt: Another common mount point for temporarily mounted filesystems.

/opt: Intended for installing optional software packages that are not part of the base system.

/srv: Houses data for specific services running on the system.

FINAL BOSS:



LEARNING COMMAND LINE

VAIBHAV PRATAP SINGH

```
02/08/2018  
01/38/2018  
E:\Temp>cd ..  
E:\>
```

- **SSH:** USED TO CONNECT TO A REMOTE LINUX MACHINE.
- **LS:** LISTS ALL FILES IN THE CURRENT DIRECTORY.
- **PWD:** PRINTS THE WORKING DIRECTORY.
- **CD:** CHANGES THE DIRECTORY.
- **TOUCH:** CREATES A FILE.
- **ECHO:** PRINTS TEXT TO TERMINAL/ ADDS TEXT TO A FILE.
- **NANO:** EDITS A FILE.
- **CAT:** READS THE CONTENTS OF A FILE.
- **MKDIR:** CREATES A DIRECTORY.
- **CP:** COPIES A FILE.
- **MV:** MOVES A FILE.

- **RM:** REMOVES A FILE.
- **RMDIR:** REMOVES A DIRECTORY.
- **LN:** CREATES A LINK TO A FILE.
- **CLEAR:** CLEARS THE TERMINAL SCREEN.
- **WHOAMI:** SHOWS THE CURRENT USER.
- **ADDUSER:** CREATES A NEW USER.
- **SUDO:** ALLOWS YOU TO RUN A COMMAND WITH ROOT PRIVILEGES.
- **SU:** SWITCHES TO A DIFFERENT USER.
- **EXIT:** EXITS THE CURRENT SHELL.
- **PASSWORD:** CHANGES THE PASSWORD FOR A USER.
- **FINGER:** DISPLAYS INFORMATION ABOUT A USER (YOU NEED TO INSTALL IT FIRST).
- **MAN:** SHOWS THE MANUAL PAGE FOR A COMMAND.

- **WHATIS:** GIVES A SHORT DESCRIPTION OF A COMMAND.
- **WGET:** DOWNLOADS A FILE FROM THE INTERNET.
- **CURL:** DOWNLOADS A FILE FROM THE INTERNET.
- **ZIP:** CREATES A ZIP ARCHIVE.
- **UNZIP:** EXTRACTS A ZIP ARCHIVE.
- **LESS:** READS A FILE ONE PAGE AT A TIME.
- **HEAD:** SHOWS THE BEGINNING OF A FILE.
- **TAIL:** SHOWS THE END OF A FILE.
- **CMP:** COMPARES TWO FILES.
- **DIFF:** SHOWS THE DIFFERENCES BETWEEN TWO FILES.
- **SORT:** SORTS TEXT ALPHABETICALLY.
- **FIND:** SEARCHES FOR FILES.
- **CHMOD:** CHANGES THE PERMISSIONS OF A FILE.

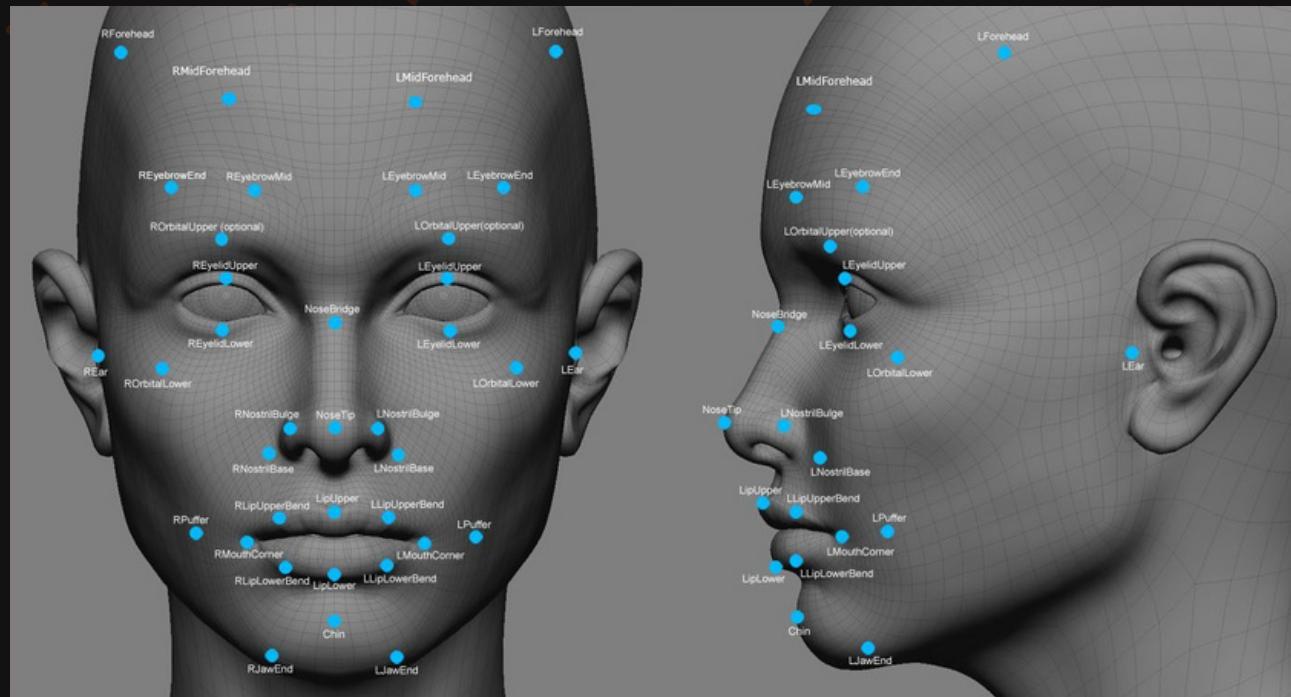
- **CHOWN**: CHANGES THE OWNER OF A FILE.
- **IFCONFIG**: SHOWS NETWORK CONFIGURATION INFORMATION (YOU MIGHT NEED TO USE IP ADD INSTEAD).
- **PING**: CHECKS IF A HOST IS ALIVE.
- **NETSTAT**: SHOWS NETWORK CONNECTIONS.
- **SS**: SHOWS NETWORK CONNECTIONS (A MORE MODERN VERSION OF NETSTAT).
- **UFW**: MANAGES THE FIREWALL.
- **UNAME**: SHOWS SYSTEM INFORMATION.
- **NEOFETCH**: DISPLAYS SYSTEM INFORMATION IN A GRAPHICAL WAY.
- **CAL**: SHOWS A CALENDAR.
- **BC**: PERFORMS BASIC MATH CALCULATIONS.
- **FREE**: SHOWS MEMORY USAGE.

