

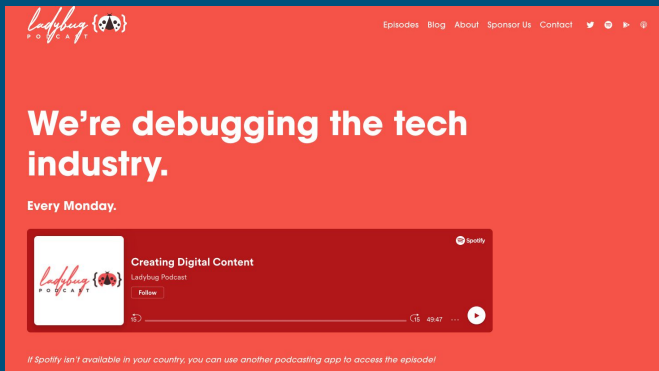
Before We Get Started...

- How are you?!
- Ask questions
- Slack
 - Thread for Specific Class Resources
 - Example: Week 1, Day 2: CLI 101
 - Example heading: QUESTION: Can someone help me find the syntax for `forEach()`?
- What did we learn on Tuesday?!



Podcasts

<https://www.ladybug.dev/>



<https://syntax.fm/>



[Find more here!](#)

Need a challenge?
Write a blog post!

NEW
BLOG POST!



CLI 101



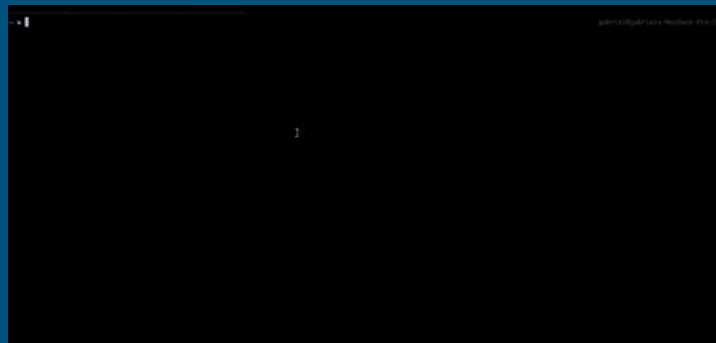
CLI = Command Line Interface



CLI 101: Learning Objectives

After completing this lesson, you will be able to do the following with a command line interface (CLI):

- Run commands with arguments and modifiers
- Navigate the file system
- Create folders and files
- Bonus: Create an alias



Overview: CLI 101

- Command Line Interface === CLI
- A way to communicate with your computer
- In the past, the only way to communicate with your computer
 - Now we have graphical user interfaces
=== GUIs



What do we use the CLI for?

Your average person is not using the command line!

- Git
 - Navigating to projects, folders
 - Installing dependencies
-

Common CLI Commands



If you see anything denoted with a “\$”, it is referencing the CLI!

CORE COMMANDS

cd	Home directory
cd [folder]	Change directory
cd ~	Home directory, e.g. 'cd ~/folder/'
cd /	Root of drive
ls	Short listing
ls -l	Long listing
ls -a	Listing incl. hidden files
ls -lh	Long listing with Human readable file sizes
ls -R	Entire content of folder recursively
sudo [command]	Run command with the security privileges of the superuser (Super User DO)
open [file]	Opens a file
open .	Opens the directory
top	Displays active processes. Press q to quit
nano [file]	Opens the Terminal it's editor
pico [file]	Opens the Terminal it's editor
q	Exit
clear	Clear screen

It's time to open your terminal!



Let's run some commands!

- `$ pwd`
 - PWD → Present Working Directory... your current location on your machine
- `$ ls`
 - Short listing of items
- `$ ls -l`
 - Long listing of items
- `$ ls -a`
 - Listing includes hidden files

Differences in Output

```
➔ ~ ls
Applications  Downloads  Music      bin          lib
Desktop       Library   Pictures   google-cloud-sdk pyenv.cfg
Documents     Movies    Public     include
```

