Command Line - Matrix Time

🕐 Created	@July 11, 2021 12:39 AM
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👤 Last Edited By	Ⓛ Luke Landau
🕐 Last Edited Time	@July 13, 2021 8:25 AM
☰ Note	
👥 Stakeholders	
⊙ Status	
⊙ Type	

- command line is the nerd-approved way to run programs
- it is the OG and was around long before any Graphic User Interface (GUI)
    - GUI's were invented to stop mouth-breathers ruining the machine they were using
    - we are so used to GUI's now that we've mostly forgotten the purpose of command line
- it gives you more control and power, but relies on you knowing what you're doing
- some commands can literally ruin your computer, so be SUPER CAREFUL
    - don't copy and paste commands unless you know what they are or trust the vendor
    - `sudo` can temporarily elevate your privileges to 'super-user' - USE VERY RARELY
- command line is used for connecting to remote servers, running custom programs etc
    - some wizards still exist that can control every aspect of their machine from a terminal

- as a web developer you may not need it often, but it is worth getting used to because;

  - GUI's are expensive and usually built for users rather than devs

  - getting comfortable "close to the machine" is a good thing, machines are your friends

- **useful commands**
  - `cd` is used to change the current directory, allowing us to move around the file system
    - `cd` on its own will return you to your home directory
    - typing `cd` then pressing tab `→|` will display directories in the current folder, or auto complete if there is only one to move to
    - `cd ~/with/an/absolute/path` will move you directly to a directory from anywhere
  - `ls` lists files in the current directory

- adding the `-a` option lists all hidden files
- adding the `-l` option shows file permissions
- command line options can often be given as one, e.g `ls -al`
- `man` pulls up a manual for a given command (`q` to quit)
  - e.g `man ls` to see the list manual, `man rm` to see the remove manual
- `mkdir` creates a new directory
- `touch` creates an empty file
- `rm` deletes a file
  - `-r` attempt to remove file hierarchy
  - `-f` remove warnings, errors and confirmation prompts
  - `-rf` is a silent recursive folder delete (delete everything and don't tell me about it)
    - e.g `rm -rf folder` will delete everything in the folder
- `chmod` changes the permissions of a file
- `sudo` temporarily elevates permissions (Super User DO) - **don't brick your machine**
- `cat` displays contents of file in the command line
- `pbcopy < file` will copy a file to clipboard
- `nano` and `vim` are text editors common to many terminals
  - can be launched from the command line, as can any program
  - escape `vim` by pressing `esc` to return to command mode
    - `:q!` to quit, `:wq` save and quit
  - `i` to enter INSERT mode
  - need to learn to set nano to default
- `ctrl+c` - terminate program running in current terminal
- terminals are **highly customisable**

- A good package to instal is <u>OhMyZsh</u>

  - make the terminal look more friendly / clear

  - lots of pre-made themes and ability to customise

  - `nano ~/.zshrc` to pull up the options file

  - `source ~/.zsgrc` to set all changes in options file