F O S S P R O J E C T S

NIKHIL KUMAR

PROJECT 1: FACE RECOGNITION USING OPEN CV

We have build a new face recognition system using the tech stack mentioned below what it does is, it detects faces on the basis of pre stored data in a particular folder named "faces".

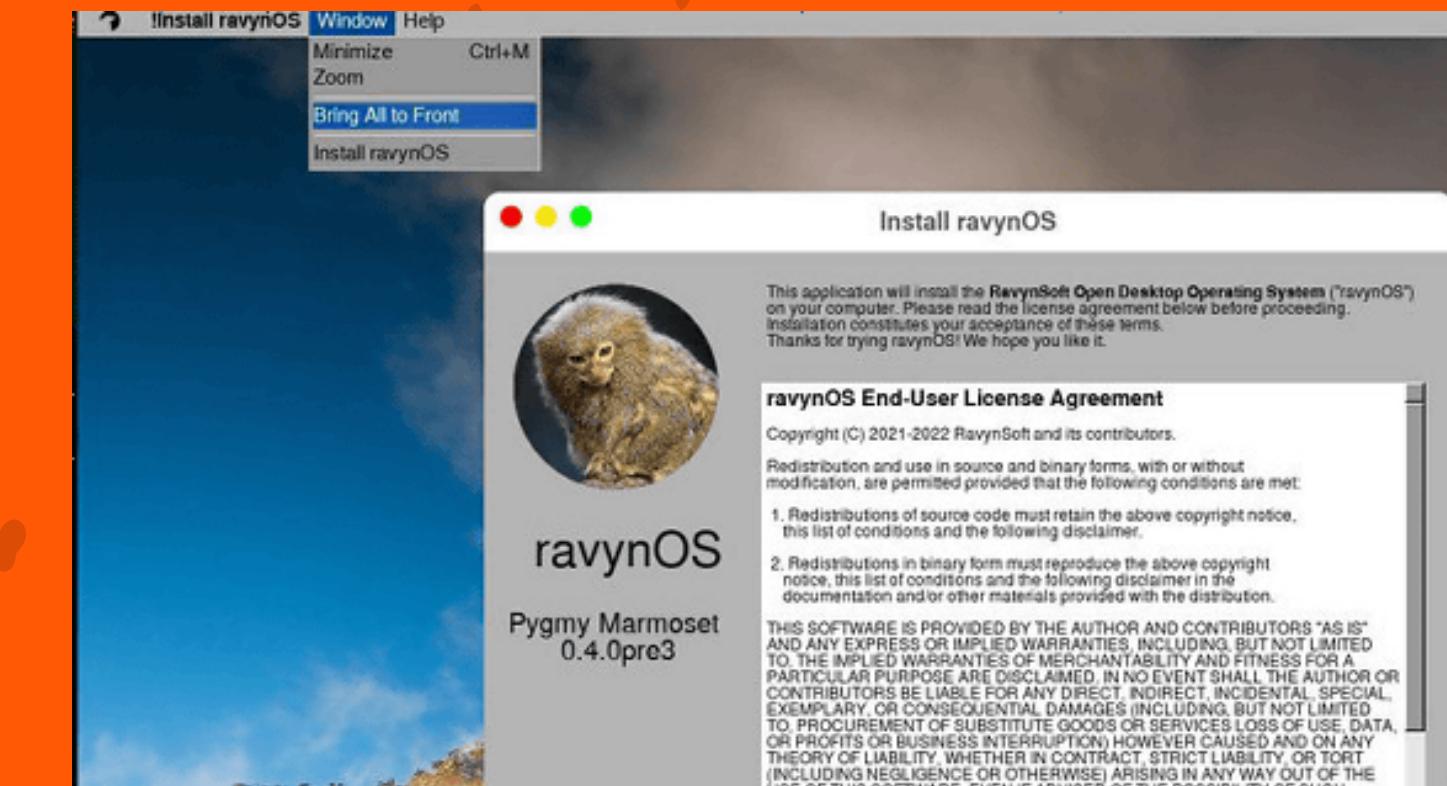


TECH STACK USED:

- Python3
- C / C++
- OpenCV
- GTK/ QT Framework

PROJECT 2: OPERATING SYSTEM DISTRO

