

# 333 GitLab Setup

The following instructions are for connecting your CSE Linux environment (attu or VM) to your GitLab repo in preparation for Homework 0-4.

## Find Your 333 Repository

- 1) Navigate to <https://gitlab.cs.washington.edu>
  - a) If you have a CSE NetID, use the green "CSE NetID" button, otherwise, use the white "UW NetID" button.
- 2) In your list of Projects, you should see a CSE333 repo (named **cse333-19su-students/cse333-19su-<netid>**) created for you already.
  - a) If not, please contact your instructor ASAP to have one created.

## Add Your SSH Key

This will allow you to access your repo without having to authenticate (*i.e.* type your password) every time and will greatly improve your workflow.

- 1) Check to see if your CSE Linux environment (attu or VM) account already has an SSH key
  - a) Run `$ cat ~/.ssh/id_rsa.pub`
  - b) If you see a long string starting with **ssh-rsa** or **ssh-dsa**, skip to step 3.
- 2) Generate a new SSH key
  - a) Run `$ ssh-keygen -t rsa -C "<netid>@cs.washington.edu"`
- 3) Copy your SSH key
  - a) Run `$ cat ~/.ssh/id_rsa.pub`
  - b) Copy the complete key (starting with **ssh-** and ending with your username and host)
- 4) Add your SSH key to GitLab
  - a) Navigate to your SSH Keys page by clicking on your avatar in the upper-right, then "Settings," then "SSH Keys" in the left-side menu.
  - b) Paste into the "Key" text box and give a "Title" to identify what machine the key is for.
  - c) Click the green "Add key" button below "Title."

## Your First Commit

From your CSE Linux environment (attu or VM), execute the following git commands:

- 1) `$ git clone <repo url from project page>`
  - a) Clones your repo – find the URL by clicking the blue “Clone” button in the upper-right of your project’s Details page.
- 2) `$ touch README.md`
  - a) Creates an empty file called **README.md**.
- 3) `$ git status`
  - a) Prints out the status of the repo – you should see 1 new file **README.md**.
- 4) `$ git add README.md`
  - a) Stages a new file/updated file for commit.
  - b) Should output: `git status: README.md staged for commit`
- 5) `$ git commit -m "First Commit"`
  - a) Commits all staged files with the provided comment/message.
  - b) Should output: `git status: Your branch is ahead by 1 commit`
- 6) `$ git push`
  - a) Publishes the changes to the central repo, which should now be viewable (may need to refresh) in the web interface.
  - b) You might need run `$ git push -u origin master` on the first commit (only).

## References

- **SSH Key Generation:**  
<https://gitlab.cs.washington.edu/help/ssh/README.md>
- **Basic Git Tutorial:**  
[http://courses.cs.washington.edu/courses/cse333/19su/resources/git\\_tutorial.html](http://courses.cs.washington.edu/courses/cse333/19su/resources/git_tutorial.html)