Git on the command line

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Review

A typical workflow with Git

- git clone
  - Copies a remote repository onto your machine. The copy is your local repository
- git status
  - Tells you where your local repository is in relation to the remote repository
  - If you are **behind** the remote repository, you will **pull** the changes to become up-to-date
  - If you are **ahead** of the remote repository, you will **add**, **commit**, and **push** your changes
- git pull
  - Updates your local copy of the repo
- git add
  - Stages changes to be committed
- git commit
  - Records and assigns a label to the changes
- git push
  - Applies your local changes to the remote repository
- git --help
  - If you want more information on a command

Creating a new repository

How to initialize a repository

- Option #1: You want to add a remote repository to GitHub, starting from an **already-existing** repository or directory on your local machine
- Option #2: You want to create a new repository remotely on GitHub, then clone it onto your local machine
- Why Option #1?
  - Sometimes you don’t know that you’ll want to make a project’s development public
  - You begin working individually, then start working with another person and need a way to effectively collaborate on development
  - You’re using Yeoman along while developing an eXist-db app (more on this later)
- Why Option #2?
  - You know that you’ll want to track the entire development process of your project, from its start

Practice (Initializing Locally)

- On the command line:
  - mkdir test
  - cd test
  - pwd
  - ls
  - touch test.txt
  - ls
  - git init
  - git status
  - git add .
  - git status
  - git commit -m “Initializing repo”
  - git status

Initializing locally (continued)

- In your browser:
  - Go to your GitHub profile, then click on the “Repositories” tab
  - Click on the “New” button
  - **Important:** Give your repo the same name as the directory you created (“test”)
  - **Important:** Do **not** check the “Add README” box
  - Click “Create repository”
  - Go back to your command line, then run the commands listed under “...or push an existing repository from the command line”
  - Refresh the repo page on GitHub and verify that it’s no longer empty
  - You’re done!

Practice (Initializing Remotely on GitHub)

- Go to your profile on GitHub
- Click on the “Repositories” tab
- Name the repo “practice” (or whatever you like)
- **Important:** Check the “Add README” box
- Click “Create repository”
- Click on “Code,” select the “SSH” option, and then copy the URL below it
- **On the command line**:
  - Type git clone [paste your SSH URL here]
  - Enter your passcode
  - cd into the directory (it will have the same name as the repo you cloned → “practice”)
  - git status
- You’re done!

Yeoman

Initializing a repo with Yeoman

- Head to the following link: https://github.com/Pittsburgh-NEH-Institute/pr-app/blob/main/pr-app-tutorials/yeoman.md
- Or, head to the pr-app page on GitHub, click on “pr-app-tutorials,” then scroll to the bottom of the page and click on “yeoman.md”
- Follow the steps for working with Yeoman on the command line

Resources for learning more about Git

- *Learn Enough Git to Be Dangerous*
  - https://www.learnenough.com/command-line-tutorial
- Mark Lodato, “A Visual Git Reference”
  - https://marklodato.github.io/visual-git-guide/index-en.html
- Sam Livingston- Gray, “Think Like (a) Git”
  - https://think-like-a-git.net/