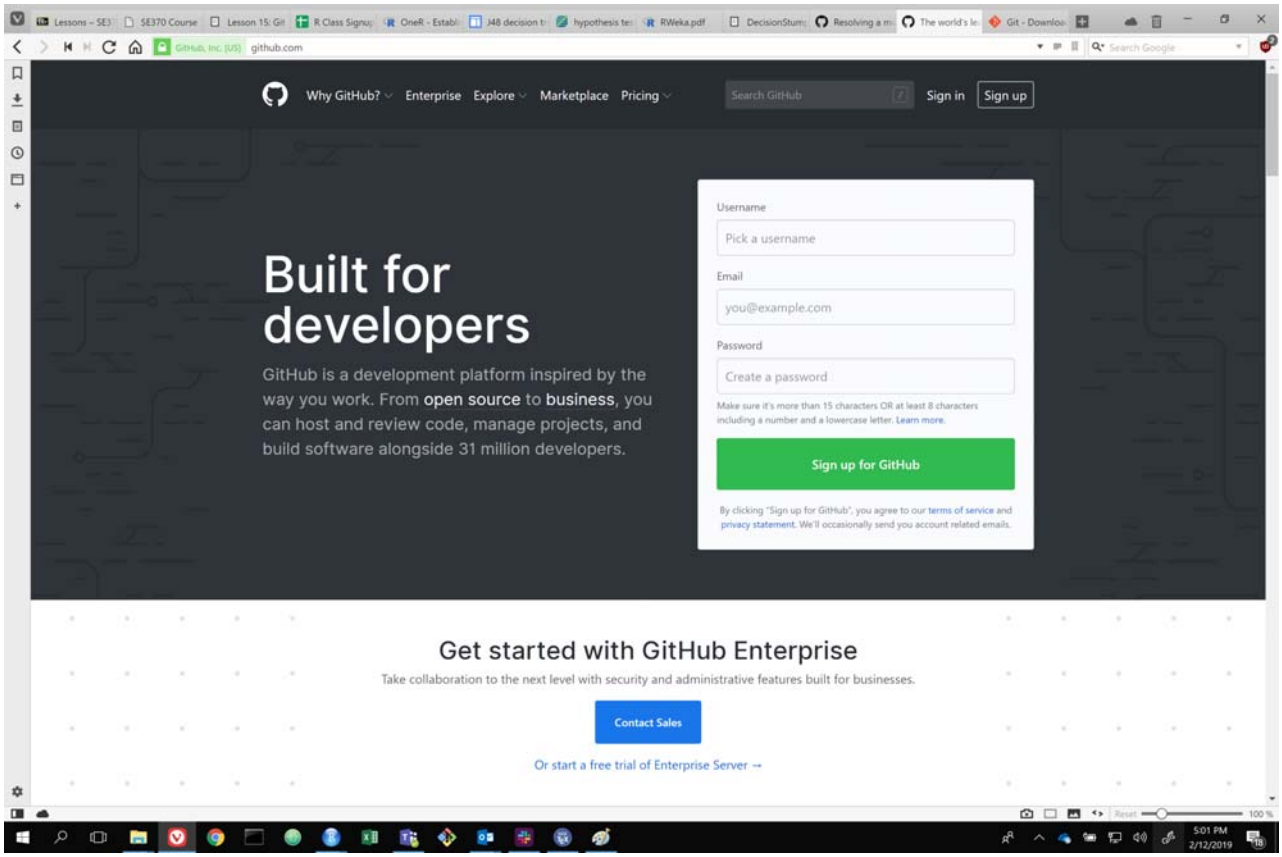
Github Exercise

This exercise will show you how to create a Github project, clone it to your computer, and push your changes back to Github.

Step 1: Create a Github Account

Go to https://github.com (https://github.com) and create a free account.

