Student git access

Everything that follows assumes that you are on one of the CS department Linux machines.

Initial setup There’s some one time setup you need to do for you usage of git:

1. Let git know your name
   
   ```bash
   git config --global user.name "Jane Smith"
   ```

2. Let git know your email
   
   ```bash
   git config --global user.email "jane.smith@slu.edu"
   ```

3. Set your preferred editor (you can also use vi, emacs, etc.)
   
   ```bash
   git config --global core.editor "nano"
   ```

4. If you get a strange error asking for one more config, copy and paste the “simple” option
   
   (sometimes you will not get this one, but I’ve seen it come up for several students this semester)

For any course you take that uses git you need to setup access to the course repository and your personal repository within the course.

1. Make a directory for the course and cd into it. (This is important, because you’ll have a lot of these by the end of your time here, and all are labeled with your username and instructor!)

2. Create the initial course repository.
   
   ```bash
   git clone git@git.cs.slu.edu:courses/spring19/csci_2100_02/instructor.git
   ```

   Note that this is less essential - I’ll use this repo to put in template files, like I’ve been doing on ZyBooks, but you can always get them off of the webpage, also. (See HW4 for an example.)

3. Add in your personal course repository (where you put in your own userid in at the end of the command below)
   
   ```bash
   git clone git@git.cs.slu.edu:courses/spring19/csci_2100_02/yourusername.git
   ```

   You’ll use this one to submit your homework, and I’ll also push grade rubrics and points totals to this repo.

In the end, you will have two directories per course: the shared course repository and your personal repository for the course.

**Important note:** Make sure that these are in some subdirectory, since every course you use here at SLU from here on out will probably generate a git folder called course and a git folder with your userid. This will be confusing if they are all in your home directory!
**Getting course materials**  To download everything from the course repository. Change directory it the course directory (course)

```bash
git pull
```

**Completing an assignment**  Your instructor will give you the name of an assignment, e.g. `assignment1`

1. Change directory to your personal repository (your userid)
2. Create a directory for the assignment (e.g. `assignment 1`)
3. Create/edit any files you need to for the assignment
4. For each file that is part of the assignment, add them to the repository  
   `git add filename`
5. Commit your changes
   ```bash
git commit -a
```
   You will need to entry a log message describing the changes you have made.
6. Upload the changes
   ```bash
git push
```

**See instructor comments and grades**  If your instructor makes any edits to your files or upload comments you can access them as follows

1. Change directory to your personal repository (your userid)
2. Access the assignment
   ```bash
git pull
```
3. Look at any files your want to

**Accessing from outside CS environment**  Git uses a ssh public/private keypair. You will need to copy your private key from hopper into the appropriate ssh directory on your computer. How to do this depends on the OS you are using, so it’s a bit easier to do from hopper to start with, but come see me if you’d like to discuss. You are also welcome to use the web browser, as I know many do in CSCI1300.

**Learning more about git**  There are a variety of good information sources online about git. For example [https://www.atlassian.com/git/tutorials](https://www.atlassian.com/git/tutorials)