

Library Technology Career Jumpstart Program

Day 01: Version Control with Git & GitHub

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Jason Raitz

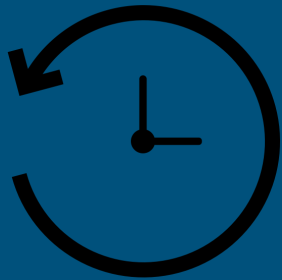
Norms

- After you have finished a task indicate it with a thumbs up
- Please share errors you have. It is the best tool for teaching and learning.
 - It is okay for you to ask questions and ask workshop facilitators to repeat things
 - If you get lost or confused, please ask for help either on mic, in general chat or direct chat with a workshop helper
 - Our troubleshooting procedures are as follows: we will try to resolve in the main room quickly if possible, but may take it to a breakout room with a workshop helper if needed
 - You won't fall behind if you go to a breakout room
 - The workshop helpers for this workshop are Tori, Kevin, and Natalia.

Today

- Build a personal website via the online interface and GitHub pages
- Introduce you to essential git commands, such as: commit, push, pull, clone, merge, etc. by working on a python file and preparing for tomorrow's workshop

What is Version Control?



Created by David Christensen
from Noun Project

Version Control Systems are sort of like time machines, but they only work in reverse. They allow you to...

- Keep a log of changes made to content
- Revert to previous states of that content



"FINAL".doc



FINAL.doc!



FINAL_rev.2.doc



FINAL_rev.6.COMMENTS.doc



FINAL_rev.8.comments5.
CORRECTIONS.doc



FINAL_rev.18.comments7.
corrections9.MORE.30.doc



FINAL_rev.22.comments49.
corrections.10.#@\$%WHYDID
ICOMETOGRADSCHOOL????.doc

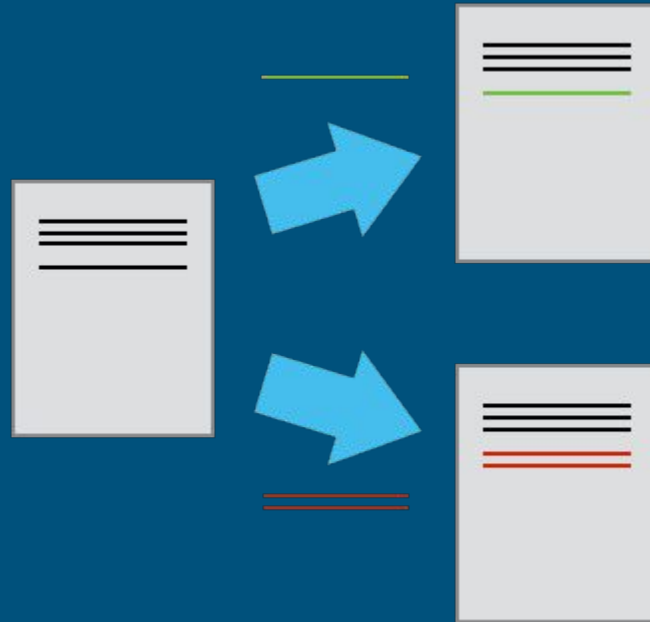


JORGE CHAN © 2012

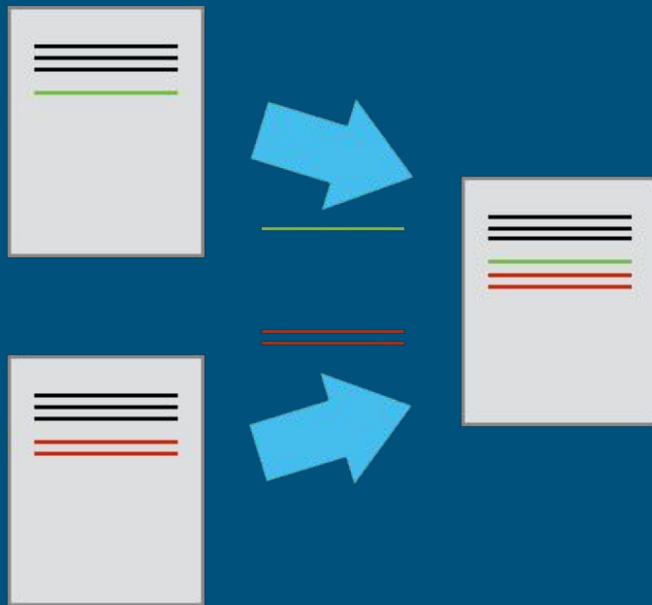
Version control systems track changes over time.



Version control systems allow multiple people to work on a document at the same time.



Multiple users can contribute independent content.



Benefits of Version Control

It's like having a limitless “undo” button.



Created by shashank singh
from Noun Project

It allows for collaboration on complex projects.



