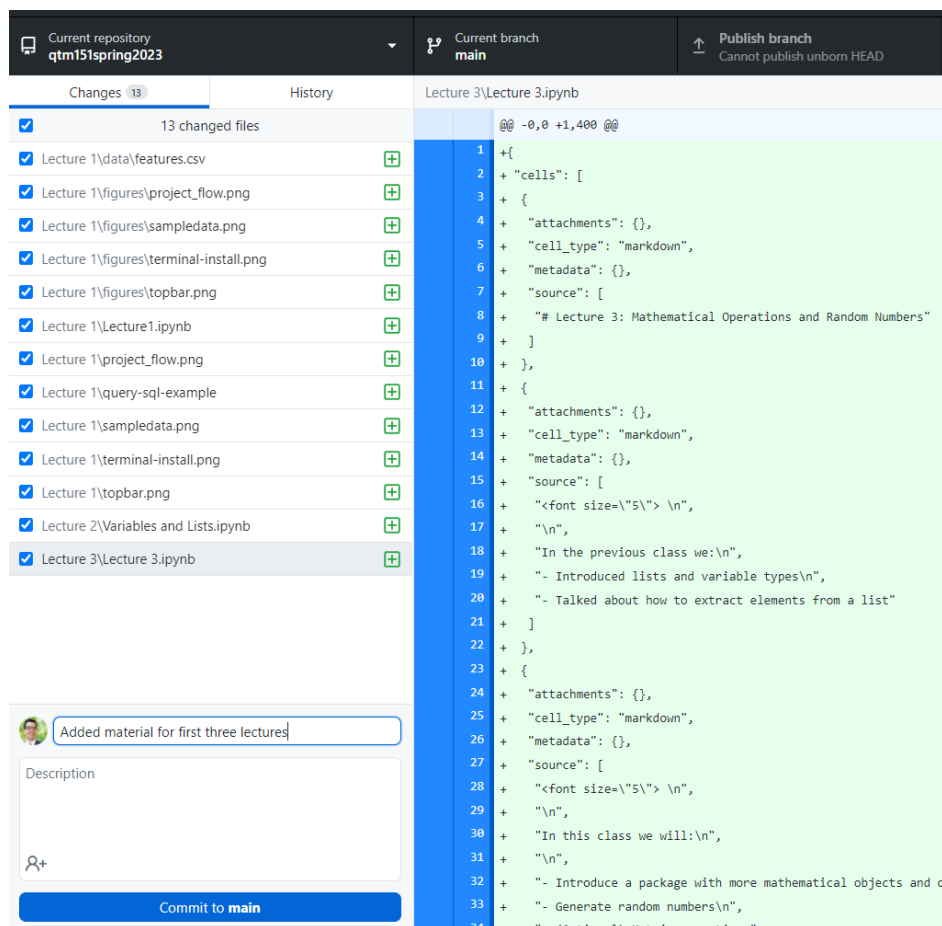# GITHUB: Essentials

A brief example of how Github works, and how you will use it too!
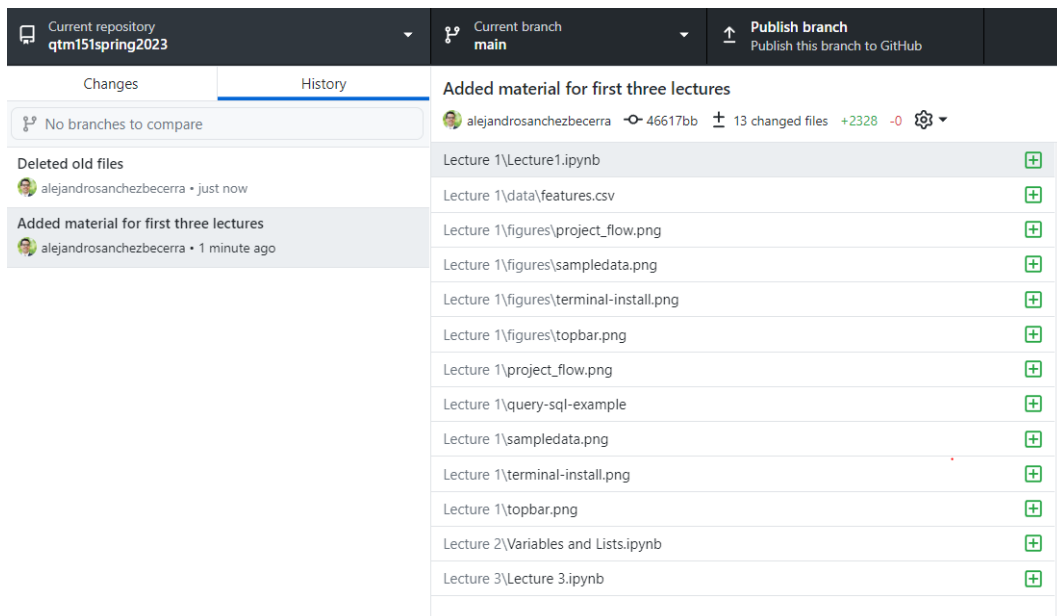
1. <u>A programmer makes some changes to their files:</u> In the photo you see that I've added the material for the first three lectures.

   o Github will tell me which files were added, which ones were edited, and which ones were removed.
   o A batch of changes is called a "Commit". I will give it a self-explanatory name. "Added material for the first three lectures".
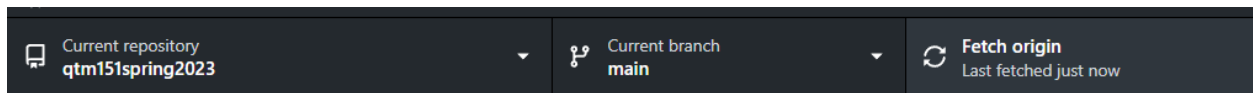   o I click on the button "Commit to main".[1]

It's good to make commits frequently. However, it's also good to think about organizing them logically. This makes it easier to communicate with a team what you've done!

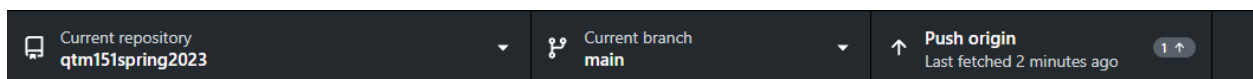[1] Sometimes you can have different versions of the same file. The primary one is always called "main".

2. After you've done this you can go the "History" tab. This will show you a list of all the commits that were made in the past, who made them, and what changes were made.

The first time you work on a repository you'll get the option to "Publish branch". After that you will see two types of options to synchronize your files with the cloud.

- This is for "fetching" material from the cloud.

- This is for "pushing" material to the cloud. This option appears when you've saved new commits and haven't yet uploaded them to the web.

For general information on Github:

https://docs.github.com/en/get-started