CS 1200 GitHub Classroom Set Up Instructions (Fall 2025)

We use <u>git</u> with GitHub Classroom for problem set code distribution and version control. There are many general git tutorials available online; here is one <u>tutorial from SEAS</u>.

We'll release starter code for problem sets via a GitHub repository. However, you will want *your own private GitHub repository* for problem sets, so that you can save your own code. Please keep this repository private so that your solutions are not publicly available. You'll clone that private repository onto your computer, do work there, and then push your work upstream to GitHub to back it up. Here's how to create that private repository.

You will need to follow these steps to get set up with the repository for CS 1200's assignments.

- 1. Create a GitHub account if you don't have one already.
- 2. Create and/or configure an SSH key using GitHub's instructions. Specifically:
 - a. Create the key (if you don't have one already) using the ssh-keygen program.
 - b. Add the key to your GitHub account.
 - c. Test your SSH connection.

If you use multiple computers to do your problem sets, you'll need to configure an identity on each of these computers. The safest way to do this is to create and configure a new SSH key for each device.

- 3. Visit our GitHub Classroom link: https://classroom.github.com/a/hz6tosr
 - a. Log in if prompted.
 - b. Accept the assignment. This will create an empty repository with a name like Harvard-CS-1200/cs1200-YOURUSERNAME.
 - c. Refresh the page until the assignment repository is ready. This may take a while, and you may see a "500 Error" at first.
- 4. Create a local copy of your (initially empty) repository:
 - a. Visit your repository's web page, which will have a link like https://github.com/Harvard-CS-1200/cs1200-YOURUSERNAME
 - b. Copy the repository's SSH link, which will look like git@github.com:Harvard-CS-1200/cs1200-YOURUSERNAME.git
 - c. Clone the empty repository to your computer: git clone git@github.com:Harvard-CS-1200/cs1200-YOURUSERNAME.git

You will get the message, "warning: You appear to have cloned an empty repository." This is OK and expected.

5. Add a remote to your repository for our handout code. This will use Git's distributed features to allow you to merge our updates with your code.

```
cd cs1200-YOURUSERNAME
git remote add handout https://github.com/Harvard-CS-1200/2025-Fall.git
```

This command creates a new shorthand name, handout, for our <u>handout code</u> <u>repository</u>.

6. Merge our latest handout code with your repository.

```
git pull handout main
```

This command loads our current handout code and then merges it into your repository. You'll run something like this every time we release or update problem set code. To see what's now in your repository, type the 1s command.

- 7. Store the resulting code in GitHub so you don't lose work: git push
- 8. If you visit the Web page for your private GitHub repository, you should now see our handout code.

Thank you to Eddie Kohler of CS 61 for this process and set of instructions.