Created by Oksana Latysheva
from Noun Project

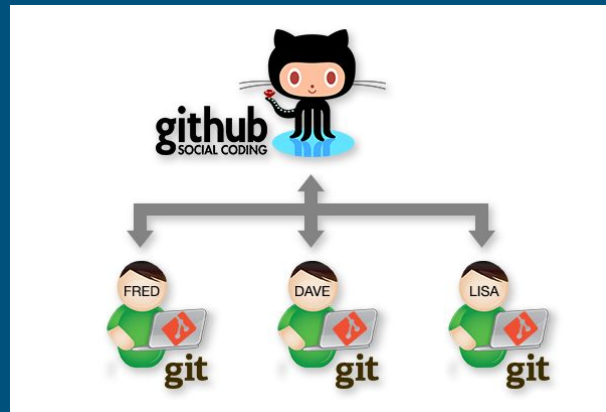
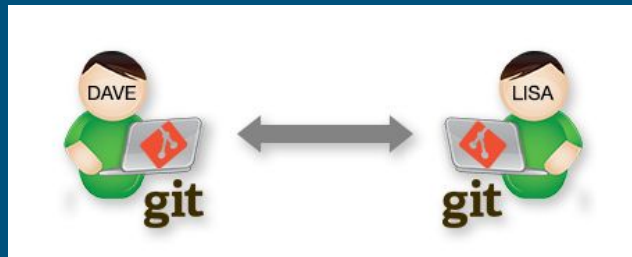
Git vs. GitHub



Git = the version control software (one of many options!)

GitHub = the hosting service (one of many options!)

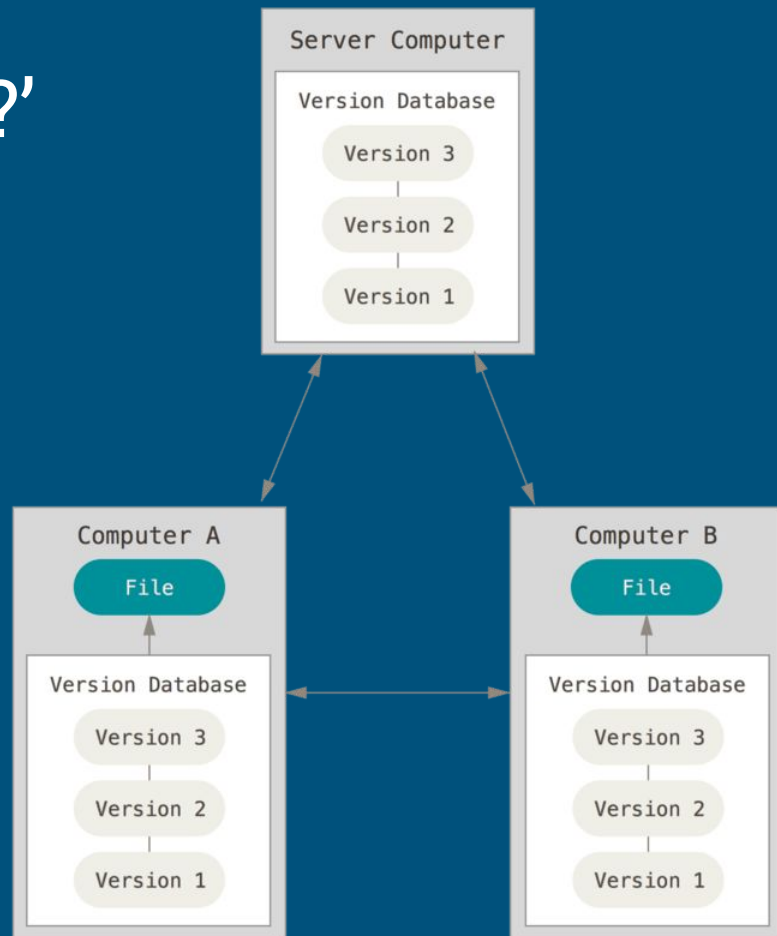
<https://jahya.net/blog/git-vs-github/>



More on 'what is GitHub?'

There are many different types of version control systems out there. Git and GitHub are what you'll encounter with most frequently in your roles as librarians/technologists within libraries.

It is what is known as a “distributed version control model”.





An advantage of the distributed model is that the repository, or project, lives in multiple places. So if one computer or server goes down, the whole thing isn't actually doomed!

GitHub Pages

- Allows you to publish code as a website
- Can be used in place of a server for static websites and code with index.html file.

E.x. <https://github.com/CityStoriesUCLA/lyricalmap>

<https://github.com/dnoneill/captioneditor>

Let's practice!

Now over to Natalia for our GitHub activities:

go.ncsu.edu/jumpstart-git

github.com/NatLopez/git-intro

Wrap-Up, cont'd

- *What next?* -- See how this works with code! Tomorrow we'll be learning python through a series of twitter bots exercises that you can add to your GitHub
- Resources to learn more about Git & GitHub:
 - ◆ [Software Carpentry Tutorial](#)
 - ◆ [GitHub Guides](#)
 - ◆ [Git Cheat Sheet](#)
 - ◆ [\(Another\) Git Cheat Sheet](#)
 - ◆ MOOCS:
 - LinkedIn Learning: [Git Essentials Training](#) (paid)
 - Coursera: [Introduction to Git & GitHub](#) (paid)
 - Udemy: [Git Started with GitHub](#) (free)
 - YouTube (Net Ninja): [Git & GitHub Tutorial for Beginners](#) (free)
 - ◆ Try it: "pair programming" -- play around!