Whenever you make new changes to a file:

Make sure to save the file(s), then

```
git add .

git commit -m “Your message here”

git push origin main
```

Then make pull request on github.com

—----------

Updating your code from the original repo main branch:

Connect your upstream to the original repo by

```
git remote add upstream (https link of original repo)
```

(You only have to do the above line once per project)

Everytime you want to update you have to do

```
git fetch upstream

git checkout main

git merge upstream/main

git push origin main
```

—----------

First time downloading a project:

Go to the original repository on github

Fork it, then the fork should be on your profile

Click on the green code button and copy the https link

Go to Visual Studio and go to the terminal

Make sure you're in a directory you want this new directory to be in, like Workspace or Documents

If you're not you'll have to "cd" into the directory you want

Once you're in the directory you want to create this directory do

```
git clone (https link of the forked repo you copied)
```

You might have to go in to the directory by

```
cd (repository name)
```

—----------

Creating a new branch:

```
git branch (new branch name)
```

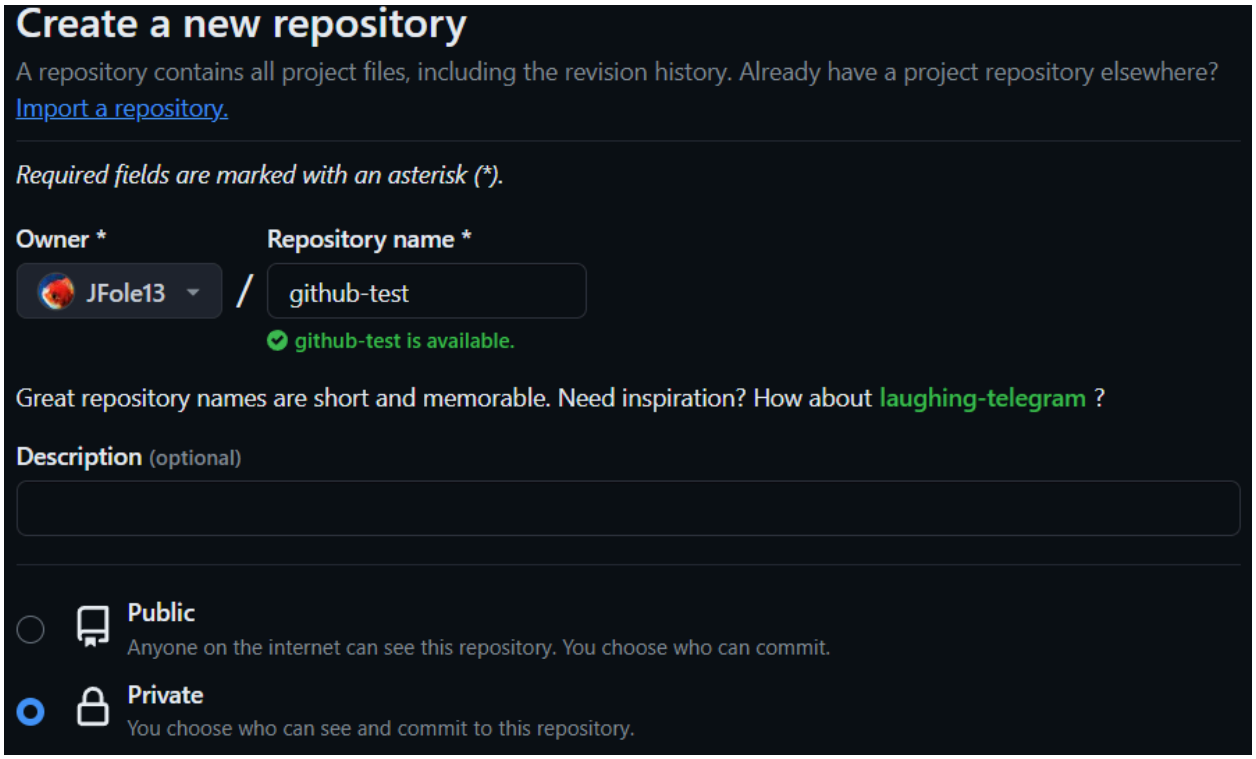
```
git checkout (new branch name)
```

When starting a brand new project that isn't on GitHub yet:

