Source Control with GitHub

Monday, January 16, 2023 7:54 AM

What is GitHub?

GitHub allows you to pick a folder on your computer for it to keep track of. Anytime you make changes to that folder and commit them, GitHub will store a record of those changes. You can create, edit, or delete files or folders, and GitHub will track all of that when you commit, as long as they are inside the original folder you told GitHub to keep track of. That's really useful, so we can revert our changes if something in our project breaks!

Instead of letting GitHub keep an eye on a folder stored on our computer, we're going to have it keep an eye on one of the server's folders! This is a folder called www. It sits on a Linux computer at the IP address 161.35.112.134. It can be found at the path /root/var/www (I believe this is where the Apache in LAMP comes from.)

How do I set this up on my computer?

- 1. Make sure you have git **installed** on your computer's terminal
- 2. Create a new folder on your computer that you want to work out of (<destination> for #3)
- 3. Clone the GitHub repo to your local machine. Run 'git clone <source> <destination>'
- 4. You now have a copy of our project's files on your local machine. You can now make changes.

The source can be found on the repo website under the green "code" tab. Use the https link.

VS Code has built in functionality for steps 1-4. If you're

using a text editor, you'll need to use some bash

commands (they aren't too difficult to learn)

being tracked by GitHub.

How do I make changes to the project?

- 1. **Pull** the latest revisions from GitHub down to your local machine.
- 2. Make your edits. (create, edit, delete)
- 3. Commit the changes locally. (include a message with your commit)
- 4. Push the commit to GitHub.
- 5. (Optional) ssh/PuTTY into the server computer and pull, the changes will be reflected at our website.

I'm not going to give exact instructions here, because everyone's computers are slightly different. Talk to me (Blake) if you need 1-on-1 help, I'd be happy to troubleshoot with you.

This is the link to our GitHub repository. The repository is where all of the files and revision history is stored online. https://github.com/proj1-team6-cop4331/lamp

GitHub will hold records of all changes. (1 for each commit) If we accidentally break the site, we can go "back in time" GitHub^e git commit (save it locally) git pull git pull git push (puts it on GitHub) Bring latest GitHub record Bring latest GitHub record down Put a new record (commit) on top of the most recent one. Make sure you give your commit a down to the server so it can to our local machine so the message so we know what your change does. be reflected on the site changes we make happen on top (ex. Added a log-in button on the front page.) of changes our teammates made. We can log into the server remotely via terminal. (ssh or use PuTTy) We can do 2 things here: 1. View the server contents. (never edit the contents 2. Pull the latest changes from GitHub. (git pull) The Our server files sit on a Linux Our local machine. We can edit latest changes will be reflected on our project files here, as long as they're computer somewhere in New York website almost immediately.