

GNU/Linux

An **Operating System** (OS) is an interface between a computer user and computer hardware. An operating system is a software which performs all the basic tasks like file management, memory management, process management, handling input and output, and controlling peripheral devices such as disk drives and printers.

An operating system is software that enables applications to interact with a computer's hardware. The software that contains the core components of the operating system is called the **kernel**.

Unix and **Linux** are both popular Kernels. a kernel cannot act as an OS on its own. It misses essential features, such as basic software like a text editor. That is where GNU comes in. **When Linus Torvalds wrote an awesome piece of open-source software called Linux, Richard Stallman wrote a suite to run on it called GNU.** The package as a whole is called GNU/Linux, and is actually the technically correct name of what is known as Linux in daily usage.

When it comes to Linux, GNU/Linux isn't enough to run a modern PC on its own. So it gives programmers the ability to go ahead and write their own versions of GNU/Linux. These different versions, called **Distros**, differ in their base software. So two Distros can have different package managers, text editors, terminal applications, calculator apps etc. Ubuntu and Debian are examples of Distros. Other examples are Mint, Arch, Kali and Fedora.

Now, on top of a Linux Distro, run certain programs called **Desktop Environments**. These DEs are used to change the look and feel of the distro. Most DEs can run on the majority of Distros, so you have your own choice when customising your desktop. Popular DEs include Gnome, Unity and Xfce.