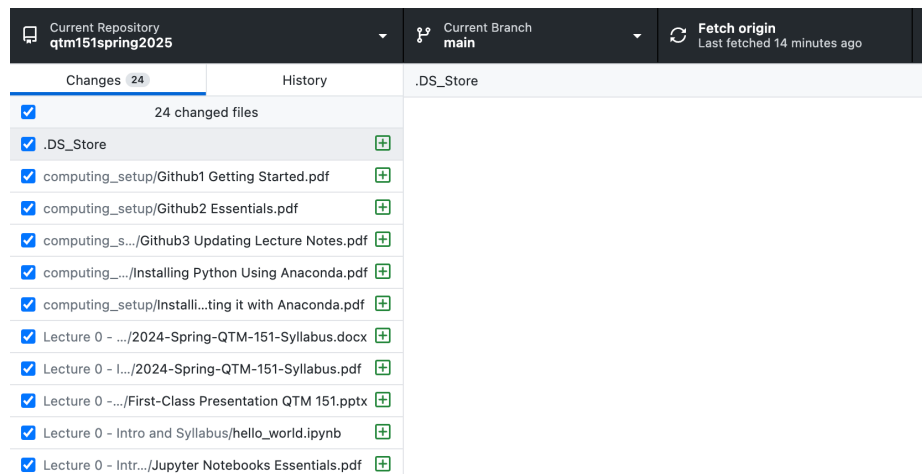


GITHUB Tutorial 1: Essentials

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

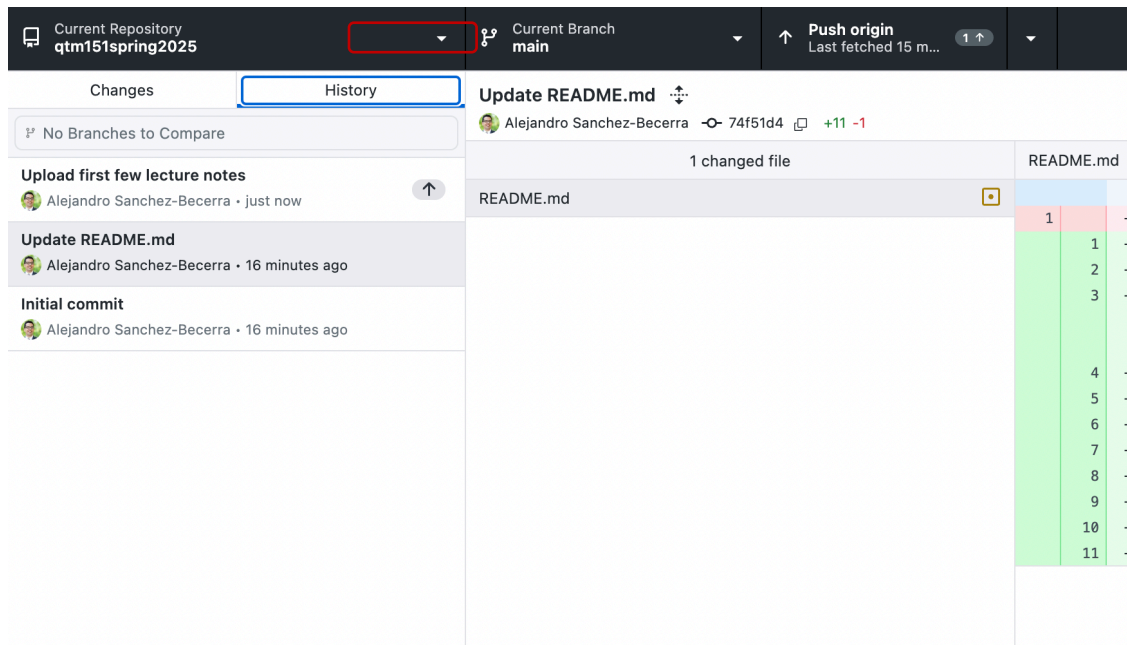
1. A programmer makes some changes to their files: In the photo you see that I've added the material for the first lecture.
 - Github will tell me which files were added, which ones were edited, and which ones were removed.
 - A batch of changes is called a "Commit". I will give it a self-explanatory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



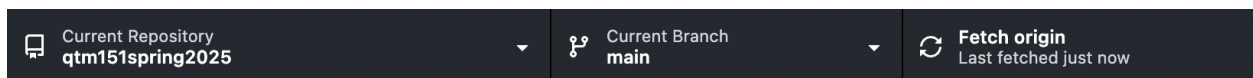
It's good to balance making commits frequently (so that your code stays up-to-date) and organizing your commits logically. This makes it easier to communicate with a team what you've done!

2. After you've committed your changes, 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.

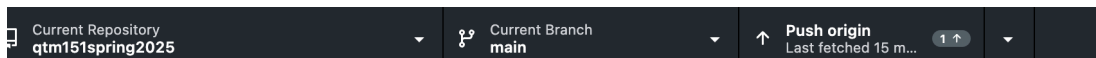
¹ Sometimes you can have different versions of the same folder/repository. The primary one is always called "main".



When your local repository (in this case “qtm151_spring_2025”) has an online Github version (called origin here), 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 (like in the case I present in the previous example).
- When you click on Push origin, it will save all the local changes into the online Github repository.

For general information on Github:

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