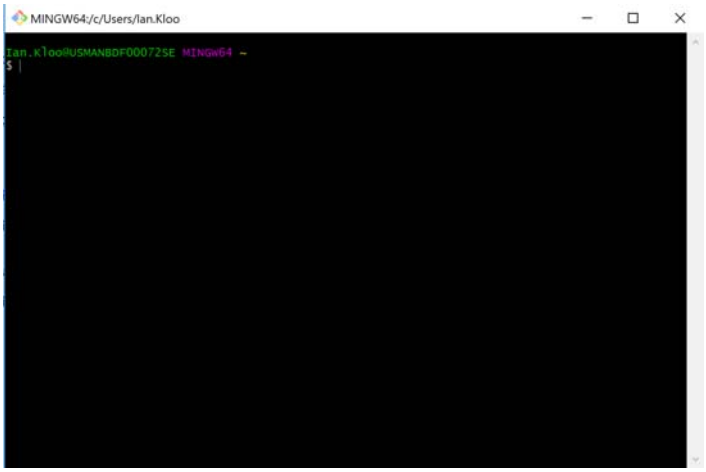


Step 2a: Install Git and Gitbash on Windows

If you are using MatrixDS, you can skip this step!

On your laptop, go to https://git-scm.com/downloads (https://git-scm.com/downloads) and install Git for windows. This will install Gitbash as well as the backend resources needed to run Git.

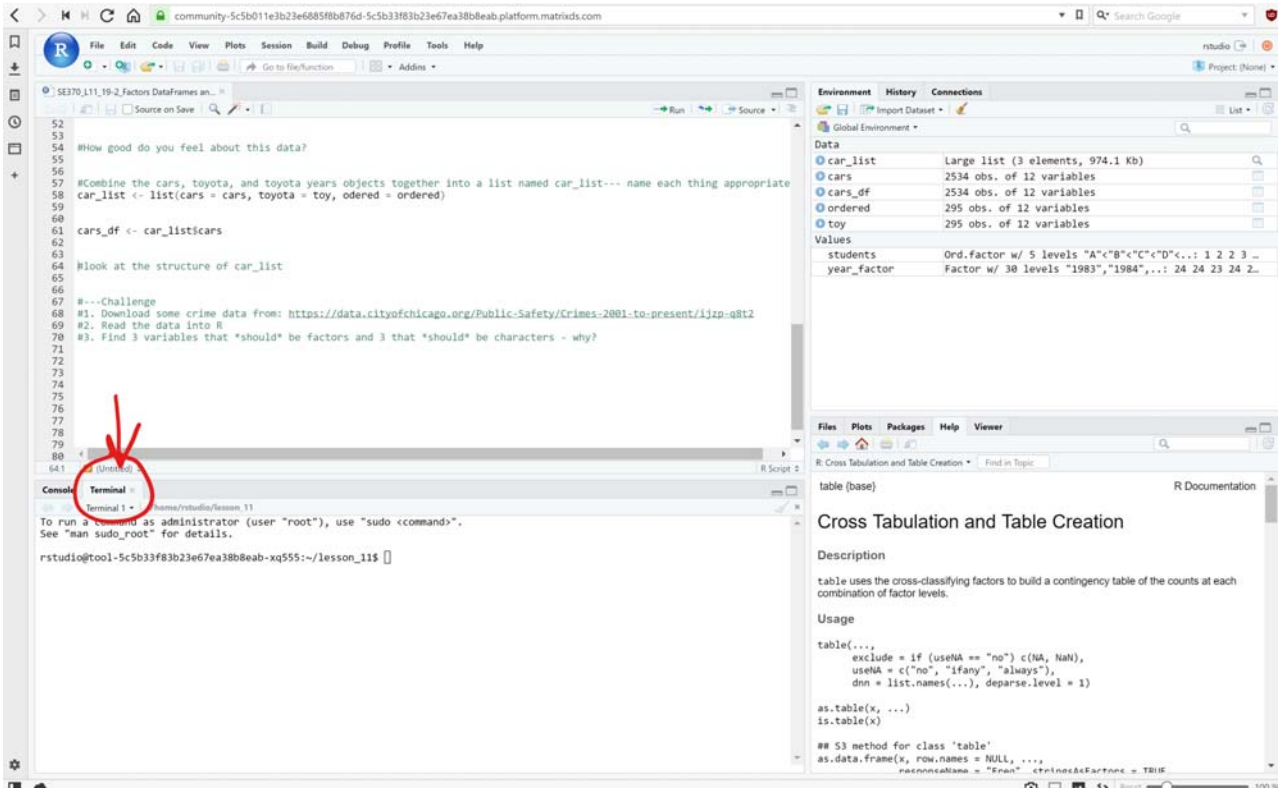
If your installation is complete, open Gitbash. It should look like this:



This is where you will type your Git commands.

Step 2b: Git for MatrixDS Users

If you are using MatrixDS, you will type your commands in the “Terminal” console at the bottom of Rstudio.