\$ ls

```
➔ ~ ls -l
total 8
drwx-----@ 3 jamiepittman staff  96 Aug 31 08:40 Applications
drwx-----+ 20 jamiepittman staff 640 Nov 14 18:02 Desktop
drwx-----+ 10 jamiepittman staff 320 Nov  3 08:25 Documents
drwx-----@ 20 jamiepittman staff 640 Nov 11 13:17 Downloads
drwx-----@ 67 jamiepittman staff 2144 Oct 13 11:40 Library
drwx-----+ 4 jamiepittman staff 128 Aug 31 20:30 Movies
drwx-----+ 4 jamiepittman staff 128 Sep  9 13:02 Music
drwx-----+ 4 jamiepittman staff 128 Aug 31 08:27 Pictures
drwxr-xr-x+ 4 jamiepittman staff 128 Aug 31 08:26 Public
drwxr-xr-x 14 jamiepittman staff 448 Sep  3 15:24 bin
drwxr-xr-x@ 22 jamiepittman staff 704 Sep  4 10:38 google-cloud-sdk
drwxr-xr-x  2 jamiepittman staff  64 Sep  2 17:41 include
drwxr-xr-x  3 jamiepittman staff  96 Sep  2 17:41 lib
-rw-r--r--  1 jamiepittman staff 114 Sep  2 17:50 pyenv.cfg
```

\$ ls -l

```
➔ ~ ls -la
.              .zcompdump
..             .zcompdump-Jamie's MacBook Pro-5.7.1
.CFUserTextEncoding .zprofile
.DS_Store      .zsh_history
.Trash         .zshrc
.angular-config.json .zshrc.pre-oh-my-zsh
.boto          Applications
.config        Desktop
.cups          Documents
.docker        Downloads
.gitconfig     Library
.gitkraken     Movies
.helm          Music
.kube          Pictures
.local         Public
.npm           bin
.oh-my-zsh     google-cloud-sdk
.openvpn-connect.json include
.ssh          lib
.viminfo      pyenv.cfg
.vscode
```

\$ ls -a

Combining Arguments

What if you wanted to see a long list that included hidden files?

ANSWER: `$ ls -l -a` OR `$ls -la`

When you get back...

Try to “change directory” to your “Desktop” from the command line.



Navigating the File System

- `$ cd` → Change Directory
 - `$ cd Desktop` → change directory to Desktop
- `$ cd ..` → Go back a directory
 - `$ cd ../..` → Go back two directories
 - `$ cd ../../..` → Go back three directories

Creating Files and Directory

- `$ mkdir <name>` → Create a directory
 - Example: `$ mkdir jamie_folder`
- `$ touch <name & file extension>` → Create a file
 - Example: `$ touch jamie_notes.txt`



Now it's your turn! (10-15 minutes)

Starting from your root directory. If you need to get back there: `$ cd ~/`

1. Navigate to your Desktop
2. Create and new folder/directory: `<your name>_Nov19`
3. Navigate into your new folder/directory, and create three (3) new files:
 - a. `my_first_file.html`
 - b. `my_first_file.css`
 - c. `my_first_file.txt`
4. In your current folder, display a long list of all of the files in the folder.
5. Navigate back to your root directory (`~`) from your new folder.

Shell: What are you using?

- `$ echo $SHELL`
 - Either bash or zsh
- `$ code <file>` → Opens your file or project in VS Code from the CLI
- Depending on your shell...
 - bash: `$ code .bash_profile`
 - zsh: `$ code .zshrc`

What is a `.bash_profile` / `.zshrc`?

- This file is loaded before Terminal loads your shell environment and contains all the startup configuration and preferences for your command line interface.
- You will very rarely need to make edits to these files

Aliases → Shortcuts!

Let's create one!

1. Scroll to the bottom of your `.bash_profile` or `.zshrc`
2. Start by naming the alias: `alias <name of new folder>`
3. Then: `alias <name>="cd <path to your new folder>"`
4. Save the file and close.
5. Open a new terminal window. Type in your alias.



```
alias gplay="/Applications/GraphQL\ Playground.app/Contents/MacOS/GraphQL\ Playground --ignore-certificate-errors &> /dev/null"
alias jamie2="cd ~/Desktop/Jamie2"
```

← Your alias should look something like this!

For next class (Saturday)...

- Try CLI 101 - Training Exercises, Large
- In The Learning Portal, read through Git 101

CLI 101: Training Exercises, Medium

- Create a music library on your Desktop
- Example:

```
1 my-music/  
2 | classic-rock  
3 |   | david-bowie  
4 |   |   | blackstar  
5 |   |   | hunky-dory  
6 |   |   | changes.mp3  
7 |   |   | oh-you-pretty-things.mp3  
8 | jazz  
9 |   | dave-brubeck  
10 |   |   | take-five  
11 |   | miles-davis  
12 |   |   | kind-of-blue
```

