

OPERATING SYSTEM HISTORY

https://eylenburg.github.io/os_familytree.htm

Initially its UNICS

Most of the other OS comes related and after to this

Like iOS, appleTVOS, macOS, Android

They are in red color and they have share similar commands

But Windows is separate one (BLUE)

not related to UNICS OS back in 70s

UNIX

mid 1960s

grandfather of many modern operating systems that we frequently used today

Multi user operating systems and hierarchical file systems

OS can be grouped into 2 families

Microsoft NT

windows, Xbox OS and Windows Phone/Mobile

UNIX

max OS X, Linux, Android, Chrome OS, PS4 OS

3 kinds of OS based on type of source

open source

closed source

mixed/ shared source

FREE SOURCE MOVEMENT - RICHARD STALLMAN

free is not based on the concept of money

but based on the freedom

"users should have the freedom to run, copy, distribute, study, change and improve the s/w"

GNU

Free software alternative to Unix

1984

everything that comes under Unix system but Free

The Linux Kernel

Linus Torvalds

working on creating his own kernel known as Linux

At that time GNU pieces were complete

but lacked a kernel

He combined his kernel with the existing GNU components to create a full OS

A kernel is the core of an operating system (OS), acting as the central interface between the hardware and software.

GNU/LINUX

GNU/Linux is a free and open-source Unix-like operating system consisting of components developed by the GNU Project and the Linux kernel. It's not a single entity, but rather a collection of software, including the Linux kernel, and other software developed by the GNU Project, such as compilers, libraries, and utilities. The Linux kernel is the core component that manages hardware, while the GNU components provide the tools and libraries needed for users to interact with the system.

SHELL

IN WONDOWS power shell , bash

its a computer interface to an os

shell exposes os services to human user to other programs

it takes our command and give them to the os to perform

its the outer layer of the os - so the name shell

TERMINAL

Program that runs the shell

they were physical devices initially

now its a software

ubunu, linus ---> BASH

mac -----> ZSH

Fish

BASH

Bourne Again SHell

in most Linux based systems, default shell is bash

same or similar in Unix or Unix based systems