<Coding Club>

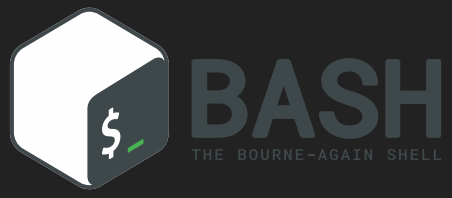
COMMAND LINE

terminal, console, cli, shell

- console - historically, the physical interface to a machine
- terminal - a particular interface to a machine eg. keyboard
- cli - command line interface - where you type commands
- shell - starts other programs can be GUI or CLI

Speaker notes

TERMINAL - A terminal implements certain features. The keyboard doesn't implement the same features as the monitor. SHELL - encompasses other programs. We will be using terminal emulators. For our purposes all of these terms are the same.



Speaker notes

Many things will be the same or similar in different shells but we will be working in Bash. Originally bsh, Bourne Shell is now Bourne-Again Shell, Bash.

FILE STRUCTURE NAVIGATION

- pwd - print working directory
- ls - list
- cd - change directory
- . - current directory
- .. - parent directory
- ~ - home directory

Speaker notes

ls likely comes from Multics OS where drive access was segmented in memory, thus list segments. It is commonly assumed that now this just stands for list.

FILE MANIPULATION

- cp - copy
- mv - move
- rm - remove
- mkdir - make directory

Speaker notes

These commands are pretty straight forward but useful. Be careful with rm. rm is permanent and /, ~, and * can delete your entire system. mkdir -p is the most useful argument as it lets you create multiple directories.

USEFUL TOOLS

- --help
- man - manual page
- cat - concatenate
- less - less is more
- head/tail
- <> - redirection
- !! - last command
- tab complete

Speaker notes

Both --help and man depend on implementing the feature. cat is cat abuse but who cares? head and tail give you a part of the file. < > redirects the file or output in the given direction.

INSTALLING PYTHON

https://realpython.com/installing-python/

You may already have it installed.