# Demo: GIT

#### Git

- Versioning control system for web sites and software development
- Created by Linus Torvalds to assist in the development Linux operating system
- · Part of modern workflow for web development
- · Keep track of changes made to files over time
- Full history of project
- Super "undo"
  - Make mistake and go back to previous version
  - Confidence to change anything
- Alternative branches
  - Experiment with different changes
  - o Merge successful branches with master branch
  - Delete unsuccessful branches

## Launch Terminal

- Applications > Utilities > Terminal
- OR launch Utilities (shift + command + u) from finder
- OR Spotlight Search (command + spacebar)

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## Navigate to web site directory

- · CD into site directory that you want to add git to
  - Is = list contents of pwd
  - o cd = change directory
  - o pwd = present working directory

## Initialize Git Repository

- git init
- o creates hidden .git folder
- o view in terminal Is -la

#### Staging

- "saving a file" at its current state
  - o git status
  - o git add.
  - o git status

## Committing

- · "printing a file" as a permanent record
- saving changes to history
  - o git commit -m "first commit"
  - -m = message
    - describes why change was made
    - q to exit log

#### Log

- git log
- displays author name and email address (automatically assigned) and commit message
- lab fix
  - o git config -global user.name "URfirstname URlastname"
  - o git config --global user.email "you@colorado.edu"

## **Process**

- write code
- terminal
  - o git status
  - o git add.
  - o git status
  - o git commit -m "commit message"

## Super Undo

• git checkout "filename"

#### GitHub

- Store git repositories online
- Share code
- · Collaborate on projects

### Create GitHub account (free)

- https://github.com
- · username, email address, password
- Signup for GitHub

#### Create new repository

- Repository Name
- Choose Public
- · uncheck initialize this repository with a README
- Create repository
- Clone (copy github repository url)

#### Terminal

- cd into local git repository project
  - o git remote add origin github-repo-url
  - o git push -u origin master
- make change
  - o git status
  - o git add.
  - o git commit -m "change description"
  - o git push
- · check GitHub to see new commit