Installing git

What is Git?

Git is a free and open source distributed **version control system** designed to handle everything from small to very large projects with speed and efficiency.

(https://git-scm.com)

So you can track all work processes.

Access to Git official website and download the latest version

https://git-scm.com

or

Download from HisNet

Click.
Then the installation will be started automatically.

Installing git

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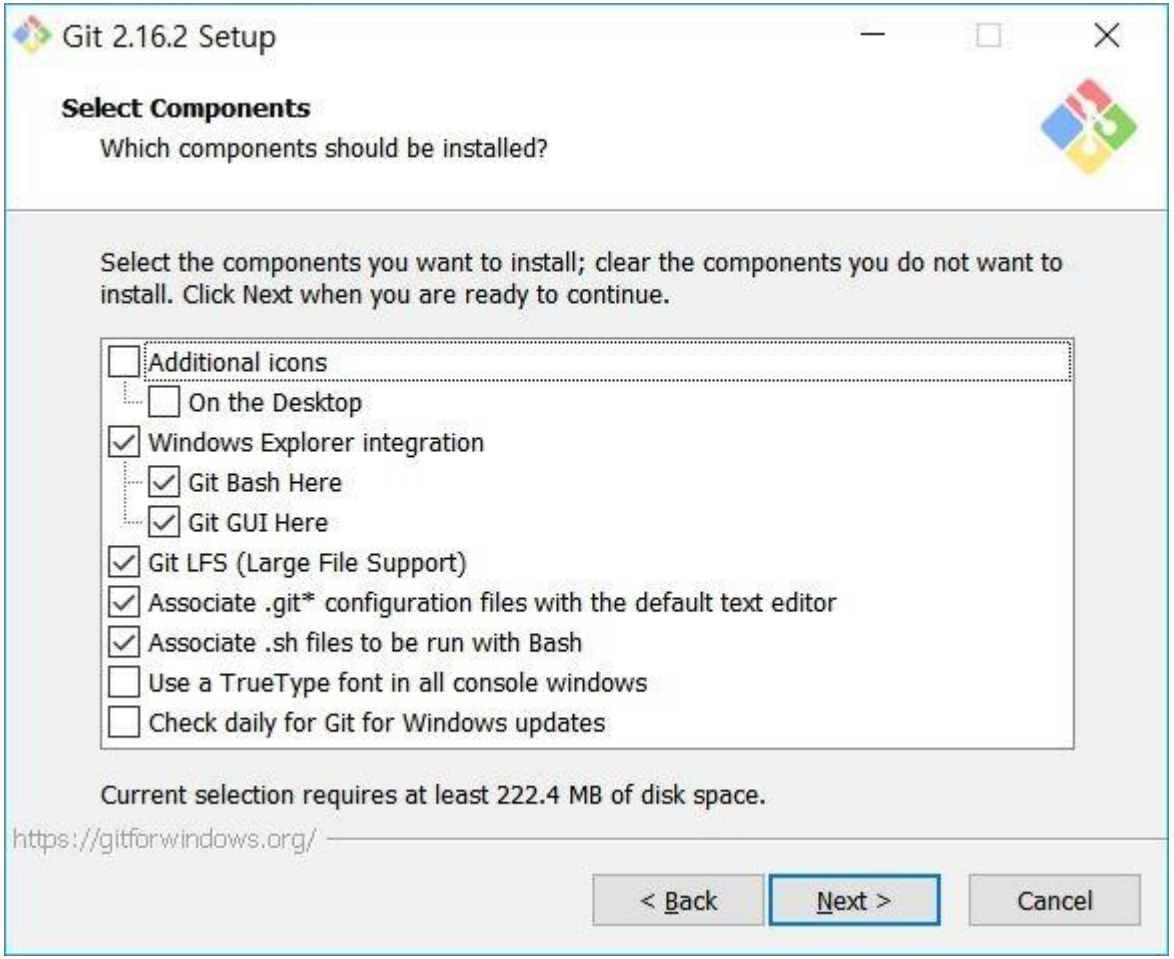
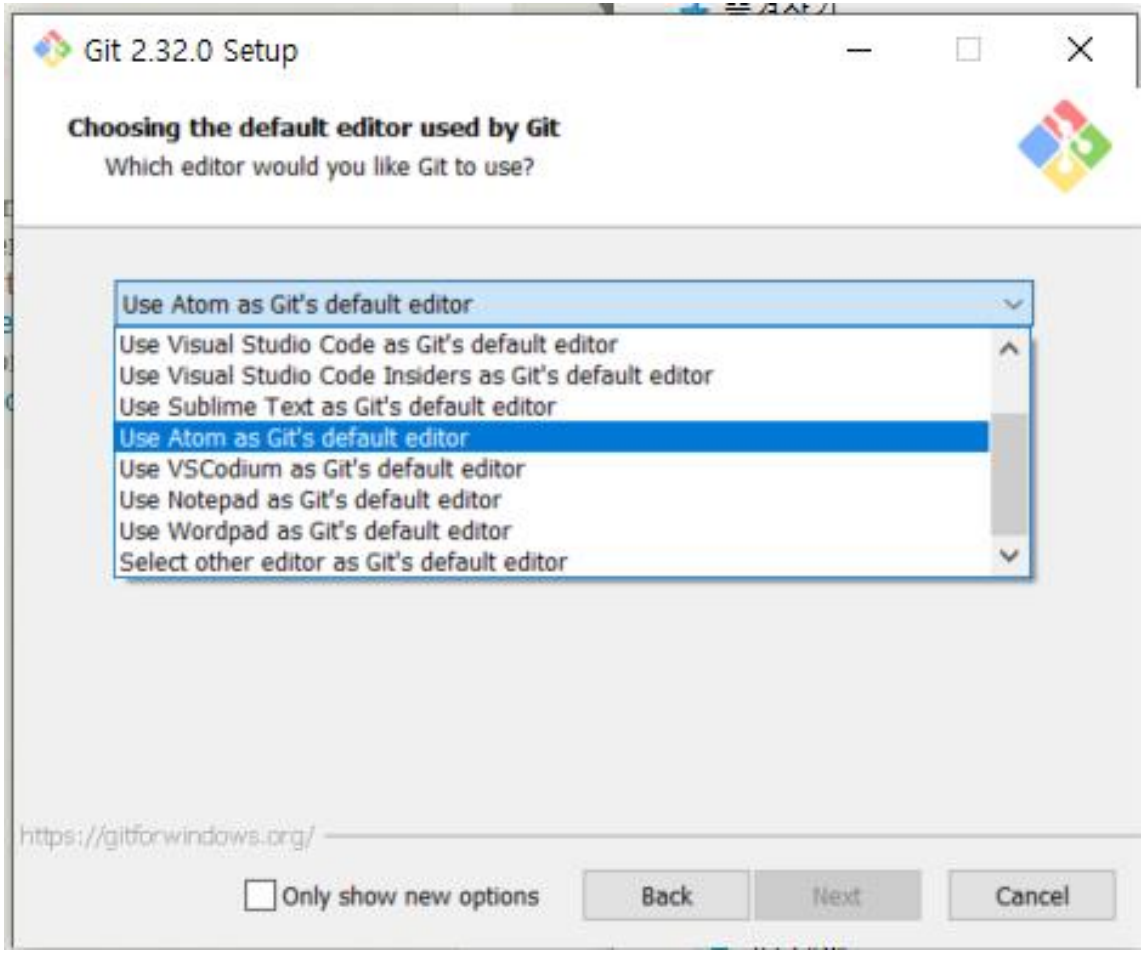


If you want add icons on your Desktop, you can check 'additional icons' and 'On the Desktop'

Installing git



There are other options. But using **atom** is recommended.

