Git tutorial

1. How to connect it.

One git repository can include many branches. In our project, we just need to use original master branch. Therefore, after we confirm that everyone has installed and configured the git service on their PC/Mac, we will open a new private/public repository on the github. Once the repository is created, I will send you the link and you can join that through the link. For connecting, all we need to do is just clone it to your PC/Mac. The instruction is that:

**git clone xxx**(xxx represents the address of repository, the same meaning for all xxx in this tutorial)

Attention: do not use “git remote add origin xxx”, it will result in some problems since we don’t use other branches. The clone instruction has done that for us. In addition, you also don’t need to use “git init” to initialize the local repository.

1. How to work with git

In this project, we will just need a few instructions of git most of time. Basically, we will concentrate on two parts: push and pull. Literally, push means you want to upload your work to the remote repository; pull means you want to download projects to your local repository.

Usually, the whole work process looks like that and I indeed recommend to do like that:

* Using the Fetch instruction to check is there any updates in the remote repository
* Using the Pull instruction to download all of the updates to your local repository
* Work with your stuff(coding, writing, etc)
* After finishing your work and wanting to push something. Using the fetch and Pull instructions again as the first and second step
* Using the add instruction to includes all stuffs which you want to upload
* Using the commit instruction to indicate that what you do in this push operation
* Using the push instruction to upload your stuffs.
  1. How to push and commit

The add instruction: **git add .**

The commit instruction: **git commit –m “something you want to write”**

* 1. How to pull, merge and fetch

The pull instruction: **git pull origin master**

The merge instruction: **git merge origin/master**

The fetch instruction: **git fetch**

1. This is the basic tutorial for our project and I think it could meet our requirements basically. However, we also might meet some problems like code conflicts or something like that. Since every conflict is different, if we meet that, just show that and we can solve it together. Finally, the most important thing for using git is to be careful before you use the push instruction. Thus if there are some weird situations appearing when you try to push something to the remote repository, just copy the whole remote repository at another place in your computer in case of your stuffs overwrite others’ parts.