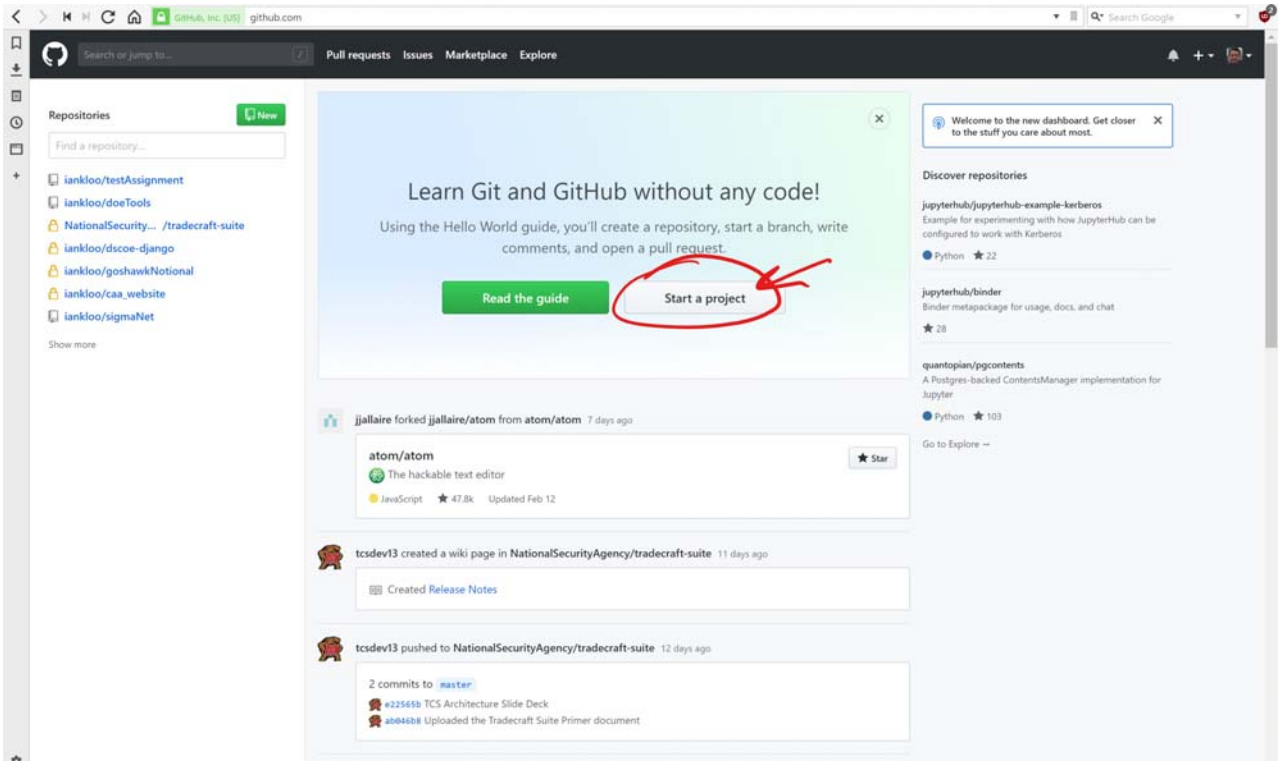


Note, this is NOT the R console!

The rest of the tutorial will show Git code in the Gitbash terminal. If you are using MatrixDS, just type the same code in this terminal.