Go to your profile on GitHub

Click on the green "New" button to make a new repository

You should be on the following screen:

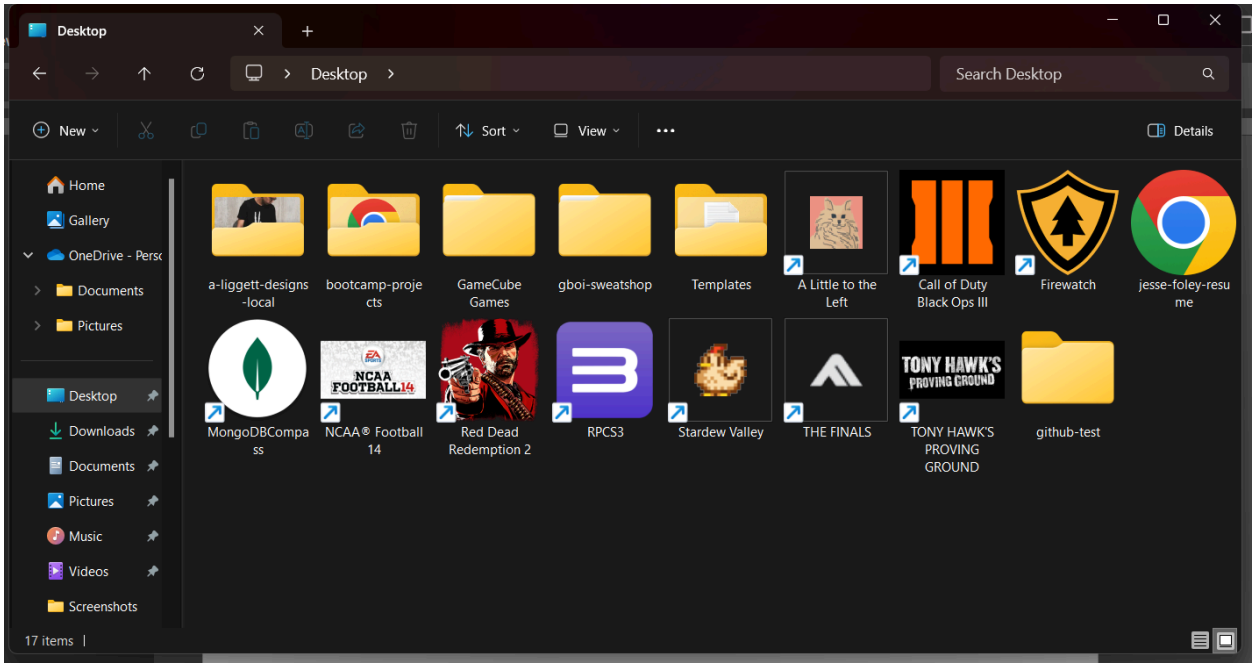


Make the repo name whatever, we'll do github-test as an example

Click on the private button, it'll be public by default

Don't need the README initialized for now, and can leave the other options how they are

Make a new folder with the same repo name on your local computer, where you put your other stuff. If you like your project in your workspace folder or something like that make sure to make it in there. For this example I just made it on my Desktop and you can see it on the bottom right



Note: You actually don't have to name this folder as the same as the one on GitHub, but it's just easier to know which one of your local folders matches up with the remote repo

Then go to Visual Studio Code and go to that repo with the cd command (refresher on navigating the file system at the bottom)

Note: Repository (repo), folder, and directory all mean the same thing for the most part

Note: The $ means it's just a terminal command. You'll never have to actually type that

```
J Fole@JFoles-Computer-Bitch MINGW64 ~/Desktop (main)
$ cd github-test

J Fole@JFoles-Computer-Bitch MINGW64 ~/Desktop/github-test (main)
$
```

