# GitHub, Git Bash



### Objectives

- Articulate the purpose of git and GitHub
- Learn about markdown
- Learn how to create a repo and clone a repo

What is Git and Github?



# Git and Github



GitHub is a website for code storage. It makes your code (including all changes) visible and accessible from anywhere.



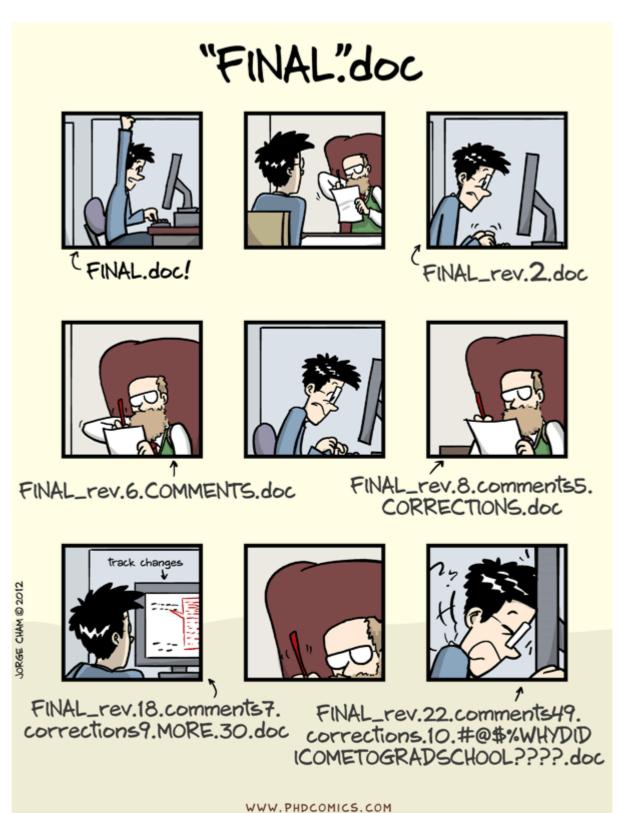
**Git** is a software tool that enables version control and collaboration

### Repository

A repository is a storage space where your project lives. It can be local to a folder on your computer, or it can be a storage space on GitHub or another online host. You can keep code files, text files, images or any kind of a file in a repository.

#### What is version Control?





Source: "Piled Higher and Deeper" by <u>Jorge Cham on www.phdcomics.com</u>.



# Why Github?



1- Back up for your files



2- It gives you visual interface for navigating the repos.



3- It gives a way for other people to navigate your repos.



4- Makes repo collaborations easy.

# What are the benefits of using version control?

- The ability to save and review or revert to previous versions.
- The ability to collaborate on a single project.

# How Git and GitHub Support Version Control?

- Keep track of changes to your code locally using git.
- Test changes to code without losing the original.
- Revert back to older version of code, if needed.
- Back-up your files on the cloud (<u>GitHub.com</u>).
- Share your files on <u>GitHub.com</u> and collaborate with others.

#### Markdown

Markdown is a way to style text on the web. You control the display of the document; formatting words as bold or italic, adding images, and creating lists are just a few of the things we can do with Markdown. Mostly, Markdown is just regular text with a few non-alphabetic characters thrown in, like # or \*.

Practice Markdown: https://dillinger.io/

### Markdown

- You can use Markdown most places around GitHub:
- README FILE on Github
- Comments in Issues and Pull Requests
- Files with the .md or .markdown extension

#### GitHub Documentation

https://help.github.com/en/github



1- Create a repo



2- Clone a repo



Steps

3- Fork a repo



4- Adding a file to repository using the command line



5- Adding an existing project to GitHub using the command line

### How to Navigate Folders

- pwd is used to print the 'present working directory'. pwd is equivalent to executing cd on a DOS(Windows console host) terminal. This is the folder or path that the current Bash session resides in.
- Is is used to 'list' contents of the current working directory. Is is equivalent to DIR on a Windows console host terminal.
- Both Bash and Windows console host have a cd command. cd is an acronym for 'Change Directory'. cd is invoked with an appended directory name. Executing cd will change the terminal sessions current working directory to the passed directory argument.

## **Useful Commands**

Command (Windows)	Command (Mac OS / Linux)	Description	Example
exit	exit	close the window	exit
cd	cd	change directory	cd test
cd	pwd	show the current directory	cd (Windows) or pwd (Mac OS / Linux)
dir	ls	list directories/files	dir

