



Shells ++

Terminal App?

- × On mac, there is terminal but you should use iterm2
- × On Linux, I like terminator but others are also good
- × On Windows, PowerShell but the linux subsystem is probably good enough



We talked about Bash

- × **B**orn **A**gain **S**hell
- × There are other shells
 - × **Z**SHell
- × I like ZSH
 - × SPELL CORRECTION bc Im dum
 - × Auto capitalization
 - × Also other stuff, but mostly that
 - × Also it looks pretty



OhMyZSH

- × The best version of ZSH
 - × So many features
 - × Themes!
 - × Git support
 - × You'll learn about this later
 - × Makes you look like a hacker!!



ZSH vs BASH

- × They are different
- × There are a few subtle differences
- × You might have ZSH on your computer, but Andrew and other CMU servers run BASH
- × We have never had an issue switching between the two
- × Just remember that they're not the same



Lets install all this stuff!!

- × `ohmyz.sh`
- × `item2.com`
- × `Terminator: apt it`



.zshrc, .bash_profile, etc

- × These files run on startup of terminal
- × Themes
- × Shortcuts
- × Aliases
- × A bunch of stuff to make your life easier



Export and Source!

- × Source is the command you should run after making changes to your `.zshrc` file or equivalent.
 - × `source ~/.zshrc`
- × Exported variables are available to the programs within the shell, whereas non exported variables are not available to these programs
- ×



Shells are a language!!

- × Functions are shell scripts!!!
 - × So like (almost) every time you run anything on your computer it's running in the a
- × You can add things to your `.zshrc` or `.bashrc` or `.bash_profile` (depending on your os/shell)
- × These things are in “scope” when you're in terminal
 - × Like variables you use throughout your shell



Let's make some stuff

- × Removing is hard
- × I like to yeet stuff
- × So lets yeet things
 - × Add to your .zshrc or equivalent file
 - × `alias yeet="rm -i"`
- × Remove this before you accidentally yeet -r



That's cool but let's make it better

- × Maybe you've handed in trainer lab?
- × You remember having to SCP stuff
 - × Gross!! no one likes this
- × Let's make a shell function to do this for us



GPI handin script

```
gpihandin(){  
    labname=$1  
    scp "andrew:~/private/path/to/gpi-labs/$labname/handin.zip" ~/path/to/where/you/want/it/to/go  
}
```

...

```
$ gpihandin trainerlab
```



There is so much more!

- × Fish
- × ZSH plugins
 - × We can recommend some
- × Literally anything you want



Attendance

× tinyurl.com/functions-are-zsh-scripts