This project is our second project from FOSS Club and we aim to replace the old systems using our new OS which will be based on Linux with a comfy User Experience DE.

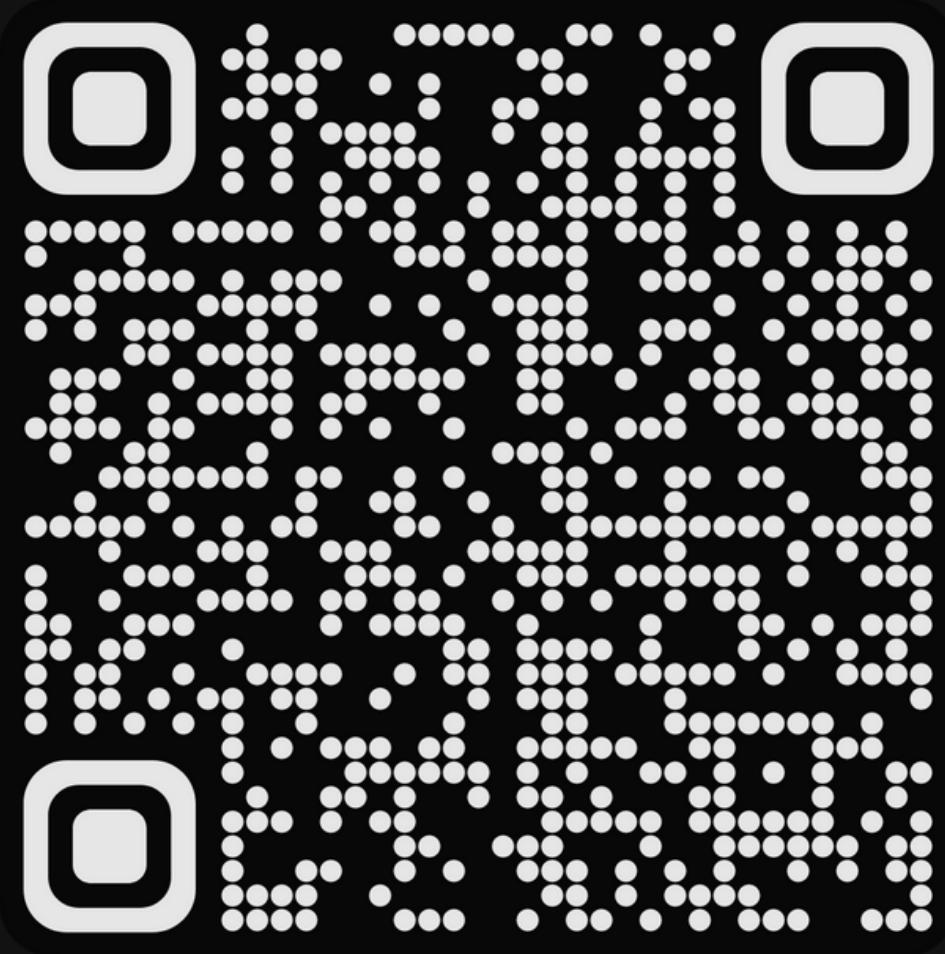


TECH STACK USED:

- Linux Kernel
- RPM package Manager
- SELinux Security
- GNOME/ KDE DE
- Wine configured system

THANK YOU FOR

BEING WITH US TILL NOW



scan the QR & fill
the feedback
form to recieve
your e-certificate



WE HOPE YOU ENJOYED YOUR TIME AND
LEARN A FEW THINGS ABOUT LINUX.



@TheFOSSclub