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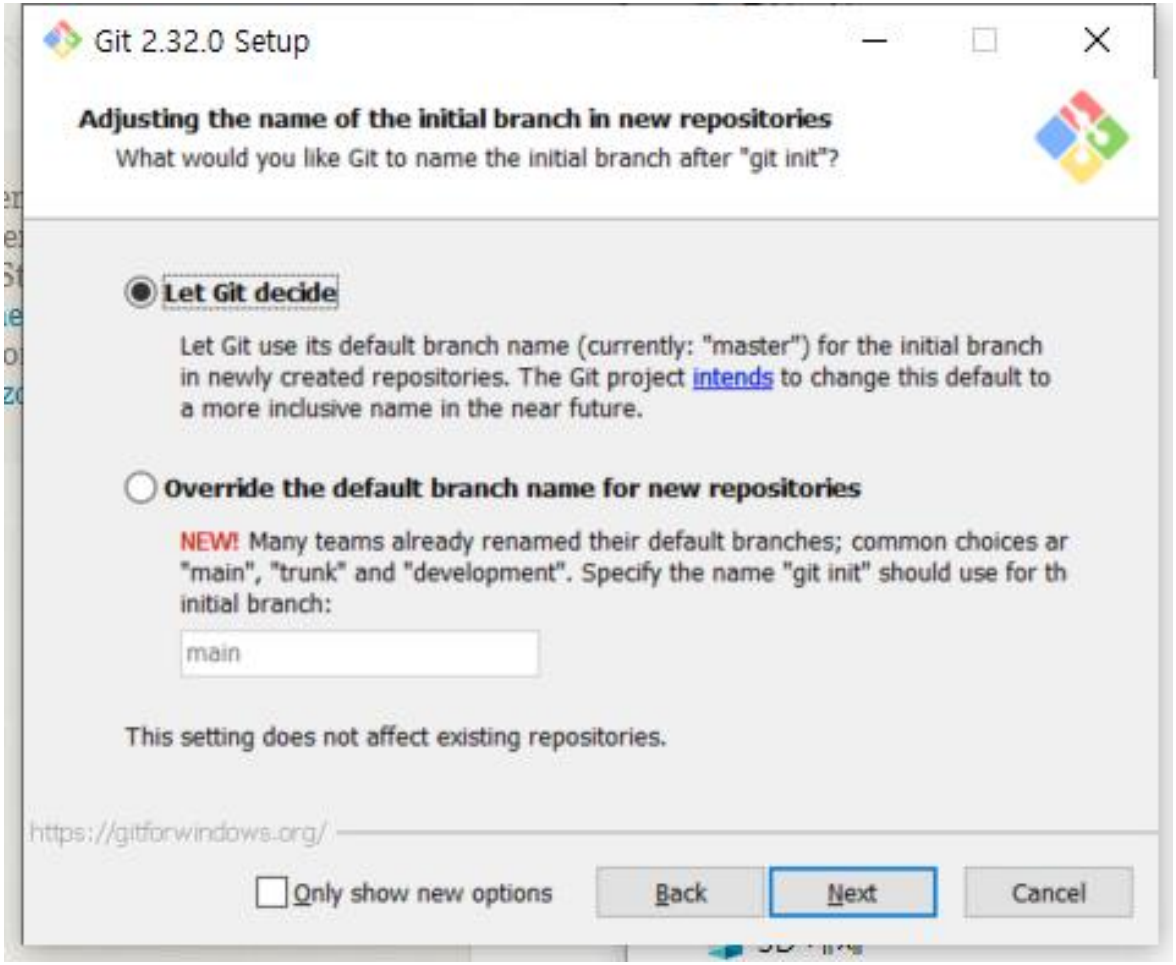
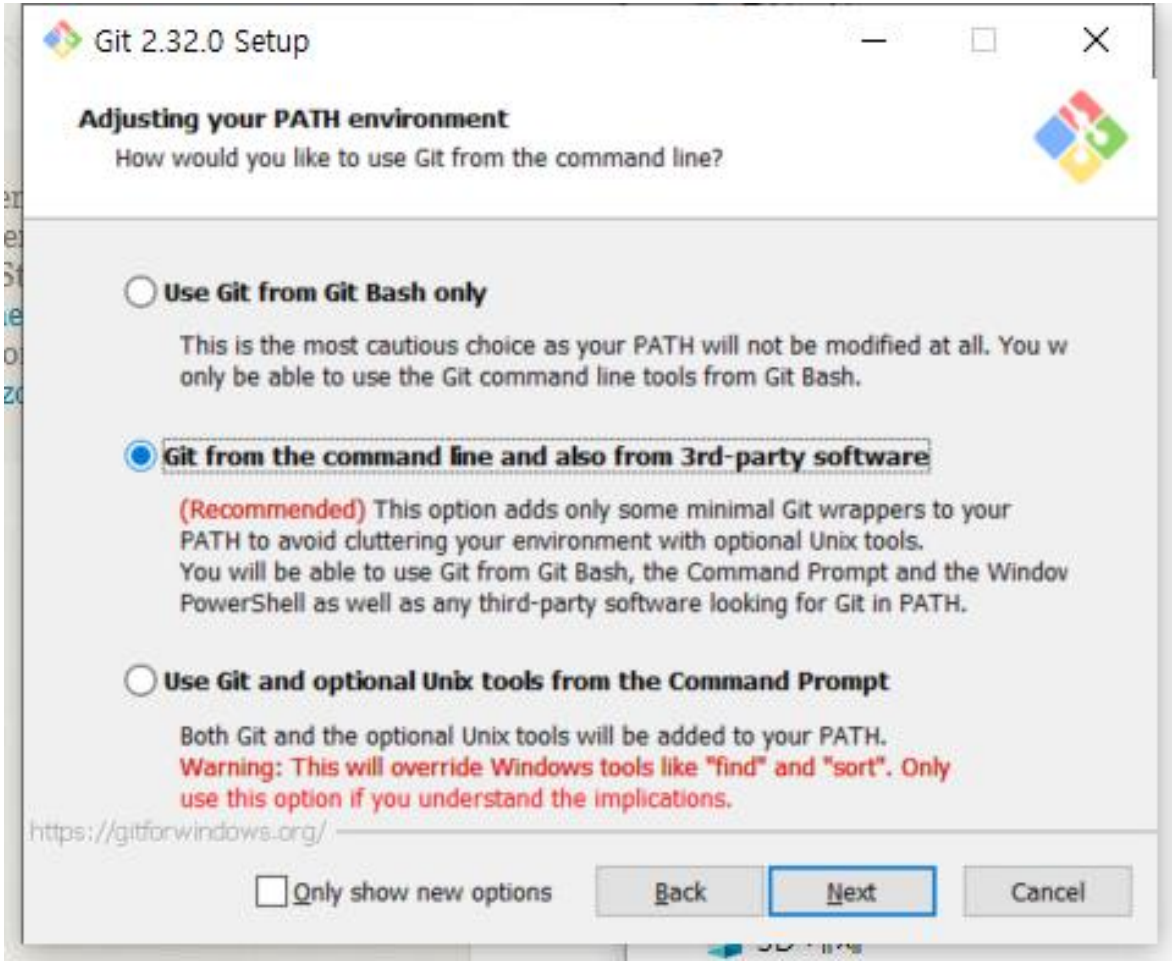


Accept the default.

