

A Basic Guide to Git & GitHub

Getting my teammate's work / Updating my local repo

- Need to first commit your own work (even if you haven't made any changes), because XCode has a file that it updates for each contributor
- For other platforms/languages, can simply do **git pull** if you haven't made any changes since your last commit

Open Terminal -> get to correct directory (the folder created by git clone – see below)

```
git add .  
git commit -m "whatever message here"  
git pull
```

Adding my own code to GitHub

Open Terminal -> get to correct directory

```
git add .  
git commit -m "commit message here"  
git push
```

Copying a new directory into my local machine

- Go to Repo you want to clone, click on "Clone or Download" button on the top right
- Copy the link provided

Open Terminal -> navigate to desired parent directory (usually, you'll want Desktop)

```
git clone // + paste link here
```

- This creates a new folder in the parent directory; this folder is where your project should reside

Setting up a new repository on GitHub

- Create new repository (profile -> repositories -> New)
- Click into repo -> Settings -> Collaborators to add any collaborators
 - o Collaborators must accept invitation in order to push changes to that repo
- Follow directions for "Copying a new directory into my local machine" above
- Move project to / save project in the folder created by that git clone
- Follow directions for "Adding my own code to GitHub"

Relevant Command Line / Terminal Commands

cd Folder – getting into a child folder (think of the folder hierarchy; if you have a folder on your Desktop, then that folder is a child of the Desktop; your Desktop is usually a child folder of your Home folder, which is the Terminal's default folder)

cd . – returns to home folder

cd .. – returns to previous folder (if you're on Desktop, it goes Home; if you're in a folder on the Desktop, it goes to the Desktop)

Further Reading

<https://guides.github.com/introduction/git-handbook/>

<https://www.edureka.co/blog/how-to-use-github/>

<https://dev.to/sublimegeek/git-staging-area-explained-like-im-five-1anh>