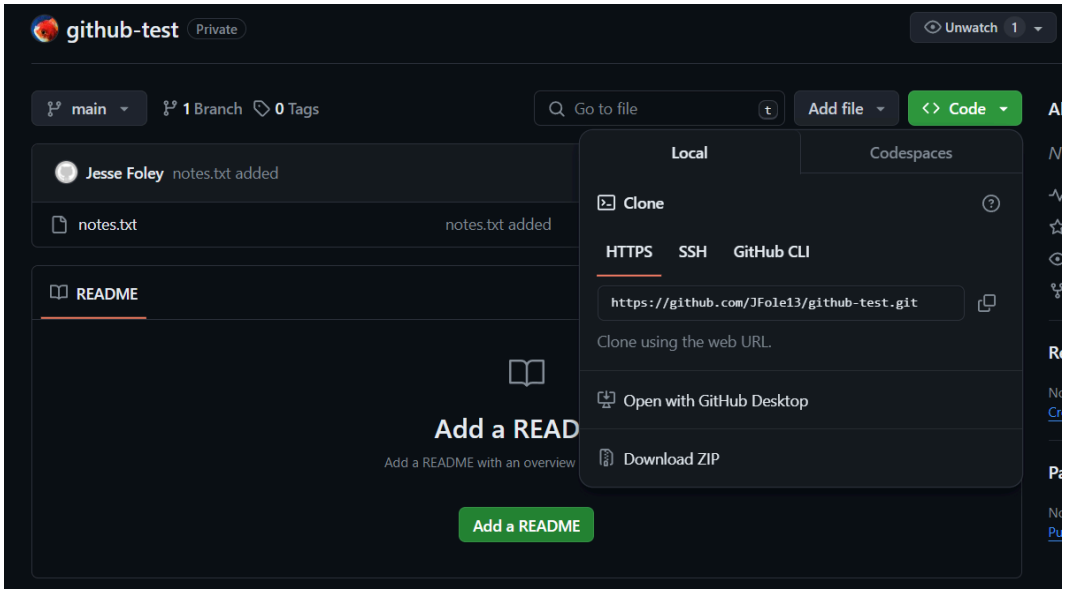
Once you're in the correct directory, do

```
git init
```

```
git branch -M main
```

```
git remote add origin <your GitHub repo link>
```

Your GitHub repo link can be found with that green code button on the repo site, it's the one under HTTPS



Then you need to make some sort of change to the project, like creating any kind of file (.txt, .html, .css) and then commit that change

In the example above I made a notes.txt file by clicking New File in Visual Studio and just left it blank

Then to commit (notes on committing new changes are also at the top of this document):

```
git add .

git commit -m "Your message here"

git push origin main
```

And you should now have the GitHub repo set up

See all branches:

```
git branch -a
```

Navigating the File System from the terminal:

The only commands you really need are `cd` and `dir`

You can also use `mkdir` to make a directory from the command line if you want, or you can just use the File Explorer App

`cd` stands for change directory

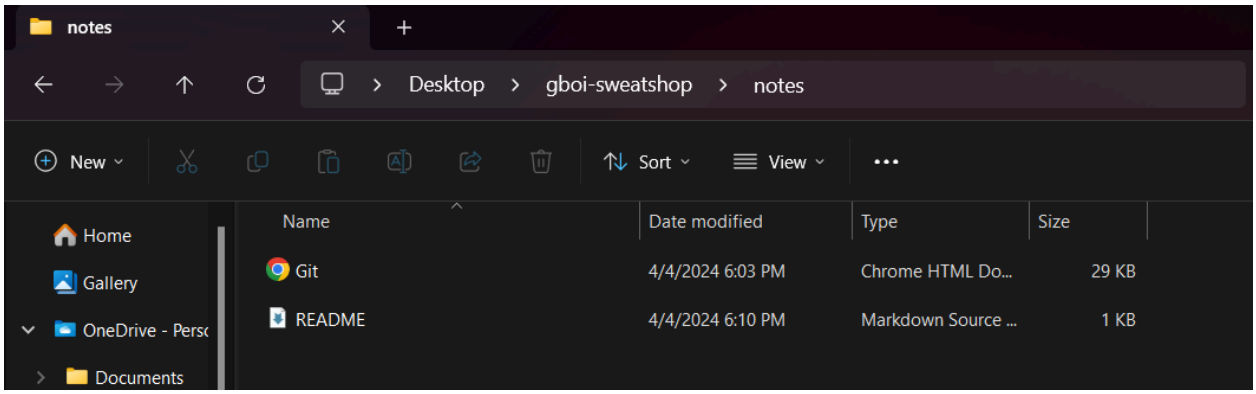
`dir` is to see what else is in the directory that you are currently in