Installing git



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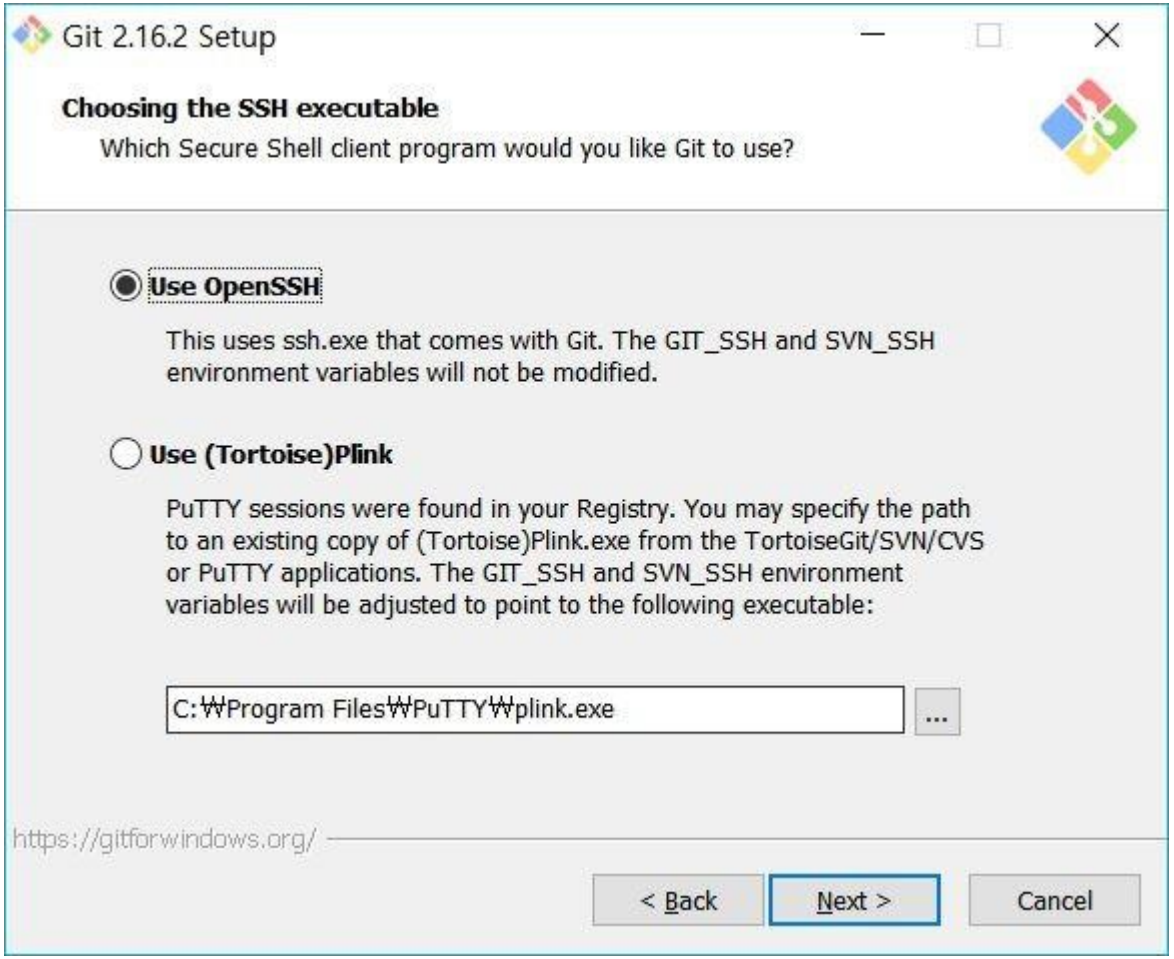

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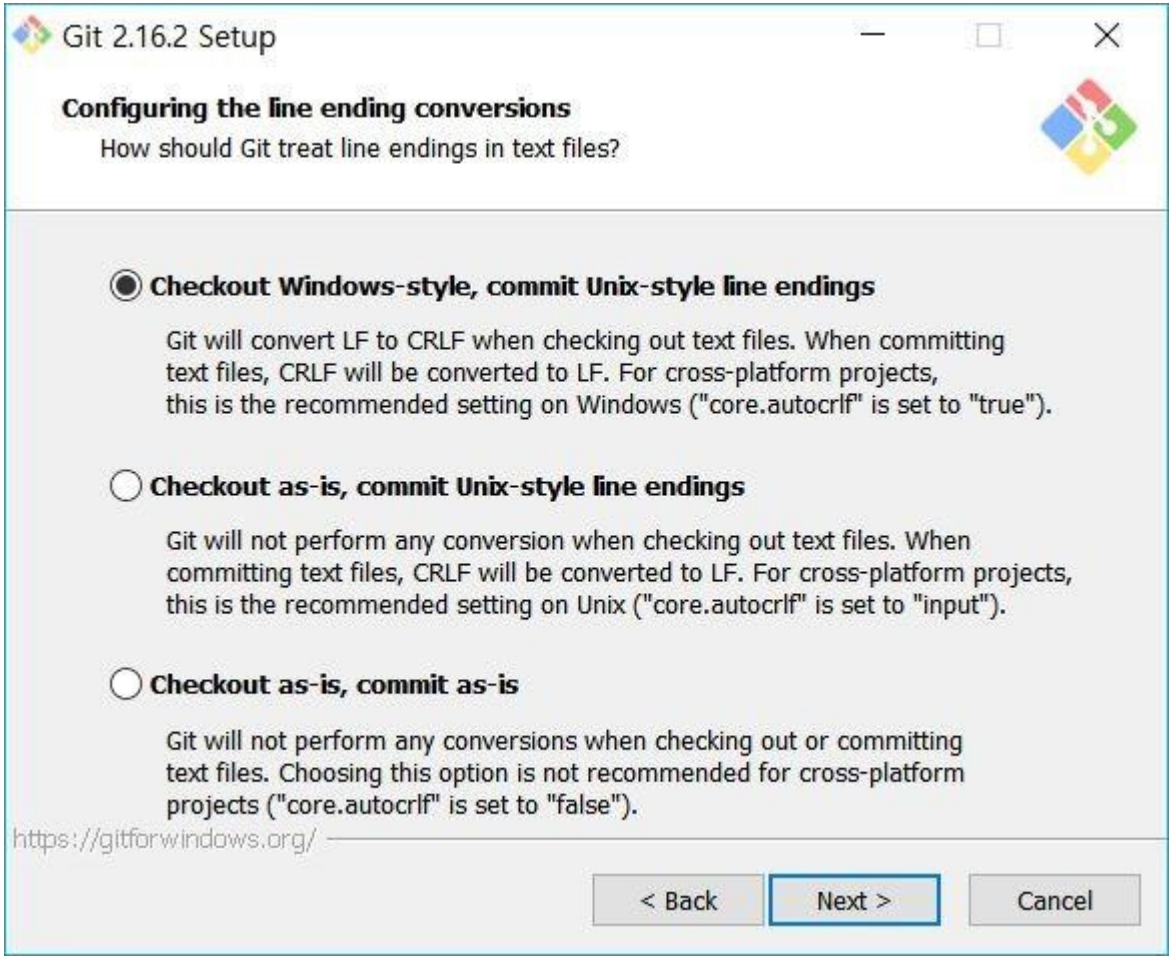

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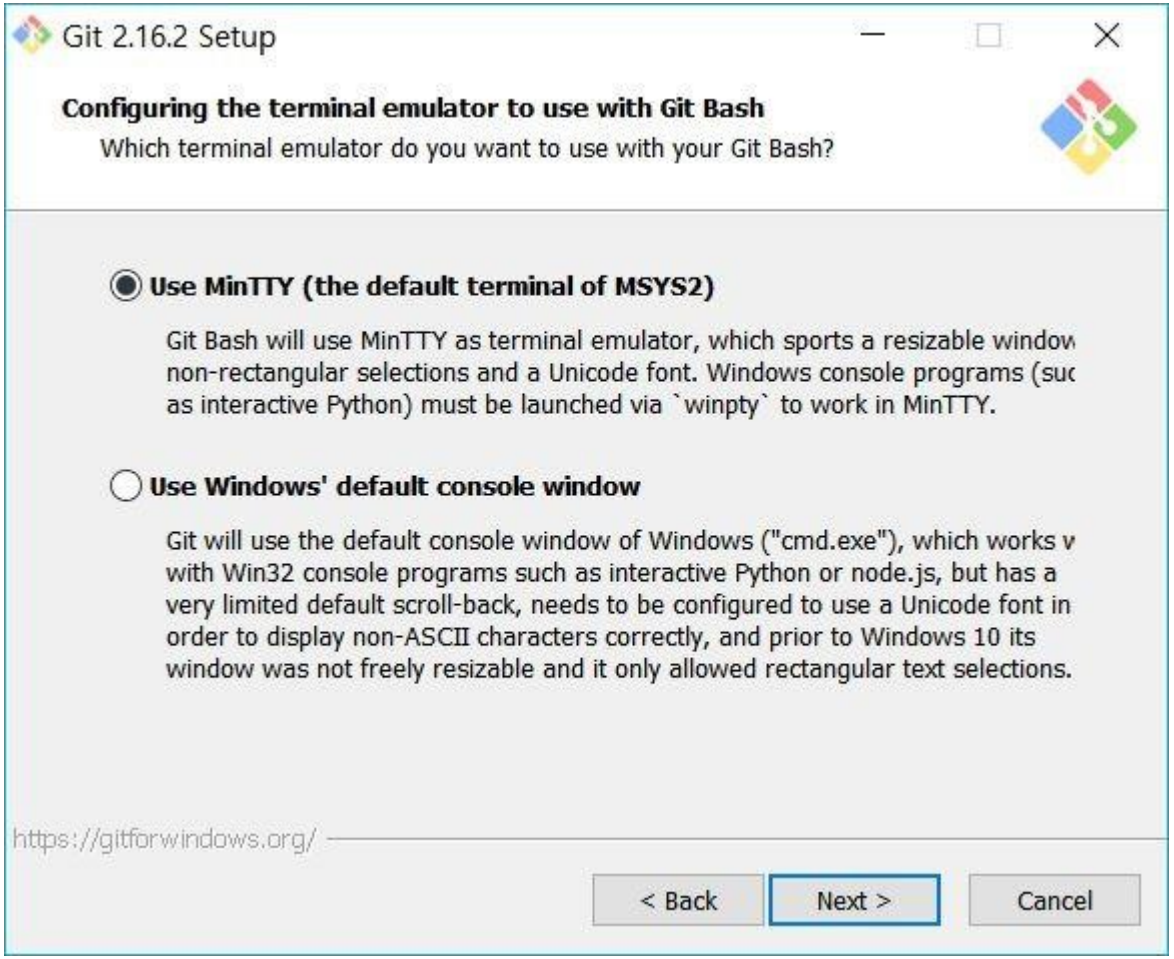
Installing git