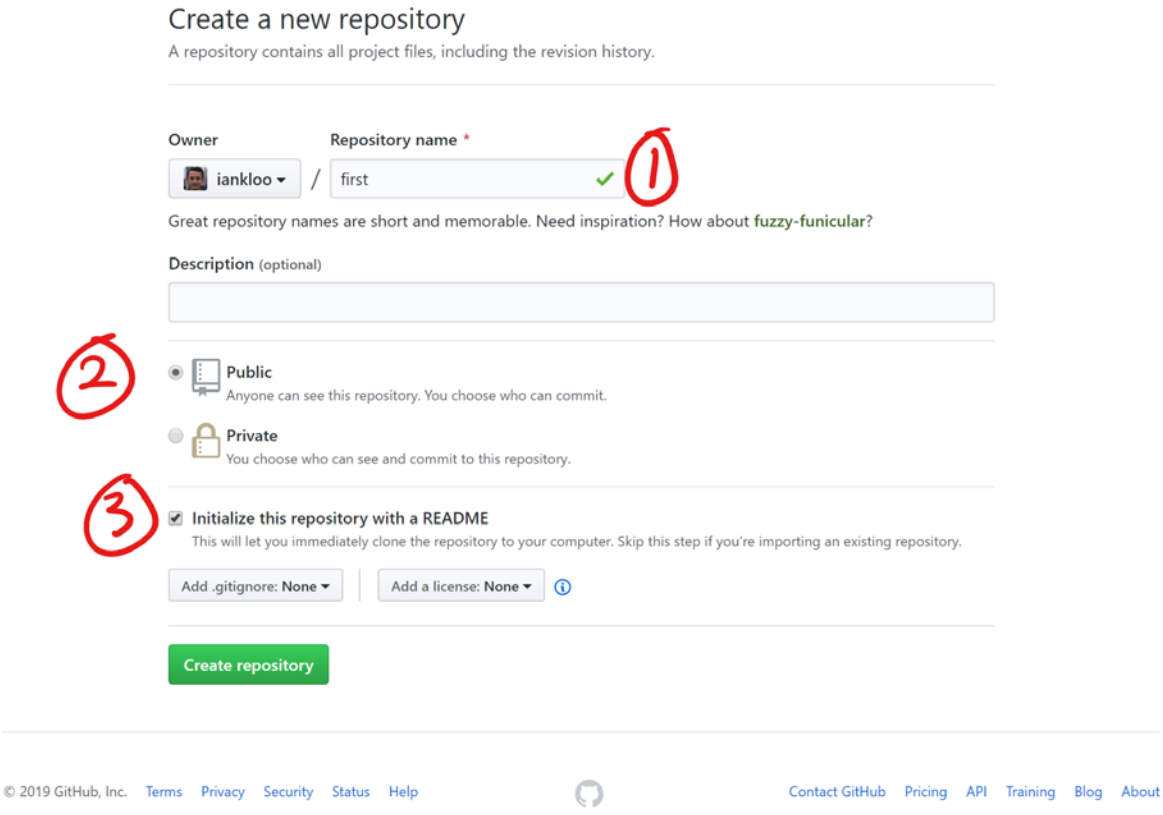
Step 3: Create a Github Project

On the Github web page, click “Start a project”:



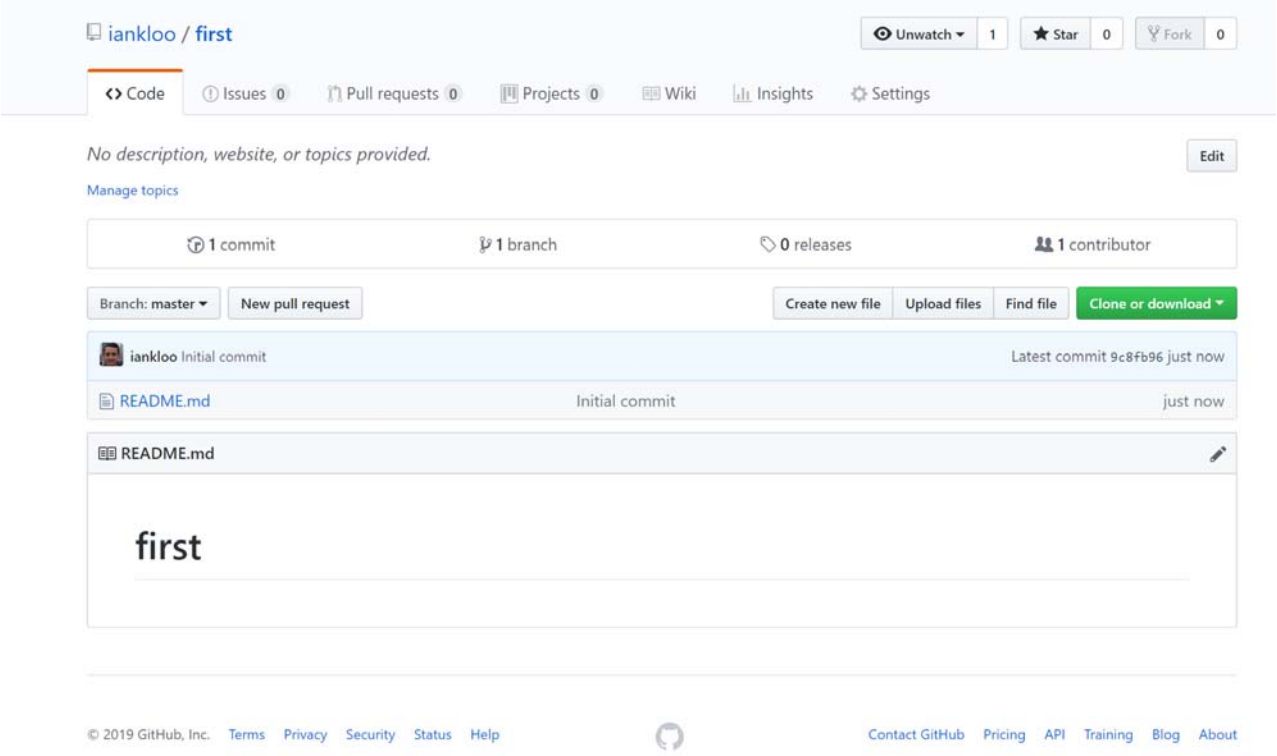
On the next screen:

