Introduction to Operating System

Operating System is system software that manages computer hardware, software resources, and provides common services for computer programs.

Operating System

Operating System

Types of Operating Systems

1.WINDOWS OPERATING SYSTEM

2.LINUX OPERATING SYSTEM

3.MAC OPERATING SYSTEM

1>Microsoft Windows, also called Windows and Windows OS, computer operating system (OS) developed by Microsoft Corporation to run personal computers (PCs). Featuring the first graphical user interface (GUI) for IBM-compatible PCs, the Windows OS soon dominated the PC market.

2>Linux is the best-known and most-used open source operating system. As an operating system, Linux is software that sits underneath all of the other software on a computer, receiving requests from those programs and relaying these requests to the computer’s hardware

In many ways, Linux is similar to other operating systems you may have used before, such as Windows, macOS (formerly OS X), or iOS. Like other operating systems, Linux has a graphical interface, and the same types of software you are accustomed to, such as word processors, photo editors, video editors, and so on. In many cases, a software’s creator may have made a Linux version of the same program you use on other systems. In short: if you can use a computer or other electronic device, you can use Linux.

3>macOS is a series of proprietary graphical operating systems developed and marketed by Apple Inc. since 2001. It is the primary operating system for Apple's Mac computers. Within the market of desktop, laptop and home computers, and by web usage, it is the second most widely used desktop OS, after Microsoft Windows

there are 6 layers in the operating system :

I will share an picture of the 6 layers of the operating system

And read lan, wan, pan , and virtual machines and kernal oerating system ,linux

What is Linux?

Linux is the best-known and most-used open-source operating system. As an operating system, Linux is software that sits underneath all of the other software on a computer, receiving requests from those programs and relaying these requests to the computer’s hardware

What is Open Source?

Open-source software is a type of computer software in which source code is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software to anyone and for any purpose. Open-source software may be developed in a collaborative public manner.

What is RedHat?

Red Hat is the world's leading provider of open-source software solutions, using a community-powered approach to reliable and high-performance cloud, Linux, middleware, storage, and virtualization technologies. Red Hat's mission is to be the catalyst in communities of customers, contributors, and partners creating better technology in an open-source way.

Why Linux important

Installing Linux on your PC is a simple task, and it protects your system from harmful viruses and malware. The main important aspect of these types of platforms is “Security” and while building the Linux platform it was taken into consideration. It is more stable when compared to the Windows platform.

bulleted points

A Windows user needs to interoperate with Linux.

bullet

In application development, Linux hosts the application or its runtime.

bullet

In cloud computing, the cloud instances in the private or public cloud environment use Linux as the operating system.

bullet

With mobile applications or the Internet of Things (IoT), the chances are high that the operating system of your device uses Linux.

bullet

If you are looking for new opportunities in IT, Linux skills are in high demand.

Linux distributions

Linux distribution is an installable operating system constructed from a Linux kernel and supporting user programs and libraries.

A complete Linux operating system is not developed by a single organization, but by a collection of independent open source development communities working with individual software components.

A distribution provides an easy way for users to install and manage a working Linux system.

Different flavors of Linux

Different flavors of Linux

Major Linux distributions

redhat2.jpg

RedHat Linux

Red Hat Enterprise Linux is a Linux distribution developed by Red Hat for the commercial market. Red Hat Enterprise Linux is released in server versions for x86-64, Power ISA, ARM64, and IBM Z, and a desktop version for x86-64.

Fedora

Fedora is a Linux distribution developed by the community-supported Fedora Project which is sponsored primarily by Red Hat, a subsidiary of IBM, with additional support from other companies.

Logo\_fedoralogo.png

cent os.png

CentOS

CentOS is a Linux distribution that provides a free, community-supported computing platform functionally compatible with its upstream source, Red Hat Enterprise Linux. In January 2014, CentOS announced the official joining with Red Hat while staying independent from RHEL, under a new CentOS governing board.

SUSE Linux

SUSE Linux is a computer operating system developed by SUSE. It is built on top of the free and open-source Linux kernel and is distributed with system and application software from other open-source projects. Wikipedia

suse.png

Debian\_logo.png

Debian Linux

Debian, also known as Debian GNU/Linux, is a Linux distribution composed of free and open-source software, developed by the community-supported Debian Project, which was established by Ian Murdock on August 16, 1993.

Ubuntu

Ubuntu is a complete Linux operating system, freely available with both community and professional support. Ubuntu includes the very best in translations and accessibility infrastructure that the Free Software community has to offer, to make Ubuntu usable by as many people as possible because of its user-friendly.

ubuntu.png

Logo\_Linux\_Mint.png

Mint Linux

Linux Mint is a community-driven Linux distribution based on Ubuntu which itself is based on Debian and bundled with a variety of free and open-source applications. It can provide full out-of-the-box multimedia support for those who choose to include proprietary software such as multimedia codecs.