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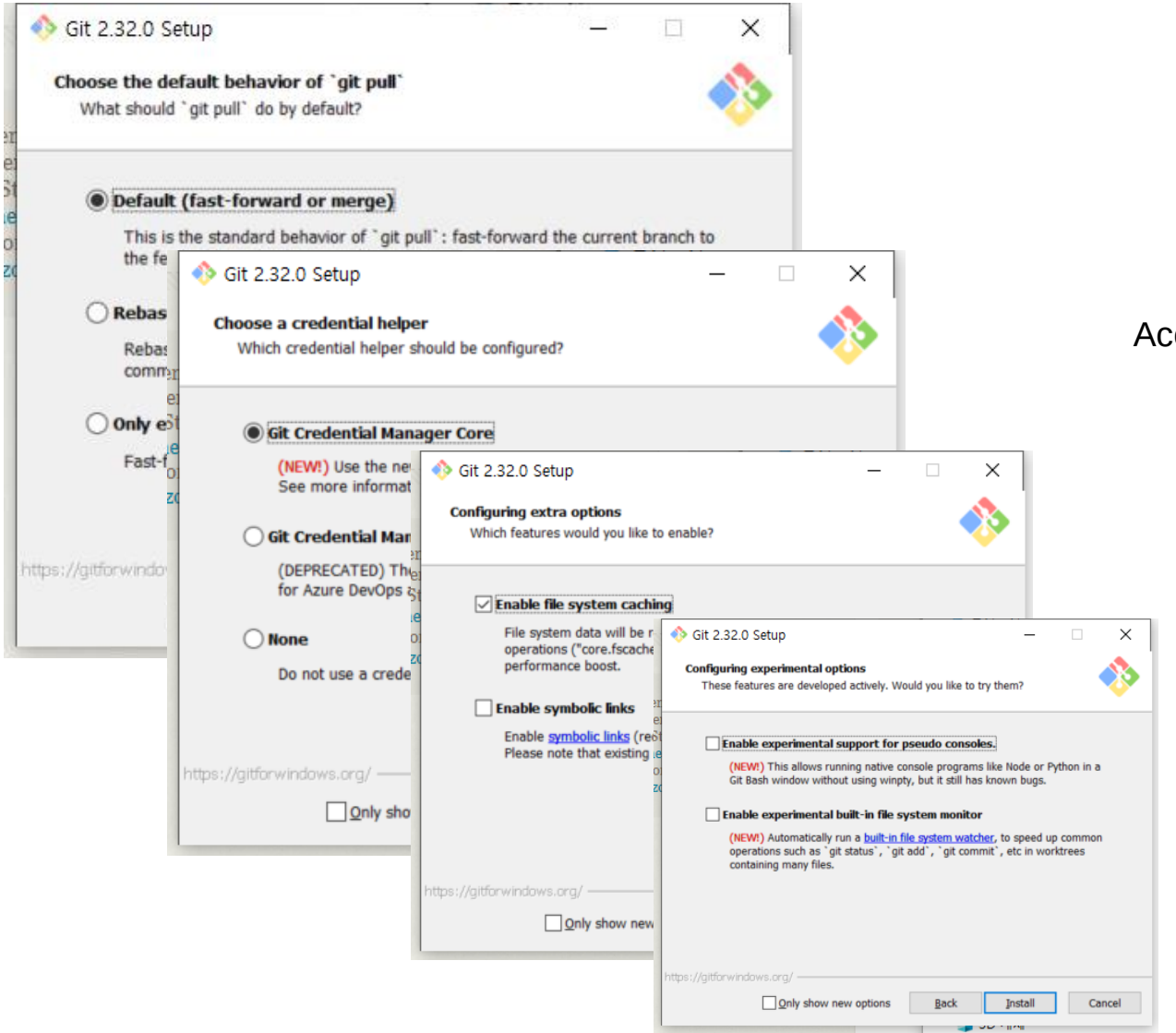
Installing git



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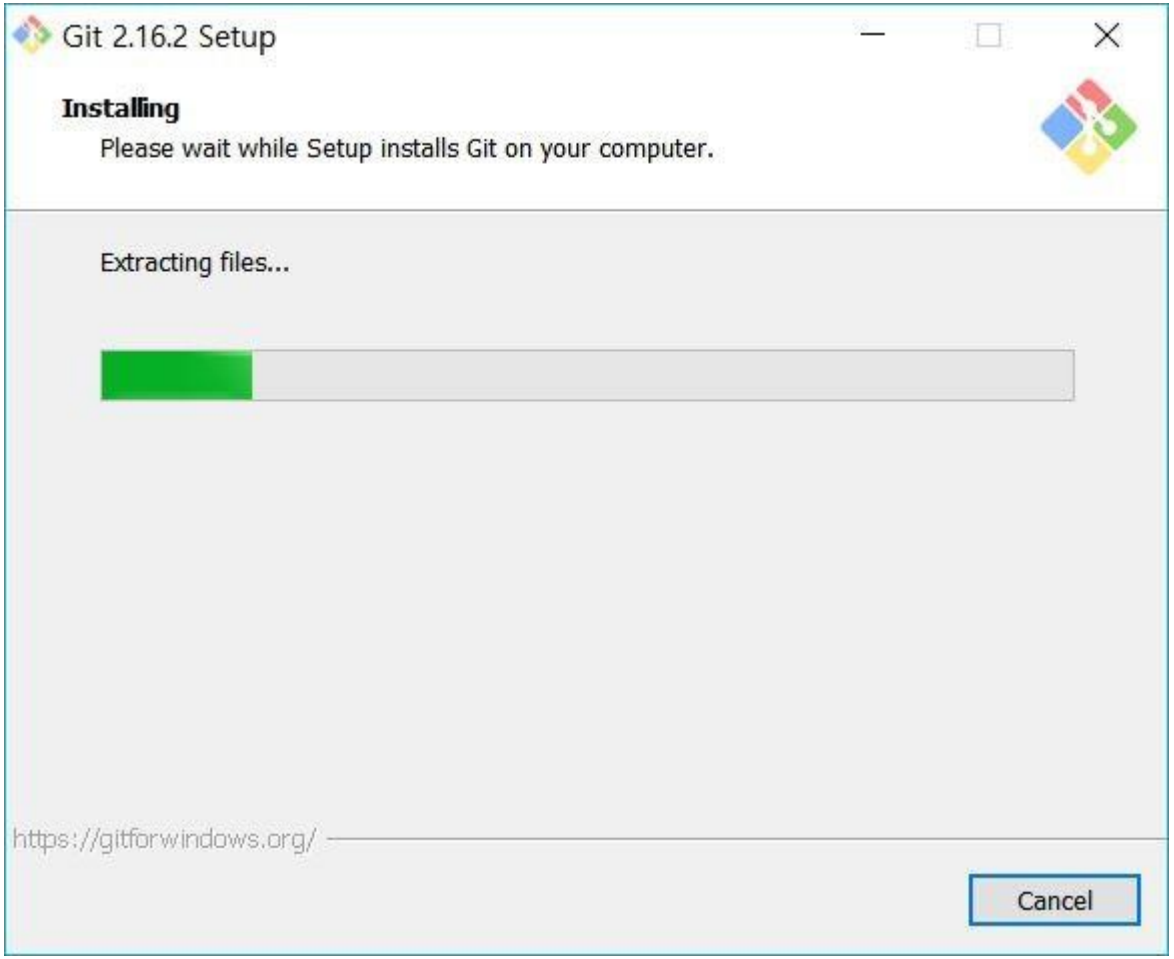
Installing git