1. Name your project “first”
2. Make sure your project is “public”
3. Check “initialize with readme”



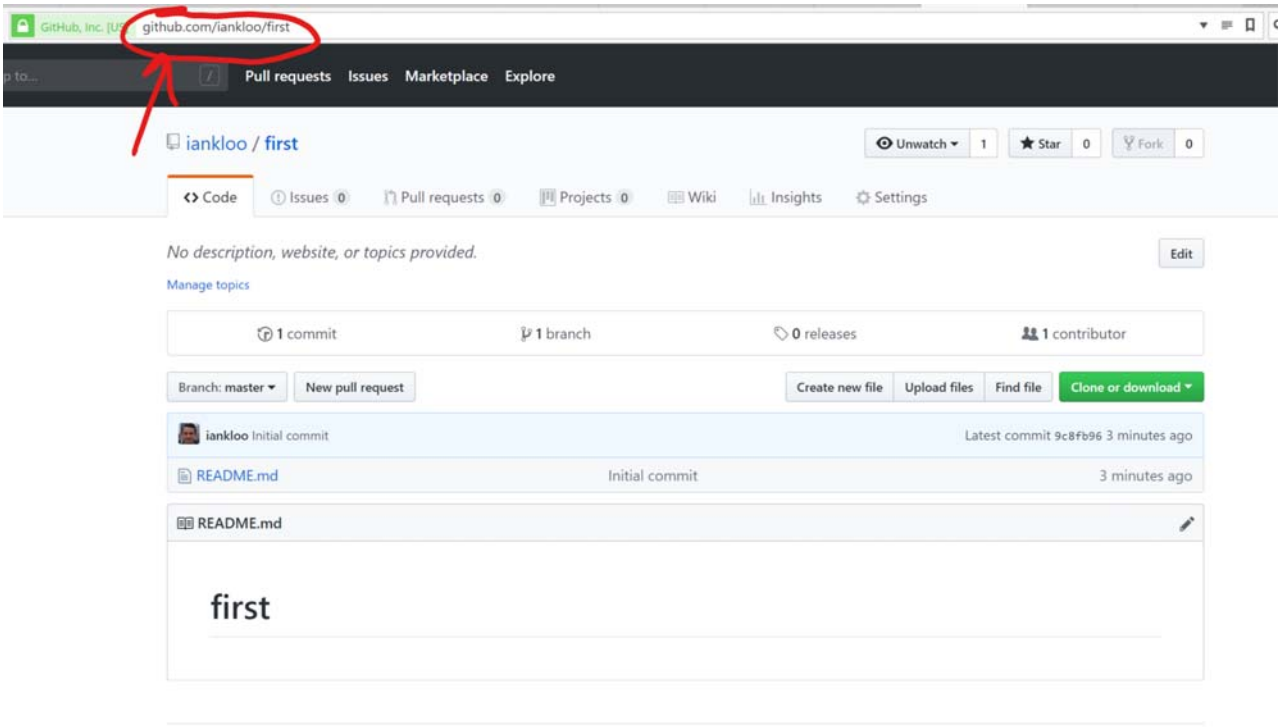
Click “Create Respository”

If you did everything right, you should see this:



Step 4: Clone your new repository on your computer

Now you will clone your repository (i.e., download it to your computer). Before we get started, we need to get the URL for our repository. You can find it here:

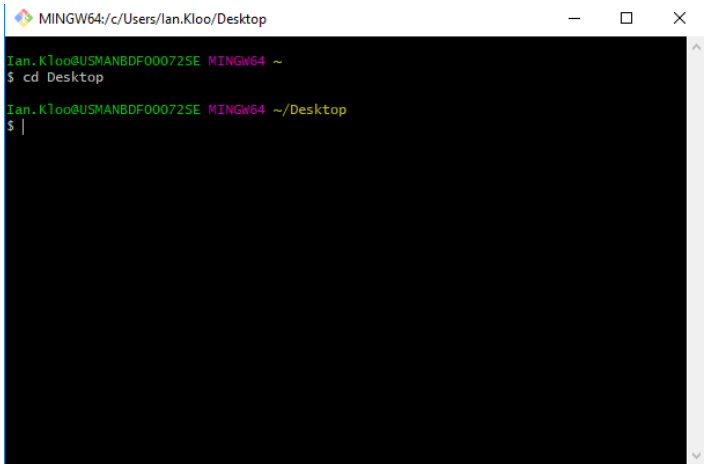


Copy this URL and paste it somewhere you can find.

Now, **only for non-MatrixDS users** open Gitbash and navigate to your desktop by typing:

```
cd Desktop
```

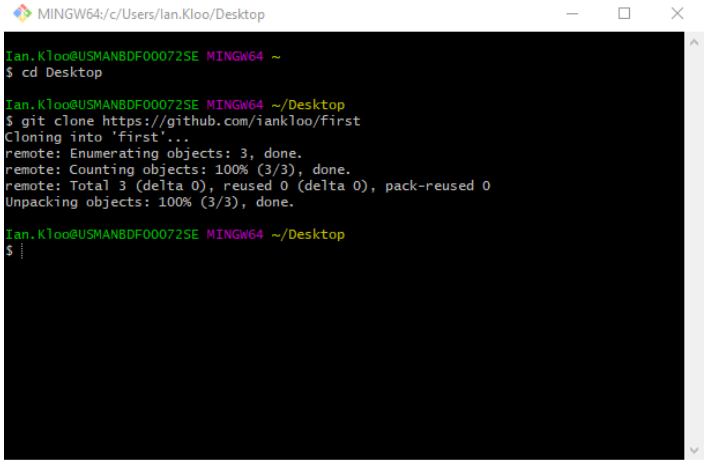
If successful, your window should look like:



Now, type:

```
git clone REPOSITORY_URL
```

Swapping in your own repository URL. Your result should look something like:



If you are succesful, you should now see a folder titled “first” on your desktop.

Step 5: Add something to your README File

Open the README.md file in the “first” folder on your desktop.

Edit it in Rstudio or Notepad. Add some random text.

Save your changes and close the file.

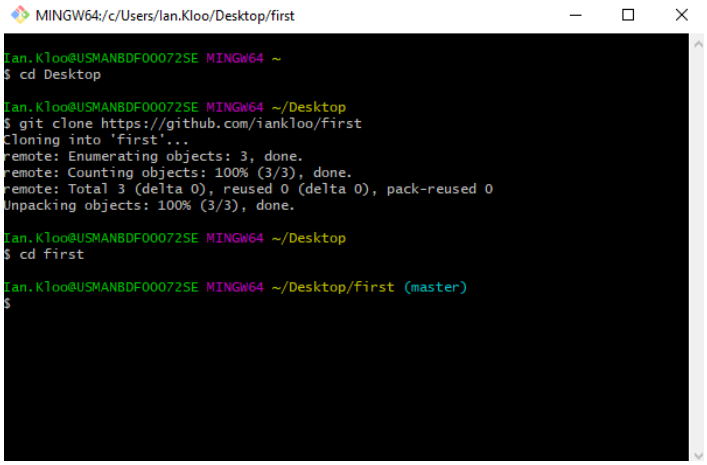
Step 6: Push your changes back to Github

You have now edited your local repository, but nothing has changed on your online Github repository. We need to push our changes.

