GitHub instructions (for hopeful reduction in frustration)

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No promises about your potential user experience, but I've got this to work on three machines now, so hopefully it will work for you too…

0) [If you haven't got one already] Make an account on GitHub

Go to github.com and make an account. Make a new repository for your stuff in the class – call it "GEO_242", and put some text in the `README.md` file.

1) Set stuff up on the GitHub side

In the olden days, you could just use your username and password to push material from your computer to your GitHub repositories. Those days are long gone. Now security is much more complicated and requires multiple steps to set up.

First, you apparently need to make a personal access token. Create one like so: https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/managing-your-personal-access-tokens#creating-a-personal-access-token-classic

This will last for up to a year, so be aware you might need to redo this step eventually…

2) Get some things ready on your side

This bit can be quite frustrating if you don't know what you're doing. So make sure you follow these instructions (found by trawling the GitHub documentation and occasionally googling error messages).

First I made a new SSH key: https://docs.github.com/en/authentication/connecting-to-github-with-ssh/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent?platform=linux

I added it to my github account: https://docs.github.com/en/authentication/connecting-to-github-with-ssh/adding-a-new-ssh-key-to-your-github-account

Tried to get it working (not sure if it worked): https://docs.github.com/en/authentication/connecting-to-github-with-ssh/using-ssh-agent-forwarding

3) You can try and use it!

Try and clone your repo to your own machine! Run this command in the terminal in a place where you'd like your repository directory to be stored:

```
git clone https://geniusinaction/GEO_242.git
```

(substitute your own user name and repo for the bolded text above, unless you want to clone my repository, which I won't give you permission to make changes to…)

Then, you should see the directory you have cloned. Go into it and copy some files into it.

Next, you need to run the command below in that directory, to enable pushing local files to the repository using ssh:

```
git remote set-url origin git@github.com:geniusinaction/GEO_242.git
```

(replace the bolded part with your own username and repo name)]

Then you can add files using this syntax (swap out the filenames for yours…)

```
git add 01_IntroToRasterData.ipynb
git add 02_RasterDataManipulation.ipynb
git add 03_RasterProjection.ipynb
```

You can then commit those changes with this command:

```
git commit -m "put some information here"
```

Where the text in the quotes should describe what changes you are making to the repo (e.g. "adding some files").

[At this stage, if you haven't already set them up, git might ask pointedly for your user name and email address. I would do what it tells you to do.]

Then, to push your changes to the repository, you can run this command:

```
git push
```

If you have set all the things up properly, it will copy your files to the remote repository, and you can see them on your repository page on the GitHub website. If you haven't set it up properly…it won't. Double check that you did all the things in 1) and 2) for a start. And failing that, try searching Stack Overflow or googling the error message.