The Command Line

Have you seen it before?

- Who has used it before?
- Who is scared of it?
- Who hates it?

Our Goals

- Define what a terminal window is
- Define what a shell is
- Identify some common commands
- Distinguish between absolute and relative paths
- Apply commands to accomplish everyday tasks

Well, what is it?

A way to manipulate and interact with your computer.

It's entirely text-based!

Why use it?

- It's (eventually) very fast
- It's automatable and flexible
- No interruptions
- It gives us what we expect
- Sometimes it is the only way

  - Command Line Interaction (C.L.I.)
  - Rails
  - Web servers

- You want a job

How do we use it?

We interact with the **Bash Shell**

So what is the Bash Shell?

- Bash is a regular program on your computer
- It was created to take commands from you
  - We talk to it using the **Bash Shell Language**
- When I say "shell", it's just that program we were talking about before
  - It's an interface to interact with other programs

Is Bash the only one?

Nope!

- Bash "Bourne Again shell"
- C shell
- Z shell "zsh"
- Korn shell
- Bourne shell
- Debian's Almquist shell "dash"

But it is certainly the most popular (with zsh in second)

What do I do with it?

Most of you will have a lot of experience with the WIMP (Windows, Icons, Menus, Pointer) style of system

That's not the only way. We are going to be using a text-only "console" or "terminal"

This is going to seem alien and primitive but you will soon see the power!

What can we do with it?

- Run programs to make all sorts of changes
  - Editing files and images
  - Converting files between types
- Creating back-ups
- Making and copying files
- Downloading, compiling, and running programs
- `telnet towel.blinkenlights.nl`

How do we use it?

- Interactive mode - Waits for you
- Non-interactive mode - Runs a script

We run this through a Terminal program
(I prefer iTerm 2)

Let's download that now and move it into your
applications folder

Let's open it up!

```
<CMND> + Space -> iTerm

Right click -> Options -> Keep in dock
```
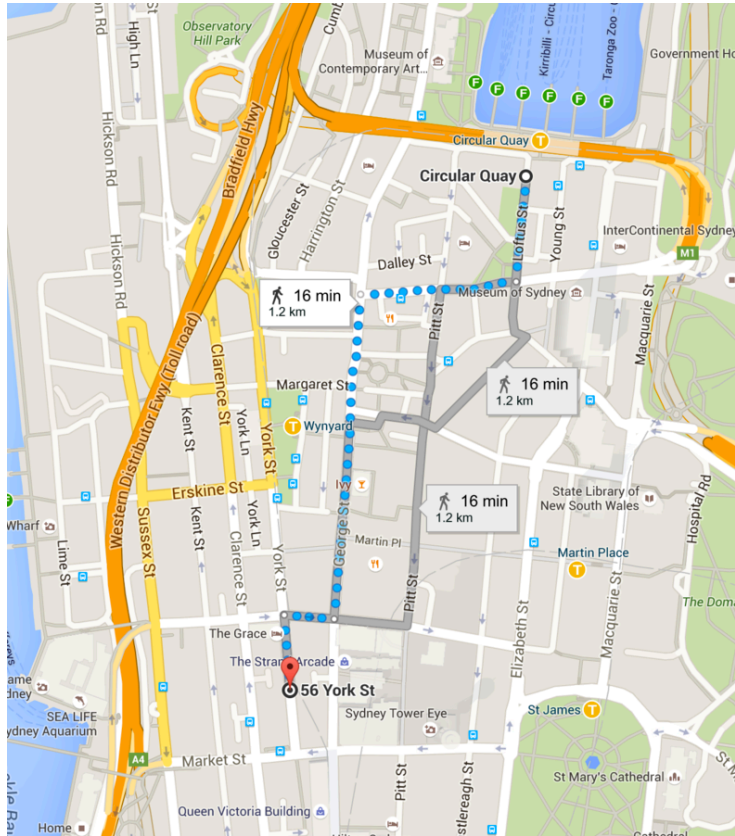
Let's do something

We are going to try and do some day to day stuff now!

- Making folders
- Creating files
- Viewing files
- Listing files
- Copying files
- Moving files
- Deleting files
- Deleting folders

Some utilities

- Opening files
- Who am I?
- Where am I?
- Show me everything that is running
- Finding files and content
- Show me the manual

Absolute vs. Relative

A few customizations

Let's make our terminal a tiny bit easier to use...

```
export PS1="\W $ "
```

We are going to be doing this a lot...

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- Define what a shell is
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Things to do now

- Watch these Code Academy videos
- Read these
  - Quick Left's Tutorials - start from the bottom!
  - Learn CLI the Hard Way
- Track down the Terminal City Murderer
- Finish off the pre-work
- Some other useful links
  - 15 Useful Grep Examples
  - 40 Terminal Tricks and Tips
  - 25 Useful Find Examples
  - Terminal Cheatsheet