

Command Line - Matrix Time

🕒 Created	@July 11, 2021 12:39 AM
👤 Created By	👤 Luke Landau
👤 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

```

~ » ls
Applications Desktop Documents Downloads Library Movies Music Pictures Postman Public sainsburys
ioacademy@Academy357

~ » cd Desktop
ioacademy@Academy357

~/Desktop » ls
luke-landau-ioAcademy
ioacademy@Academy357

~/Desktop » cd luke-landau-ioAcademy
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy » ls -a
.      ..      .DS_Store code      images
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy » cd code/
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy/code » ls
week-1
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy/code » cd week-1
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy/code/week-1 » ls
best-practice-cheat-sheet.html      jumbotron - try again      rosa-code.html
css-style-sheet-people.css          jumbotron-desktop.png     simple-website-exercise.html
css-style-sheet.css                 my-website.html            simple-website-stylesheet.css
favourite-people.html               normalize.css               test.html
form-thing.html                    rayna-example-exercise-solution.html
html_cheat_sheet.html              rayna-solution.css
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy/code/week-1 » ls -al
total 448
drwxr-xr-x  19 ioacademy staff   608 10 Jul 01:50 .
drwxr-xr-x   4 ioacademy staff   128 10 Jul 01:50 ..
-rw-r--r--@  1 ioacademy staff  6148 10 Jul 01:50 .DS_Store
-rw-r--r--  1 ioacademy staff  4892 10 Jul 01:06 best-practice-cheat-sheet.html
-rw-r--r--@  1 ioacademy staff   144  8 Jul 08:48 css-style-sheet-people.css
-rw-r--r--  1 ioacademy staff   277  7 Jul 14:12 css-style-sheet.css
-rw-r--r--  1 ioacademy staff   763  8 Jul 08:40 favourite-people.html
-rw-r--r--  1 ioacademy staff   870  8 Jul 16:25 form-thing.html
-rw-r--r--@  1 ioacademy staff 10560  9 Jul 18:10 html_cheat_sheet.html
drwxr-xr-x   7 ioacademy staff   224  8 Jul 08:47 jumbotron - try again
-rw-r--r--@  1 ioacademy staff 143846  7 Jul 15:24 jumbotron-desktop.png
-rw-r--r--  1 ioacademy staff   1951  7 Jul 11:13 my-website.html
-rw-r--r--  1 ioacademy staff   6137  8 Jul 08:48 normalize.css
-rw-r--r--  1 ioacademy staff   847  7 Jul 08:49 rayna-example-exercise-solution.html
-rw-r--r--  1 ioacademy staff   177  8 Jul 08:48 rayna-solution.css
-rw-r--r--  1 ioacademy staff   1497  8 Jul 14:15 rosa-code.html
-rw-r--r--  1 ioacademy staff   2696  7 Jul 16:22 simple-website-exercise.html
-rw-r--r--  1 ioacademy staff   1873  7 Jul 16:23 simple-website-stylesheet.css
-rw-r--r--  1 ioacademy staff   1009 10 Jul 16:50 test.html
ioacademy@Academy357

~/Desktop/luke-landau-ioAcademy/code/week-1 »

```

• 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 OhMyZsh
 - 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 ~/.zshrc` to set all changes in options file