When you're using the command line (terminal) it'll tell you where you currently are within the file system like (for me it's the orange text):

```
J Fole@JFoles-Computer-Bitch MINGW64 ~/Desktop/gboi-sweatshop/notes
```

I'm currently in the notes folder within the gboi-sweatshop folder which is on my desktop

The File Explorer is a visual representation of this:



You can type `dir` to see what's in the current directory

```
J Fole@JFoles-Computer-Bitch MINGW64 ~/Desktop/gboi-sweatshop/notes
$ dir
Git.pdf  README.md
```

You want your terminal in Visual Studio in the same folder that you're writing your code in and you'll have to `cd` into it

For example let's just say I open up the terminal and it starts me all the way back at Users, and I want to work in the notes folder that's on the desktop

```
J Fole@JFoles-Computer-Bitch MINGW64 /c/Users
$
```

Type `dir` to see what else is in there

```
J Fole@JFoles-Computer-Bitch MINGW64 /c/Users
$ dir
All\ Users  Default  Default\ User  desktop.ini  J\ Fole  Public
```

I want to go into the J Fole folder so I do

`cd J\ Fole` (backslash is needed if the folder name has a space in it)

Then type `dir` again

```
$ dir
_netrc                  edb_mtk.exe                        IdeaProjects                                                                           pemhttpd.exe
0                       edb_npgsql.exe                     Links                                                                                  Pictures
3D\ Objects             edb_pem_agent.exe                  Local\ Settings                                                                        Postman
ansel                   edb_pem_agent_8.exe                Music                                                                                  PrintHood
AppData                 edb_pem_server.exe                 My\ Documents                                                                          Recent
Apple                   edb_pem_server_8.exe               NetHood                                                                                Saved\ Games
Application\ Data       edb_pgagent_pg16.exe               NTUSER.DAT                                                                             Searches
Contacts                edb_pgbouncer.exe                  ntuser.dat.LOG1                                                                        SendTo
Cookies                 edb_pgjdbc.exe                     ntuser.dat.LOG2                                                                        Start\ Menu
curseforge              edb_psqlodbc.exe                   NTUSER.DAT{a2332f18-cdbf-11ec-8680-002248483d79}.TM.blf                                Templates
Desktop                 edb_psqlodbc.exe-20231031212228    NTUSER.DAT{a2332f18-cdbf-11ec-8680-002248483d79}.TMContainer00000000000000000001.regtrans-ms  Videos
Documents               edb_xdb_62.exe                     NTUSER.DAT{a2332f18-cdbf-11ec-8680-002248483d79}.TMContainer00000000000000000002.regtrans-ms
Downloads               edb_xdb_7.exe                      ntuser.ini
edb_languagepack_4.exe  Favorites                          OneDrive
```

I know it's in Desktop so I:

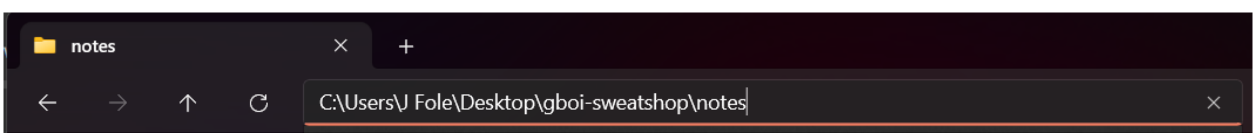
```
cd Desktop
```

And then keep repeating that process until my terminal is in the notes folder

If you ever go into the wrong folder or need to go back type:

```
cd ..
```

If you don't know where the folder you're working in is, I would look for it in file explorer. Once located you can use the file path to guide you:



You can also `cd` through multiple directories at once if you know the path, like:

```
J Fole@JFoles-Computer-Bitch MINGW64 /c/Users
$ cd J\ Fole/Desktop/gboi-sweatshop/notes

J Fole@JFoles-Computer-Bitch MINGW64 ~/Desktop/gboi-sweatshop/notes
$
```