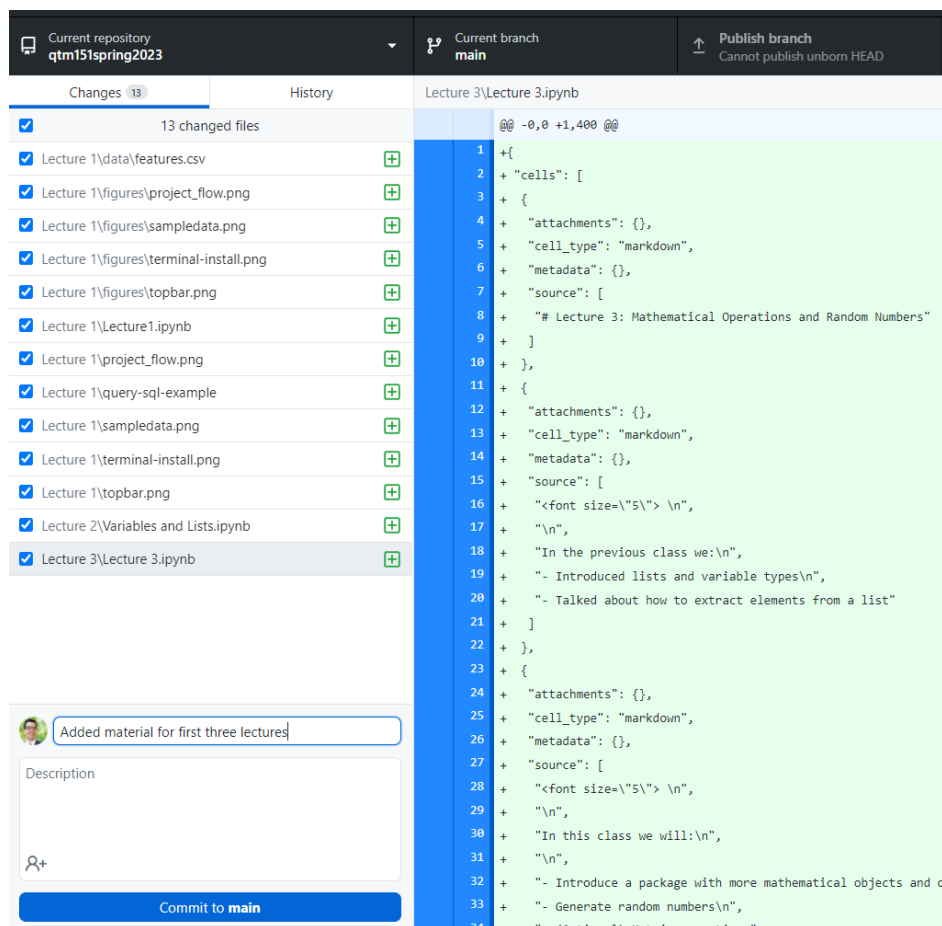


# GITHUB: Essentials

A brief example of how Github works, and how you will use it too!

1. A programmer makes some changes to their files: In the photo you see that I've added the material for the first three lectures.
  - Github will tell me which files were added, which ones were edited, and which ones were removed.
  - A batch of changes is called a "Commit". I will give it a self-explanatory name. "Added material for the first three lectures".
  - I click on the button "Commit to main".<sup>1</sup>

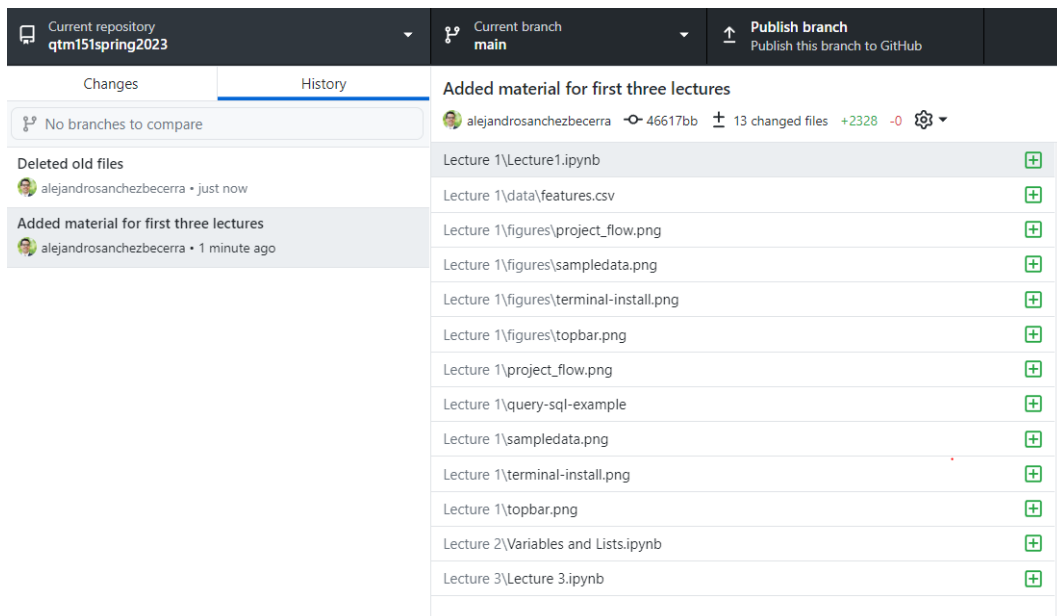


It's good to make commits frequently. However, it's good to think about organizing them logically. This makes it easier to communicate with a team what you've done!

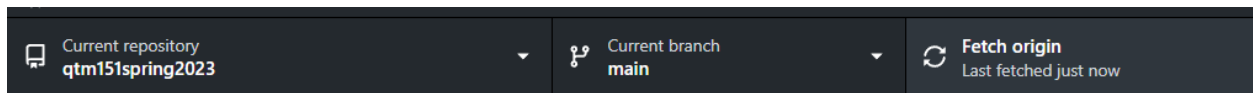
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<sup>1</sup> Sometimes you can have different versions of the same file. The primary one is always called "main".

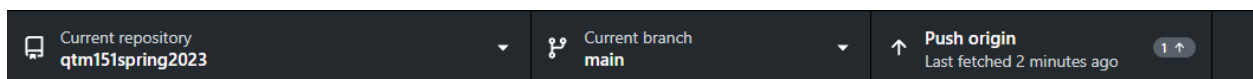
- After you've done this you can go the "History" tab. This will show you a list of all the commits that were made in the past, who made them, and what changes were made.



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>