Module 1 - Lecture 1 **Introduction to Tools** 

### WELCOME!

### The Basics

- Slack
- BitBucket
- Your mouse has an off switch.
- Sococo
- The Tech Elevator book has a language selection



## FILES!

### What is a File System?

- Controls how data is stored and retrieved
- Has multiple layers, logical and physical
- There are many different types
  - Operating systems support specific file systems
  - What are some differences between file systems on MacOS (APFS) and Windows (NTFS)?



### What is a File System?

A collection of:

- Filenames
- Directories
- Metadata



### Working with the File System

#### I need to do:

- Navigate
- Read
- Write
- This is done by communicating with the Logical Layer
- This can be done using a GUI like Finder or Windows Explorer. However, developers often use a Command Line Interface (CLI).



### SHELLS!

#### What is a Shell?

A **shell** provides a text-based interface to interacting with the file system.

- In a shell, you write code that the computer understands to get the computer to do what you want.
- Many tasks in programming are done on the command line because it is more flexible than most GUI interfaces and can be scripted.
- We will be using a very popular shell called bash.



#### Common bash commands

- Changing Directories
  cd <directory name>
- Print Working Directorypwd
- List Directory ContentsIs -al
- Working with Files and Folders
  - a. Moving Files and Foldersmv <oldname> <newname>
  - b. Copying Files and Folderscp <oldname> <newname>
  - c. Making Foldersmkdir <newfolder>



### Let's Code!

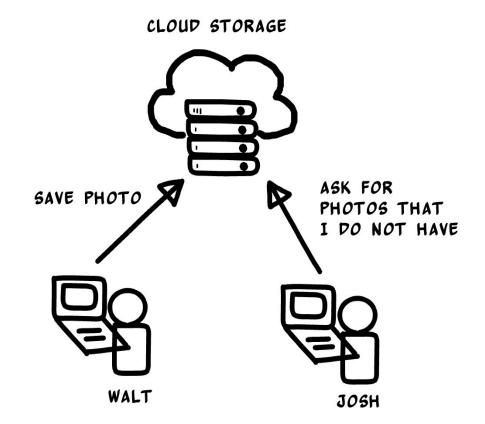
# Git!





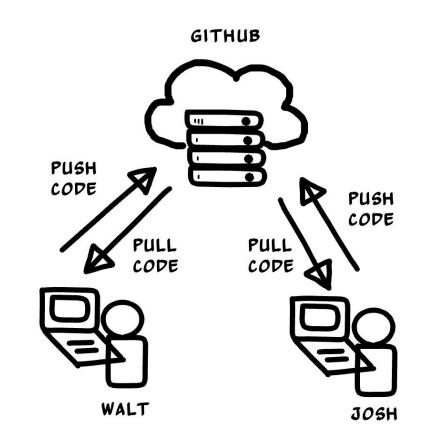


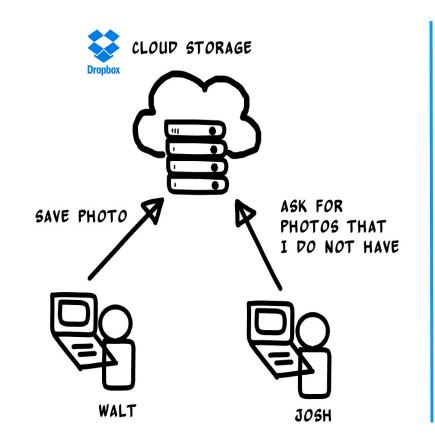
Google Photos

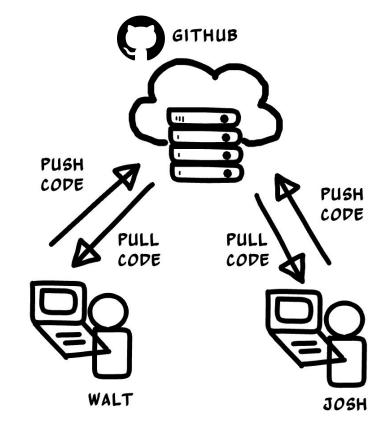




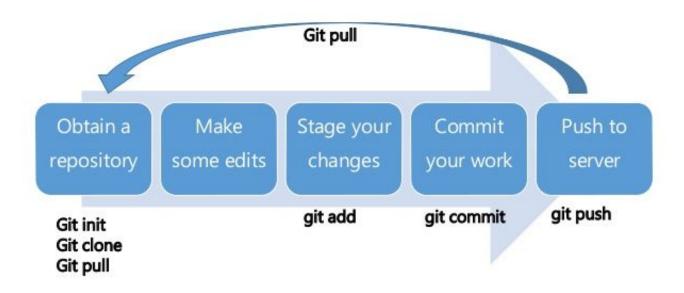








#### Git usages : Understanding Git Workflow



### Let's Code!

### **Mastery and Understanding**

- Our exercises focus on mastery of key concepts.
- Feedback will be provided so you know where you need to improve.
- You must remain at or above an average of 2.0.
- Any work submitted must be your own. We may ask you to explain your code to us!
- Seek out help from your classmates, academic fellows, and instructors!

3 COMPREHENSION (≥ 90% tests pass)

2 COMPETENCE (≥ 50% tests pass)

1 ATTEMPTED (≥ 25% tests pass)

0 NOT ATTEMPTED (or cannot compile)

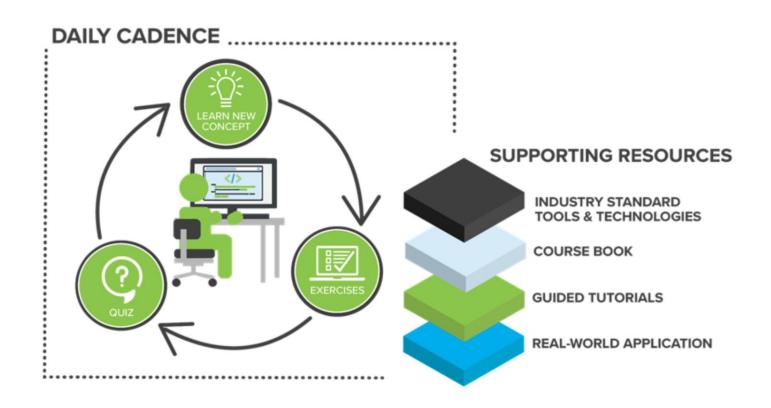


#### **Due Dates**

You will receive exercises daily (almost). You submit your work by pushing to BitBucket.

Exercise Given	Exercise Due
Monday	Wednesday 8AM
Tuesday	Thursday 8AM
Wednesday	Friday 8AM
Thursday	Monday 8AM
Friday	Tuesday 8AM

Late exercises receive a 0. You may submit late, but the highest possible score is a 2.



#### Your schedule

- 8:55 AM (or earlier) Be in class
- 9:00 AM Class starts
- Take quiz
- A little review
- Learn new material
- Attend Pathway event
- Complete homework
- Read the Tech Elevator book in preparation for tomorrow
- Complete tutorials, if available
- REST!



# QUESTIONS?