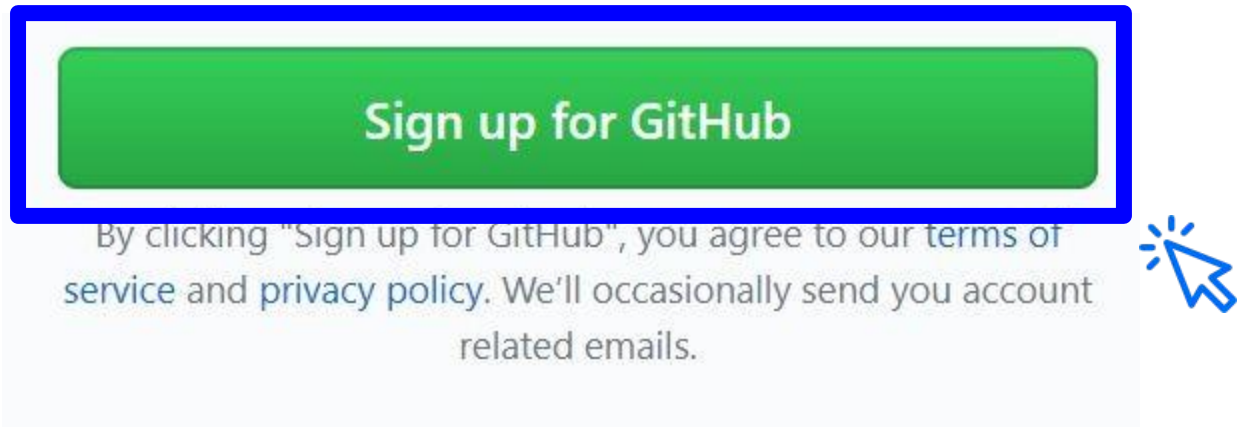


Finished installing Git

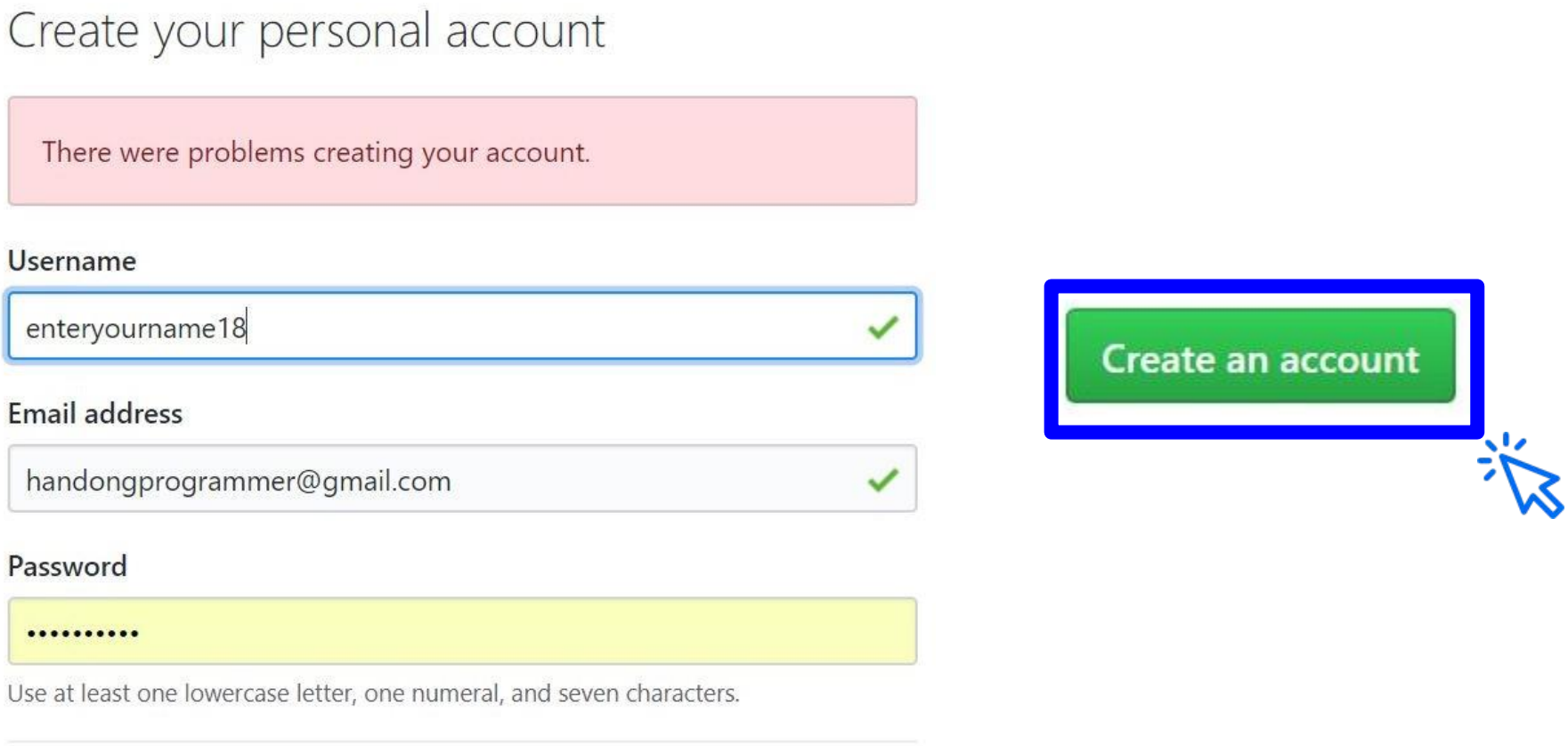
Github

Create an account

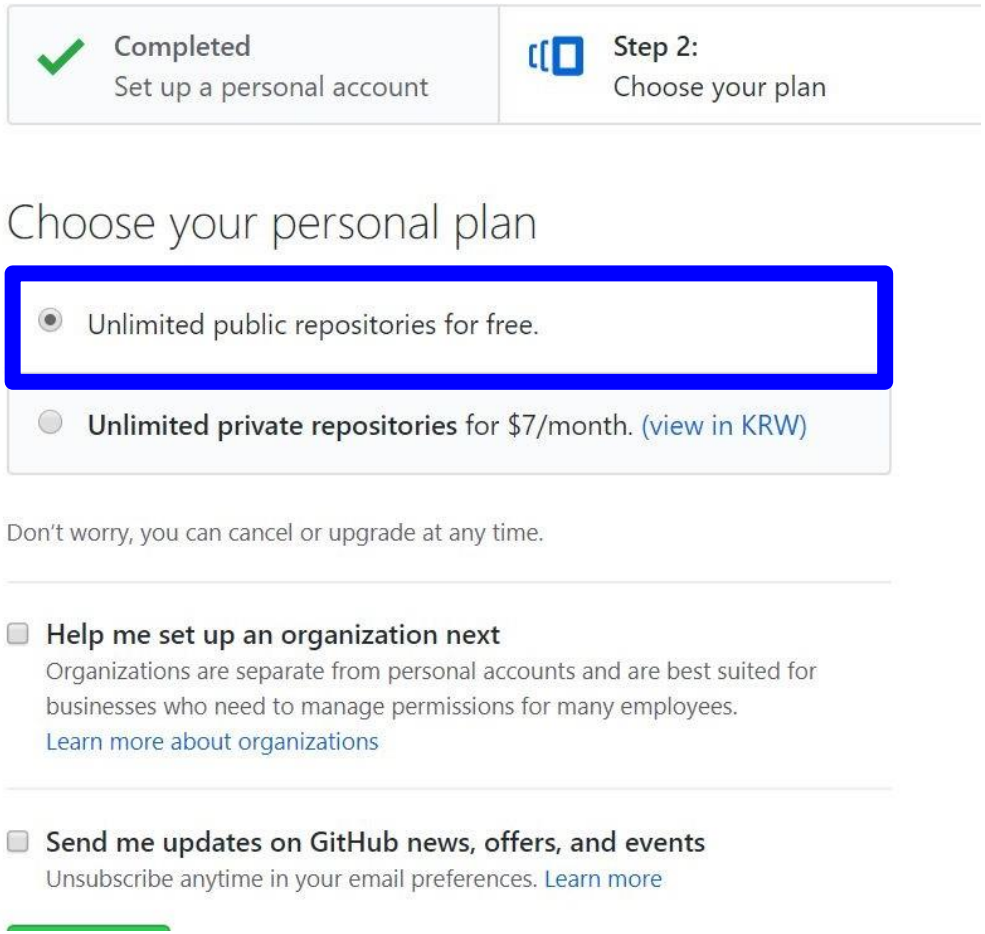
Connect to https://github.com/ and click the green button



