Github 101





Learning Objectives

- Explain what version control is
- Describe the difference between git and github
- Understand the components of a github repository
- Push a simple website up to github
- Pull a simple website down from github

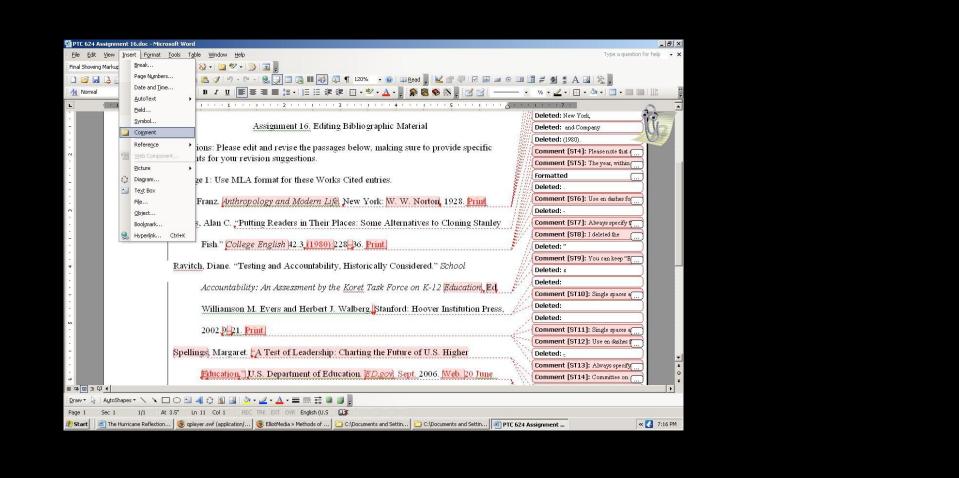
What is Github

- Social networking site used for backing up and sharing your code
- Access to thousands of open sourced projects
- Used for tracking changes in projects and project management

- What does version control mean to you?
- When have you used version control previously?
- What was frustrating about that experience?
- How did it work if you were collaborating with other people?

• VERSION CONTROL - A system that records changes to a file or a set of files over time so that you can

recall specific versions later



What is Git

- Commands and phrases Github uses to control your projects and manage versions
- Allows you to decide what changes you want to save in your 'Final' project version
 - Keeps track of those changes so you never lose anything
- All commands start with the word 'git'

Why Use Github?

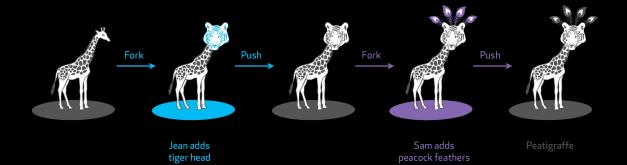
- Solidifies a connection between your projects on your computer and projects on github
- Never need to worry if you've lost your code
- Accidentally make a mistake? You can revert back to a previous version
- Easy to contribute/share projects with other people







How to use github



beacock feather, tiger, giraffe from The Noun Projec

git commit wallace.txt git add WORKING DIRECTORY STAGING PREA

REPO

Let's Setup Github

https://github.com

How to speak git

Commit Early, Commit Often

- Commits are an opportunity to save your progress
- Records the set of changes to your project at that point in time
- Allows you to go back if need be to your original code

Q	CREATED MAIN LOOP & TIMING CONTROL	14 HOURS AGO
þ	ENABLED CONFIG FILE PARSING	9 HOURS AGO
þ	MISC BUGFIXES	5 HOURS AGO
o	CODE ADDITIONS/EDITS	4 HOURS AGO
Q	MORE CODE	4 HOURS AGO
þ	HERE HAVE CODE	4 HOURS AGO
þ	AAAAAAA	3 HOURS AGO
	ADVICED LICETONICE	7 110,100 000

COMMENT

DATE

2 HOURS AGO

ARAAAAAA

ADKFJSLKDFJSDKLFJ

MY HANDS ARE TYPING WORDS

3 HOURS AGO
2 HOURS AGO

AS A PROJECT DRAGS ON, MY GIT COMMIT MESSAGES GET LESS AND LESS INFORMATIVE.

HAAAAAAAAANDS

PUSH- Your Changes made on your laptop to save them in github My project (saved locally on my laptop)

Repository: A place where your project folders are stored

Commit: Changes you have saved

Pull: Fetching changes (commits) and merging them into your local version

Push: Sending changes (commits) to a remote repository on github to be incorporated into the project

Fork: A copy of a project folder that you can view and edit on your personal github profile page (independent but linked to the original source)

Lets look at this in github

Exercise 1: Download something

- 1. Find my github-101 repository
- 2. Download my presentation
- 3. IF TIME: Add an issue.

Exercise 2: Download git/setup

Windows

- Go to http://git-scm.com/download/win & download will start Note: this is a project called Git for Windows, which is separate from Git itself
- You will be prompted to choose Git Bash or Run Git From the Windows Command Prompt

Mac

- Download the latest git for Mac installer https://sourceforge.net/projects/git-osx-installer/files/
- Open your command prompt git --version to check to see if it worked

Exercise 2: Setup

Setting your user name and email address:

git config --global user.name "Your Name Here" git config --global user.email your.name@example.com

Exercise 3: My first project

- Make a new repo (folder) on your desktop

mkdir new-project

Move to that folder

cd new-project

Create some file

touch Readme.md

Start git

git init

Thanks for coming



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