In Gitbash, navigate to your repository folder by typing:

```
cd first
```

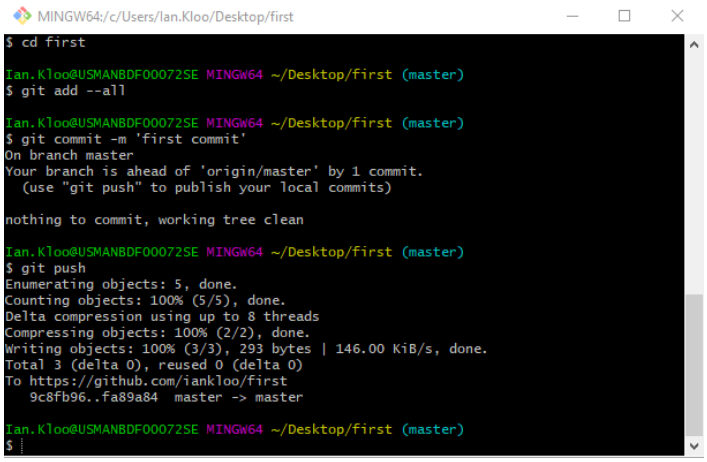
Your window should look like this:



Now, we will do our push procedure by typing (one at a time):

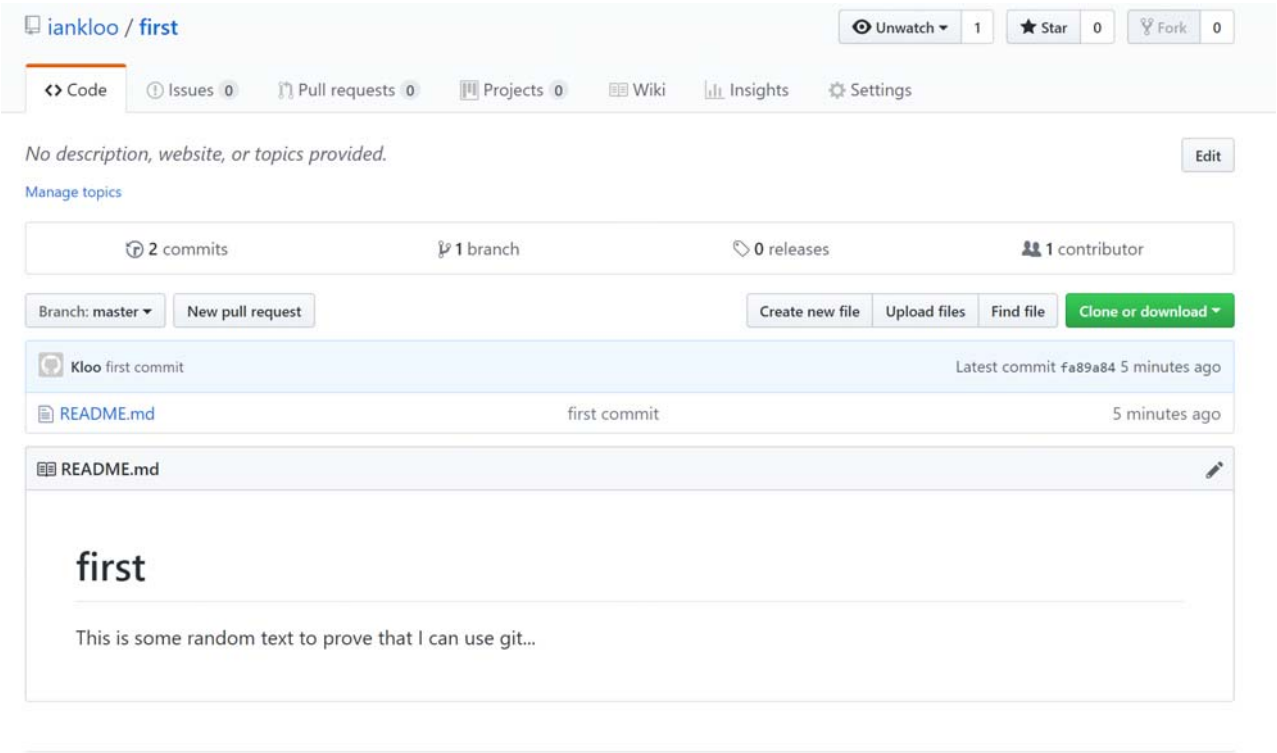
```
git add --all
git commit -m 'first commit'
git push
```

If all goes well, you will be asked for your Github username and password. If successful, you will see something like this:



Take a screenshot of your Gitbash terminal showing your successful push.

Go back to your Github repository webpage to see your changes. You should see your changes you made in the project:



Take a screenshot of your repository page.

Step 7: Turn it in

Submit your 2 screenshots (Gitbash and your repository page) on Teams.