Create an account

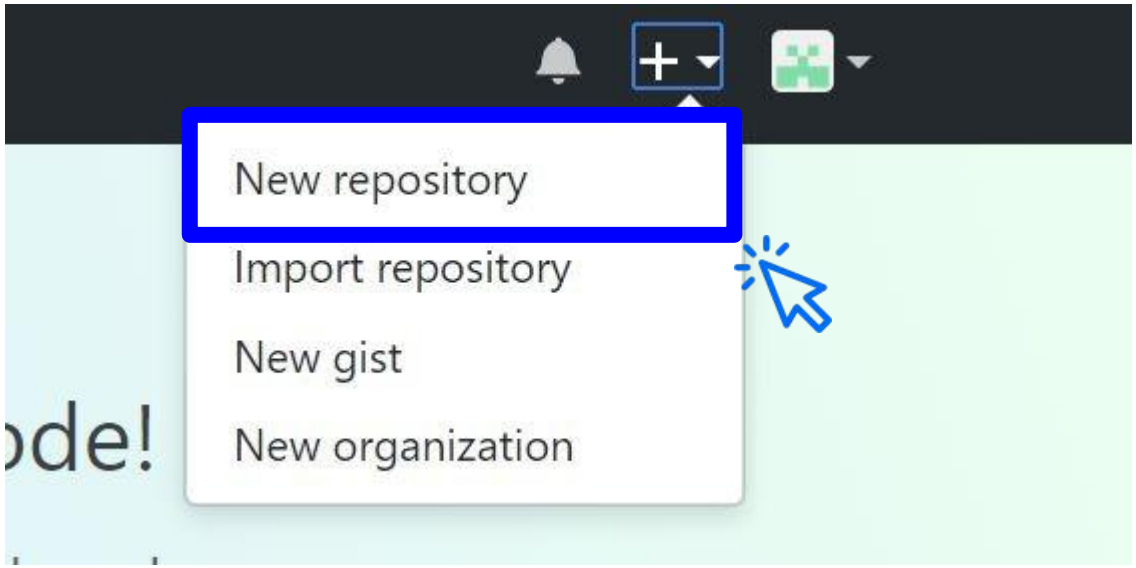


Create an account

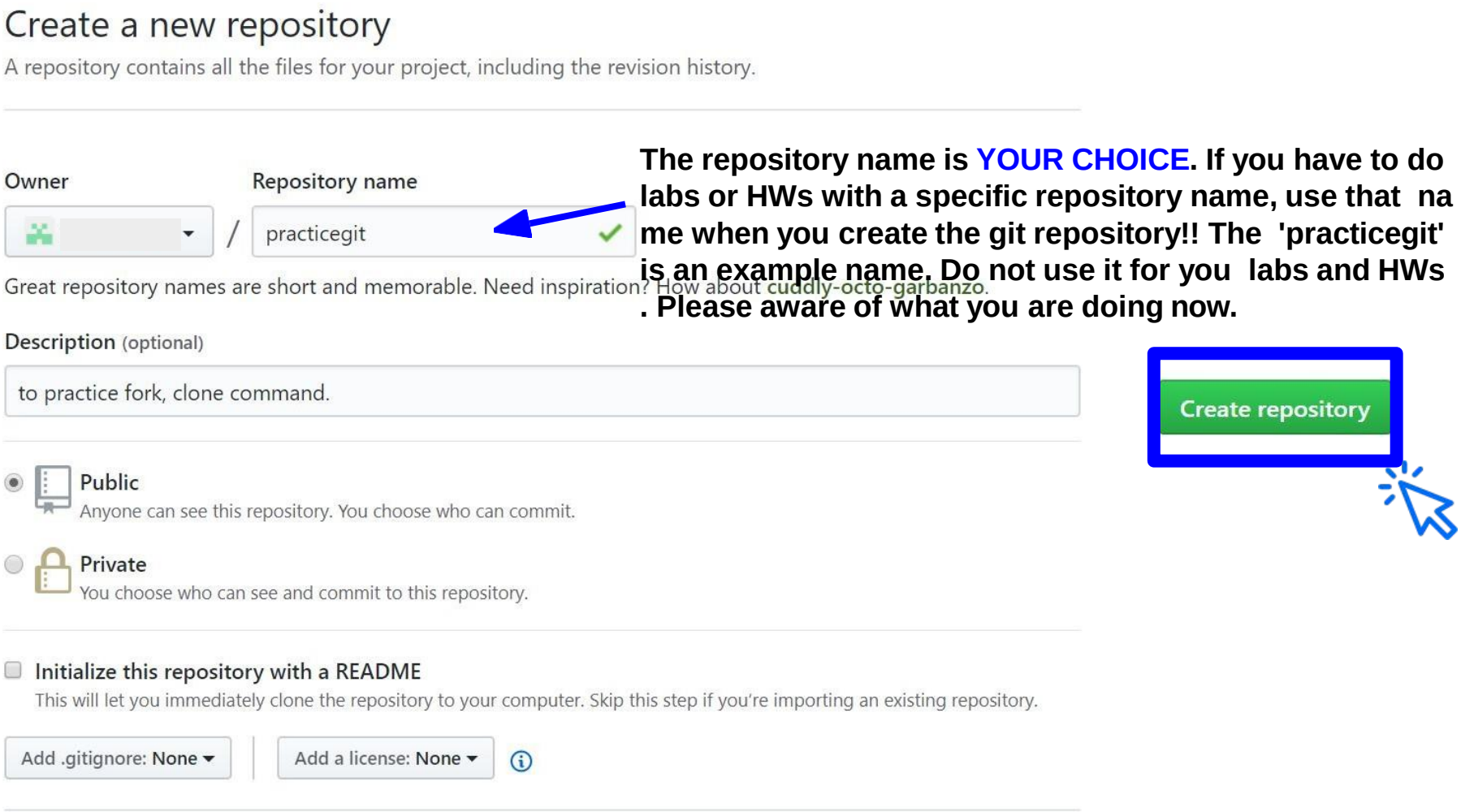


Then,<u>Verify</u> your email address.

Create your remote repository



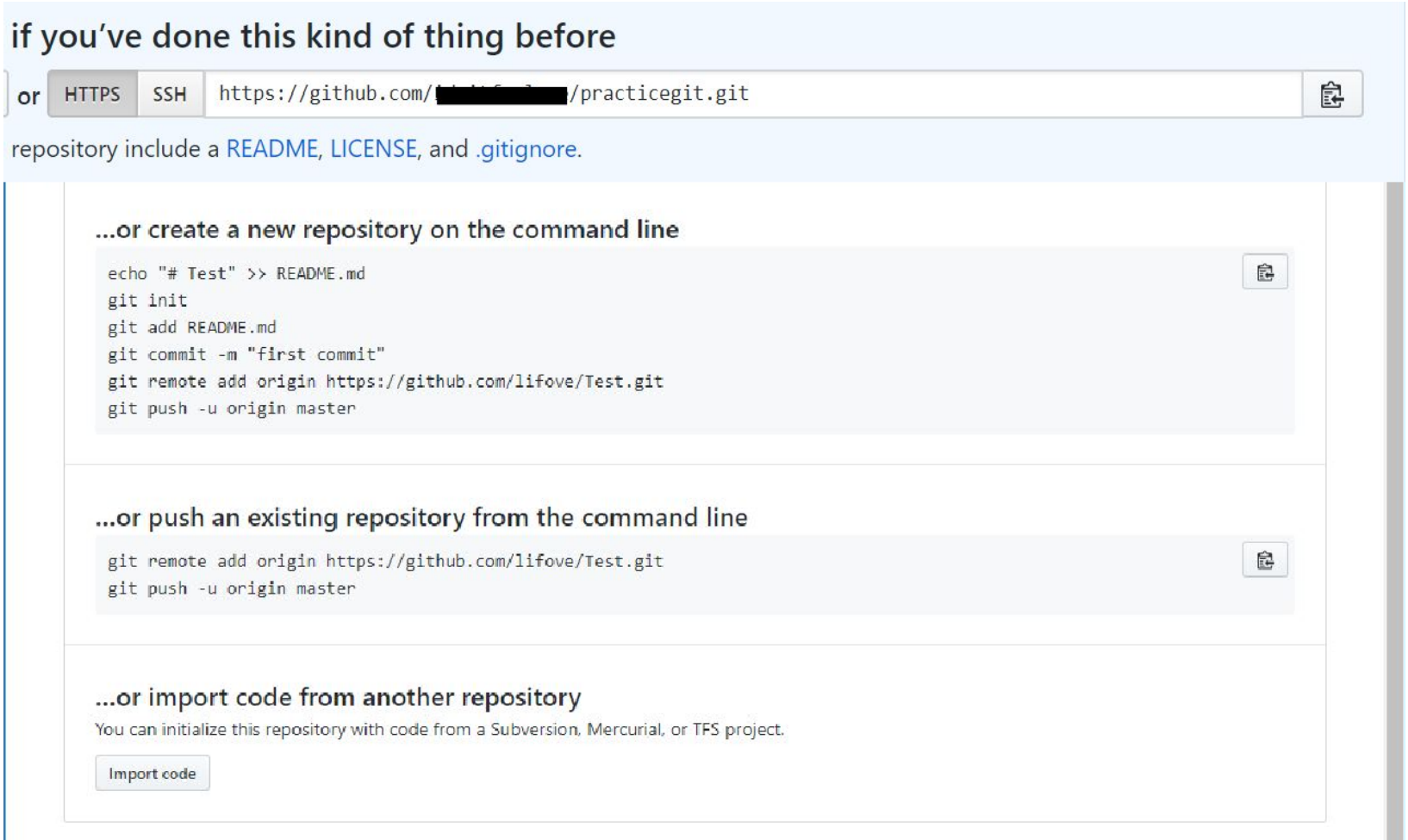
Create your remote repository (2)



