

## Registration for the 0133 Grading Server

**Due date: before starting CW1 or CW2**

### Registration Instructions

For 0133 Courseworks 1 and 2, we use GitHub to give you code that you build upon and to accept your submissions. We also separately run the 0133 grading server, which retrieves your code each time you update it on GitHub, runs our automated tests on your code, and writes a grade report (including the results of the automated tests) back to your GitHub repository. In this way, as you work on your code for a coursework and push successive versions of your code to GitHub, you can see the exact grade each version of your code would receive. (We describe the rudiments of how to manage your code with git and the benefits of doing so in the handout for CW1. There is no code to manage for CW2 as it is a written problem set, but you submit your solution to CW2 in PDF via GitHub.)

Before you can use the 0133 grading server with your GitHub account, however, you must *register your GitHub account with the 0133 grading server.*

**IMPORTANT:** If you do not register your GitHub account with the 0133 grading server before starting work on either CW1 or CW2, you will find that the grading server refuses to grade your CW1 code, and refuses to record a submission for you on either of CW1 or CW2. **It is therefore essential that you complete the instructions in this handout before starting work on CW1 or CW2.**

We have sent every 0133 student an email with the subject line “your 0133 grading server token.” Here’s how to use the content of that email to register your GitHub account with the 0133 grading server:

1. If you don’t already have a GitHub account, create one by visiting <https://github.com> in your web browser. Accounts are free.
2. Visit the following URL in your web browser:

`https://classroom.github.com/a/wYeun4F0`

3. If you are not already logged into GitHub, you will be prompted for your GitHub username and password.
4. Once you’ve logged into GitHub, you will see a page with a button to accept GitHub Classroom assignment `cs0133-2023-cw0-register-UNAME`, where UNAME is your GitHub username. We refer to this full string below as “your repository name.” Press the button labeled “Accept this assignment.”
5. GitHub will show a status page informing you that it is creating your GitHub repository. Reload the page as necessary to check when this is done. Once creation of your repository is complete, click on the link to the repository name to see the contents of your new repository.
6. To access GitHub remotely with the `git` command on the Linux command line (which is necessary to follow the rest of these steps, as well as for doing your work on CW1 and

CW2 in 0133 this term), you need to set up authentication to GitHub using either an ssh key pair or a GitHub personal access token. (GitHub no longer allows you to authenticate on the `git` command line using your GitHub web account password.) If you are new to using GitHub and are unfamiliar with using ssh key pairs, we recommend you create a personal access token on the GitHub web site. Instructions on how to do so are available at:

<https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/managing-your-personal-access-tokens#creating-a-personal-access-token-classic>

7. On a Linux machine (such as the 0133 ssh-accessible lab VMs), issue the command:

```
git clone https://github.com/UCLCS0133/YOUR-REPO-NAME
(where YOUR-REPO-NAME is your repository name, as defined above)
```

The `git` command line will ask for your username and password; give your GitHub username and paste your personal access token at the password prompt.

8. Change directory to the local copy of your repository with the command:

```
cd YOUR-REPO-NAME
```

9. Using whichever text editor you are comfortable with (the 0133 VM supports emacs, vim, and nano), edit the file `studentinfo.md` within your repository as follows:

- On the **same line** that begins `Email address:`, after a space, copy and paste the email address to which your 0133 grading server token was sent. This email address also appears in the body of that email.

*Important:* you must use this email address. The registration process will not recognize any other email address (UCL or otherwise) than the one stated in the body of the email you received with your 0133 grading server token.

- On the **same line** that begins `Token:`, after a space, copy and paste the long token string from the email you received with your 0133 grading server token.
- Save the file.

10. Issue the shell commands:

```
git commit -a -m "register with token"
(Note the double quote marks above!)
git push
(Again, enter your GitHub username and personal access token when prompted.)
```

11. Within about 2 minutes, you should find a file named `result.md` in your repository, which is the grading server's confirmation of the result of your registration request. You can either view the report in your web browser by reloading the GitHub page for your repository, or you can update your local copy of your repository with the command `git pull`, and view `result.md` locally. If you don't see a file `result.md` in your repository yet, be patient; again, this may take up to 2 minutes or so.

If registration has succeeded, you'll see that `result.md` contains a message "Success, username: U is now bound to email: E", where U is your GitHub username and E is your email address.

If registration has failed, you will find an error message in `result.md`. If this happens, it's likely you've incorrectly pasted your email address and/or token into the `studentinfo.md` file in your repository in the steps above. Repeat the steps above starting from the editing of `studentinfo.md` carefully, and you should be able to register successfully.

You only need to complete the above steps once for all of term (i.e., for your subsequent submissions of both `CW1` and `CW2` to be accepted by the `0133` grading server). If you complete the above steps more than once, you'll find an error reported in `result.md`, but so long as you previously registered successfully, your registration will still be valid, and your `CW` submissions will be marked by the grading server. (You can check whether you previously registered successfully by looking at the history of the `result.md` file in GitHub's web interface; if you see a prior version of the file's content with a "Success" message in it, then your registration remains intact.)

**Do not under any circumstances share the token you received by email with anyone else, or give access to your UCL email account to anyone else.** If you do, they may be able to register as you (with your email address) on the `0133` grading server, which would let them submit code as you, and dictate the grade you receive on `0133` `CW1` and `CW2`!

If you have tried the above steps carefully multiple times, but do not receive any confirmation of success in your repository (as explained above), please post a private message to the class staff on Ed with the name of your `cs0133-2023-cw0-register-UNAME` repository on GitHub.