

COMMAND LINE WORKSHOP

What is it?

Text interface for your computer. Terminal, Command Line, CLI

What is Bash?

Bash is a Unix shell and command language written by Brian Fox. Runs in a window (Command Line or Terminal). There are other shell languages... google them if interested!

How to open it or start it?

Linux or Mac -> nothing to do! It already comes with the OS.

Windows -> let's [download and install git](#) and use the git bash that comes with it.

Where to know more?

Watch youtube videos on it, visit [codecademy.com](https://www.codecademy.com) and learn [Most Frequent commands](#)... or visit any other site, type bash commands on google and see where it takes you.

Repository to get material from: <https://github.com/marianelamin/commandLineWorkshop>

AGENDA

1. Introduction
2. What is it and why is it useful?
3. Most used commands (open: [cheatsheet](#))

whoami, pwd

cd, ls, ls -al

.., /, autocomplete with **tab**

clear, mkdir

touch, nano

cat, less

mv, cp

some_output > createFileWITHsome_output.txt

some_output >> appendFileWITHsome_output.txt

man <comnd>, <comnd> **--manual** (*git bash*), **help** <comnd> **/?** (*cmd*)

rm, rm -r

which

history

echo \$PATH

javac, java, python

--version

CHALLENGES

Web Challenge:

1. Create a new empty online repository for this challenge with the name *CommandLineWorkshop*
2. Chose a folder to start and create a new folder named *MyCode*
 - `$ cd MyCode`
3. Check your current location by using the following command:
 - `$ pwd`
4. Clone your repository by using the following command on the *MyCode* folder
 - `$ git clone [pasteYourURLhere]`
5. List all the files in the current folder
 - `$ ls` or `ls -a` or `ls -al`
6. Navigate to the folder *CommandLineWorkshop*
7. Create an empty file called *index.html*
 - `$ touch myFirstFile.html`
8. Download the content of the following web page using curl.
 - `$ curl http://manela.web.ve/workshops/command-line-git-bash/index.htm`, or type `-o` before the url
9. Copy the downloaded content into myFirstFile.html.
 - `$ cat index.html >> myFirstFile.html` or `$ cp index.html myFirstFile.html`
 - Open the myFirstFile.html and also open index.html on your favorite browser. Do you see any difference?. Close the browser.
10. Remove index.html
 - `$ rm index.html`
11. Rename myFirstFile.html to index.html
 - `$ mv myFirstFile.html index.html`
12. Edit index.html using nano editor
 - `$ nano index.html`
 - Look for the line that says: `<body class="containerisimo">`
Change it to say `<body class="container">`,

- Save the changes and exit the editor. if you use nano check at the bottom of the terminal(the window) and see the options.

13. Create a file named *style.css* (using `$ nano styles.css`) and write the following content:

```
header{
    background: purple;
    min-height: 5rem;
    color: white;
    padding: 3rem;
}
main{
    background-color: cyan;
    min-height: 15rem;
    padding: 3rem;
    color: gray;
}
footer{
    background: gray;
    min-height: 3rem;
    color: yellow;
    padding: 1rem;
}
```

After written, save and exit.

14. Organize your files in this order, you might want to use `ls`, `cd`, `mv`, `mkdir`...

- *MyCode*
 - i. *CommandLineWorkshop*
 - 1. *index.html*
 - 2. *css*
 - a. *Style.css*

15. Create a file with the name *thisIsWhatILearnedToday.txt* and save all the lines of code you have typed since the beginning of time.

- `$ history > thisIsWhatILearnedToday.txt`

16. Save the changes and do a commit to your repository

- `$ git status`
- `$ git add .`
- `$ git commit -m "This is my first commit, Yay!"`
- `$ git push`
- note: You might have to enter your github username and password

17. Check out your online repository.

CHALLENGES

Java Challenge:

1. From the previous challenge, when you cloned the repository you downloaded a folder named *java-chat-cs331*. Look for that folder and navigate to it.
2. List the files on the folder. These are Java files.
3. Compile both files
4. Run the Server
5. Check out and fix any bugs
6. Run the Client
7. Check and fix bugs

Note: You won't need to touch the code at all.

Useful commands:

- `$ git clone <URL of the repository>`
- `$ javac filename.java`
- `$ java filename` (*note that there is no extension here*)
- `$ cat filename.java` (*see the content of the file*)
- `$ less filename.java` (*see the content line per line*)

The repository to clone will be:

<https://github.com/marianelamin/commandLineWorkshop.git>