

What is Unix? (general info)

- operating system from the 1960s --> constant development
- operating system --> suite of programs --> makes the computer work
- stable, multi-use, multi-tasking system for servers, desktops, and laptops
- has GUI like windows, but the knowledge required for operations without it

Types of Unix

- Sun Solaris
- GNU/ Linux
- macOS X

--> in school --> Solaris (server and workstation)

--> Fedora Linux (servers and desktops PCs)

Unix Operating system

- Kernel
- Shell
- Programs

Kernel

- the hub of the operating system --> allocates time and memory to programs and handles the filestore and communications in response to system calls

--> Example

rm myfile -> remove myfile

--> the kernel deletes, the shell searches

Shell

- interface between the user and the kernel

--> when user logs in --> login program check username and password --> start another program called the shell

- the shell is a command line interpreter (CLI)

- interpret the commands the user arranges

- commands are themselves programs

--> staff and students have the same tcsh shell by default

--> Filename completion - Tab key --> shell will complete the rest of the name automatically

--> History - list of commands you typed in

Files and processes

--> everything in UNIX is either file or a process

--> process - executing program identified by a unique PID (process identifier)

--> file - a collection of data, created by users using text editors, running compilers, etc...

Directory structure

--> all the files grouped together in the directory structure, arranged in a hierarchical structure, like an inverted tree.

--> the top is called root (written as a "/")