

[CS1555/2055] Simple GitHub Guide for Term Project

For our project, we are expecting each team to create one repository for the project, and you need to add your Instructor and TA as collaborators of your project.

To use GitHub, you can first register through the following link:

<https://github.com/join>

To create a new repository, one of the members should log in to your GitHub account:

- In the upper right corner, next to your avatar, click and then select New repository.
- Name your repository.
- Write a short description.
- Set the repository to be a “Private” one.
- Select Initialize this repository with a README.
- Click Create repository

To add collaborators to your project:

- Click into the project repository
- Click on the "Settings" tab (to the right of the "Insights" tab)
- On the new page, click the "Collaborators" menu item on the left side of the page.
- For each of the other team members, your instructor (GitHub username: panos4pittcs), and TA (GitHub username: xzhangedu):
 - Type his/her GitHub username into the text box
 - Select the GitHub user from the list that appears below the text box.
 - Click the "Add" button.

For more information about the GitHub you can visit: <https://guides.github.com/>.

Making changes to your local repository using Git:

Git is a version control system that is used for software development and other version control tasks. GitHub is a web serveries that allows you to publish your Git repositories and operates with you Git repositories with graphic web interface.

Using Git commends directly in the terminal is a convenient way to access your local repository. You can find Git installation guide under the following link:

<https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>

Below are some useful Git commands that may be helpful. For more detailed information please visit: <https://git-scm.com/documentation>.

1. Checkout a repository

Create a local working copy of a remote repository by running the command

git clone /path/to/repository

When your repository is hosted by GitHub, your command will be

git clone https://github.com/YOUR-USERNAME/YOUR-REPOSITORY

2. Add & commit

You can propose changes (add it to the Index) using

git add <filename>

git add *

To actually commit these changes use

git commit -m "Commit message"

Note, this commits the file to the HEAD, but not in your remote repository yet.

3. Push changes

Your changes are now in the HEAD of your local working copy. To send those changes to your remote repository, execute

git push origin master

4. Updates

To update your local repository to the newest commit in the remote repository, execute

git pull

These commands cover the basis repository operations in Git. For more information about Git commands, please read the following document: <https://git-scm.com/documentation>.