The repository name is YOUR CHOICE. If you have to do labs or HWs with a specific repository name, use that name when you create the git repository!! The 'practicegit' is an example name. Do not use it for you labs and HWs. Please aware of what you are doing now.

Create your remote repository (3)

Now you can check your own remote repository address.



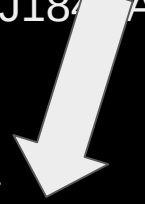
Create your local repository: Do this in CMD

```
E:\> mkdir git
E:\> cd git
E:\git> mkdir Test
E:\git> cd Test
E:\git\Test> echo "# Test" >> README.md
E:\git\Test> git init
Initialized empty Git repository in E:/git/Test/.git/
E:\git\Test> git add README.md
E:\git\Test> git commit -m "first commit"
*** Please tell me who you are.
Run
  git config --global user.email "you@example.com"
  git config --global user.name "Your Name"
to set your account's default identity.
Omit --global to set the identity only in this repository.
fatal: unable to auto-detect email address (got 'user@DESKTOP-OJ184LA.(none)')

E:\git\Test> git config --global user.email "your@email.address"
E:\git\Test> git config --global user.name "Your Name"  E:\git\Te
st> git commit -m "first commit"
```

<< Create your project directory. In this example, the directory name is "Test".
<< Change directory to "Test". Please use the git repository name you created in Github. The project name is also **YOUR CHOICE**.

Create README.md with your project name "# [your project name]". In fact you can

If you get a fatal error like this, set the email and name as follows.
Then commit again! No error then skip theses steps



Create your local repository (2)

```
E:\git\Test> git commit -m "first commit"  [
master (root-commit) fc0762f] first commit
1 file changed, 1 insertion(+)
 create mode 100644 README.md

E:\git\Test> git remote add origin https://github.com/[YOUR]/[GIT_ADDR].git

E:\git\Test> git push -u origin master
```


GitHub Login
GitHub
Login
your@email.net
Login
Cancel
Don't have an account? Sign up
Forgot your password?

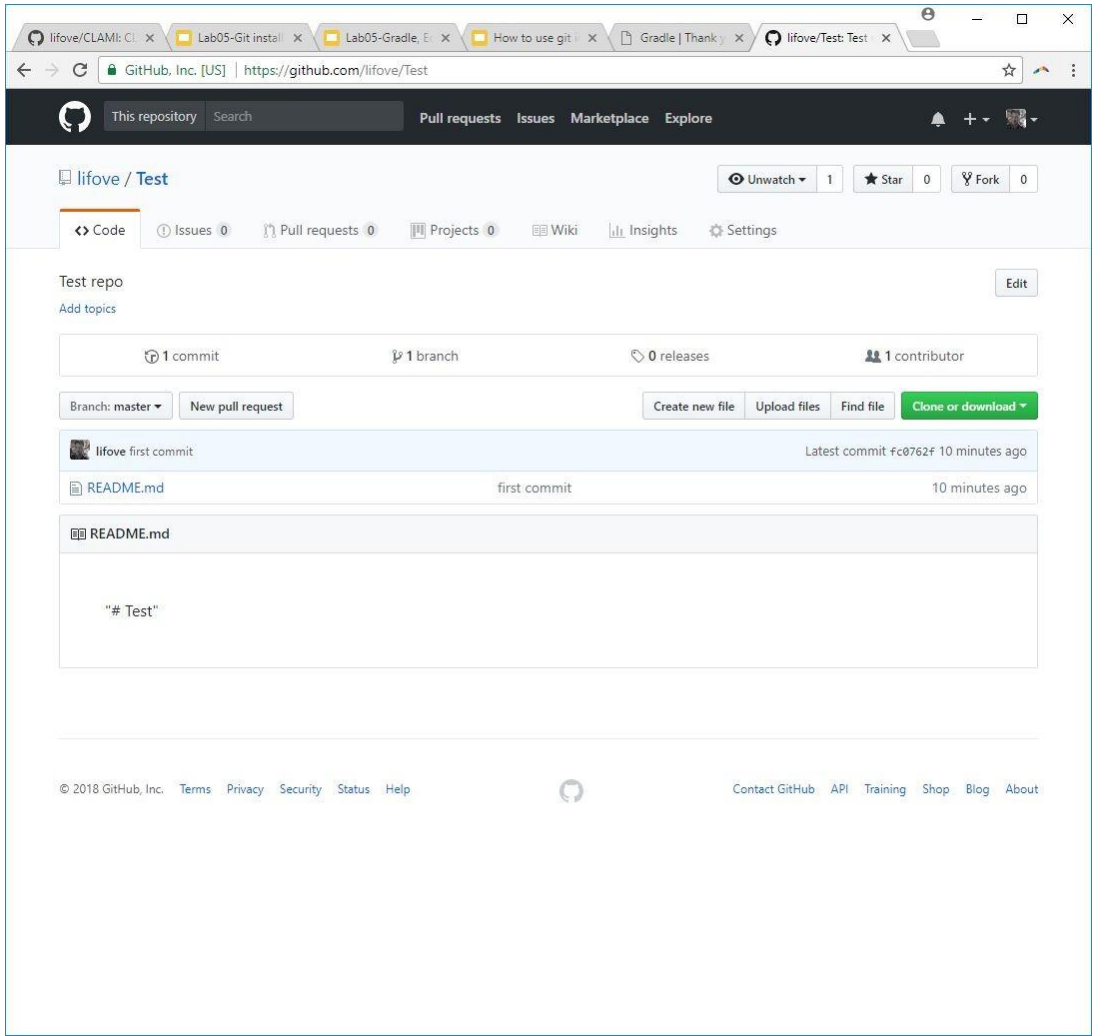
Create your local repository (3)

```
E:\git\Test> git commit -m "first commit"  [
master (root-commit) fc0762f] first commit
1 file changed, 1 insertion(+)
 create mode 100644 README.md

E:\git\Test> git remote add origin https://github.com/[YOUR]/[GIT_ADDR].git

E:\git\Test> git push -u origin master

Counting objects: 3, done.
Writing objects: 100% (3/3), 213 bytes | 213.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/lifove/Test.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

E:\git\Test>
```

Now, you've pushed your local git into the remote git in Github!!

Create your local repository (4)

- Check what happens in Github



Fork

(Copy a repository from other developers)

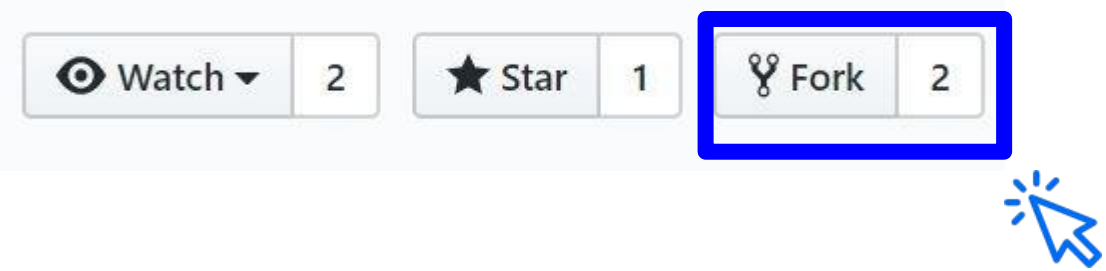
Not pork….

Forking a repository

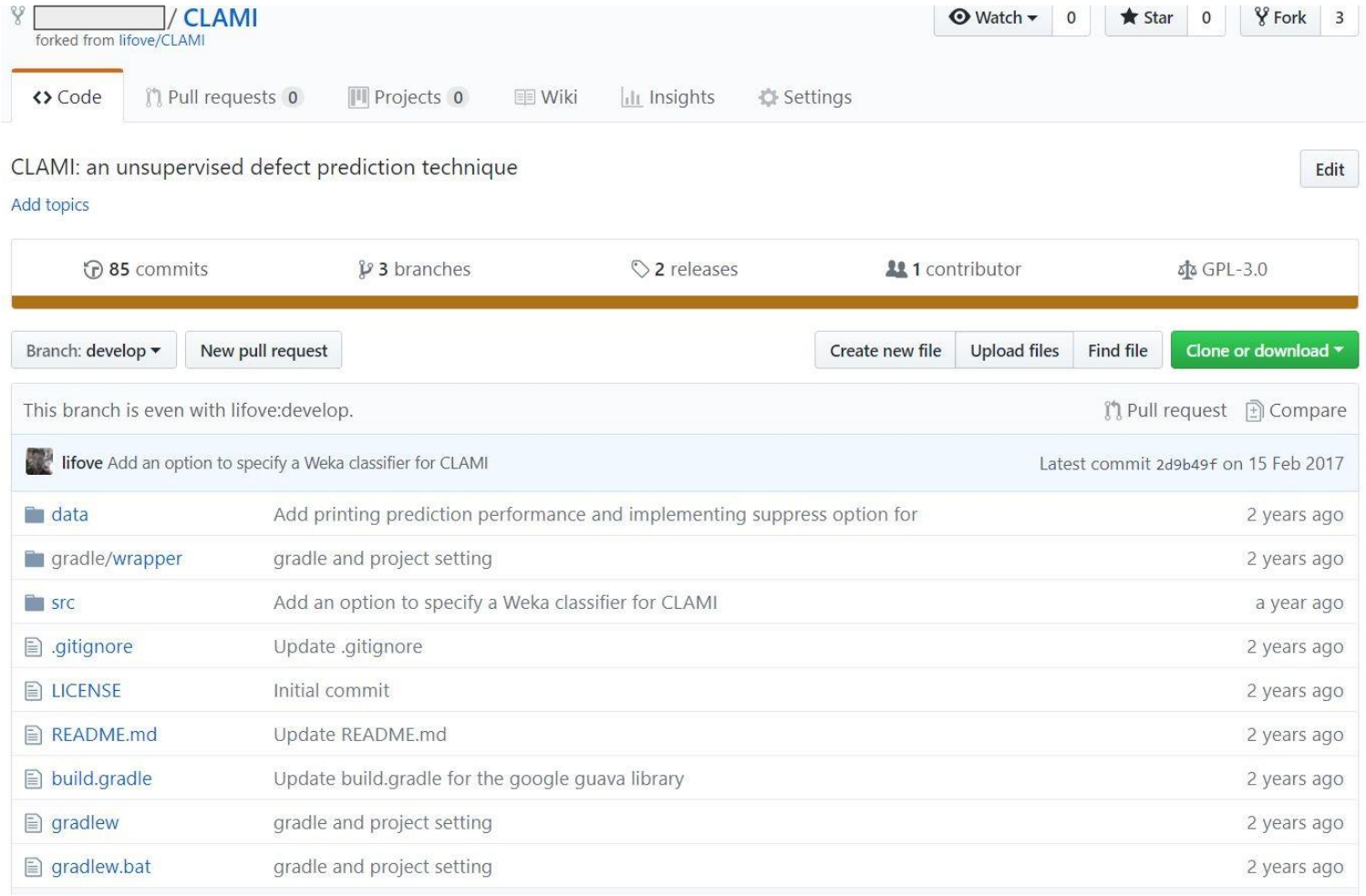
You can **fork** to bring some source codes from other repository into your repository, without affecting the original repository.

We are going to fork this repository. ↓

https://github.com/idebtor/HuStarML

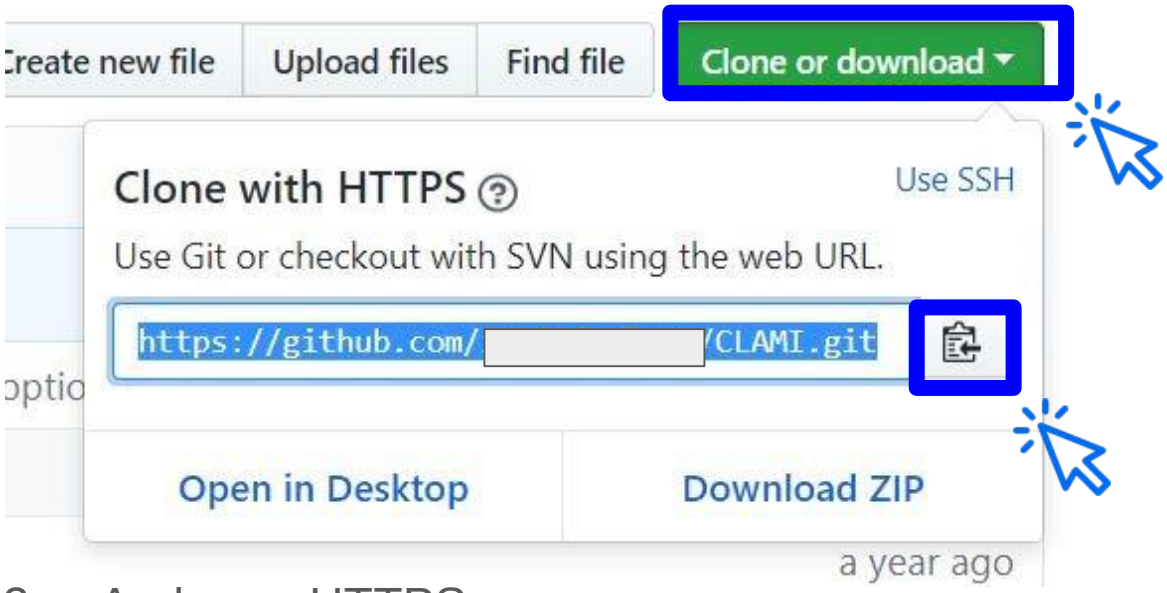


Forking a repository - result



Cloning a repository - GUI

1. Go to your remote repository



2. And copy HTTPS

Cloning a repository - command

1. Search ‘git bash’ on your computer and click

2. Make sample directory : mkdir [directory_name]

```
정 찬 미 @chanschance MINGW64 ~
$ mkdir cloningsample2
```

3. Change directory(in this case, cloningsample2): cd [directory_name]

```
정 찬 미 @chanschance MINGW64 ~
$ cd cloningsample2/
```

4. Cloning a repository: git clone [https_address]

```
정 찬 미 @chanschance MINGW64 ~/cloningsample2
$ git clone https://github.com/                /CLAMI.git
Cloning into 'CLAMI'...
remote: Counting objects: 831, done.
remote: Total 831 (delta 0), reused 0 (delta 0), pack-reused 831
Receiving objects: 100% (831/831), 195.77 KiB | 346.00 KiB/s, done.
Resolving deltas: 100% (231/231), done.
```

Please check that the operation completed successfully by checking the directory.

Other useful comments in git bash

$ ls // see the list of files in the current directory

$ cd cloningsample2 // move to the directory, cloningsample2 in my current directory

$ git log // see the commit history. press 'q' to exit

Questions

1. Fork idebtor/HuStarML git repository
2. Add files or folder (read.md or anything) and then type “git pull” to get recent resources