

DCML-CPS - Lab

Setting up a Git-Python Env

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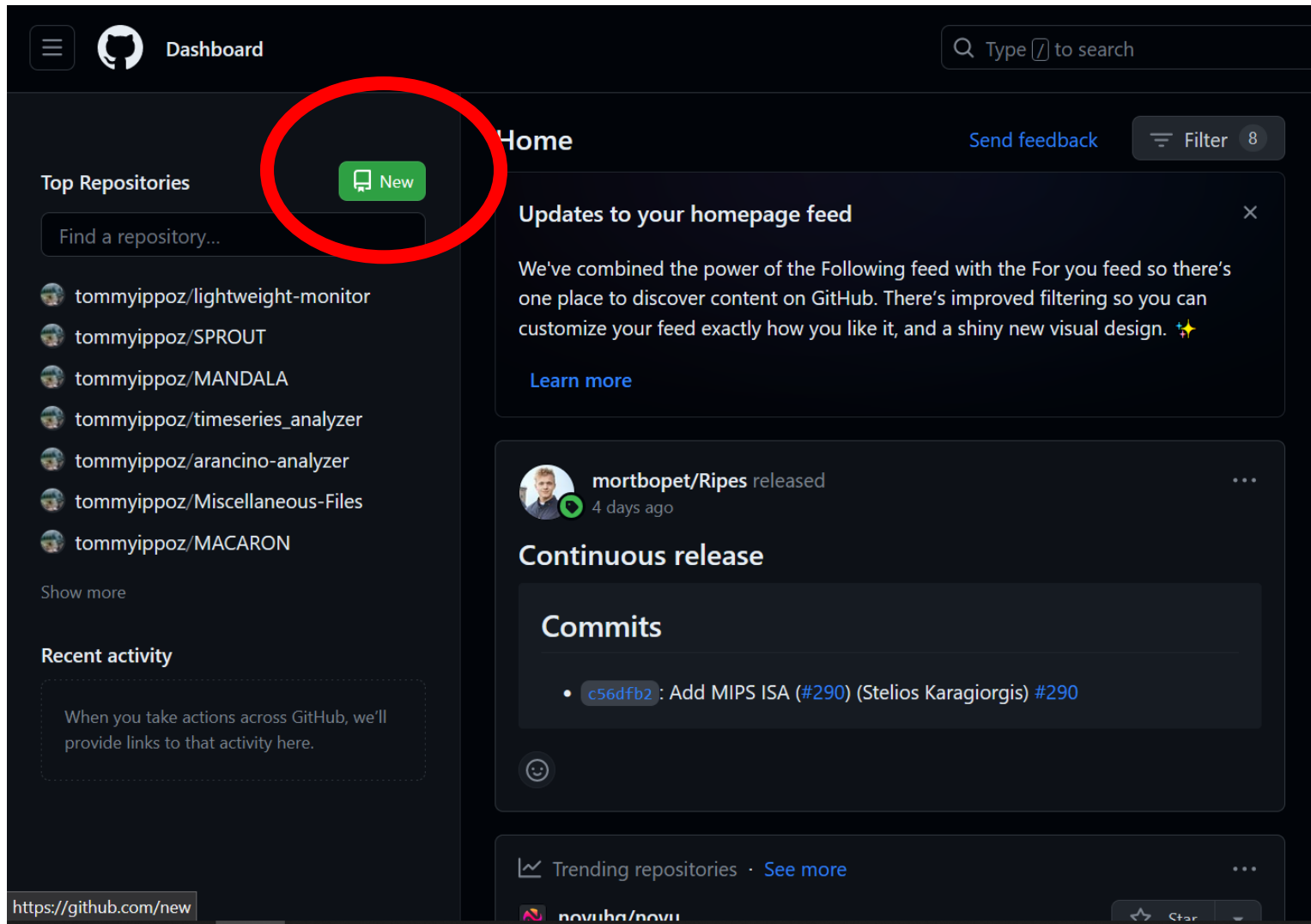
`tommaso.zoppi@unifi.it`

`tommaso.zoppi@unitn.it`

- ▶ Prerequisites
- ▶ Having a GitHub Account
- ▶ Downloading a Python interpreter
- ▶ Then, either of the two
 - Downloading an IDE and a Git plugin
 - Download a Git client



Lab Prep



The screenshot shows the GitHub Dashboard interface. The top navigation bar includes a menu icon, the GitHub logo, the word "Dashboard", and a search bar with the placeholder text "Type / to search". The main content area is divided into two columns. The left column contains a "Top Repositories" section with a search input "Find a repository..." and a list of repositories by "tommyipposz": "lightweight-monitor", "SPROUT", "MANDALA", "timeseries_analyzer", "arancino-analyzer", "Miscellaneous-Files", and "MACARON". Below this is a "Recent activity" section with a message: "When you take actions across GitHub, we'll provide links to that activity here." The right column features a "Home" header, a "Send feedback" link, and a "Filter 8" button. A large announcement banner titled "Updates to your homepage feed" explains the new feed structure. Below the banner, a post by "mortbopet/Ripes" is shown, labeled as a "Continuous release" from "4 days ago". The "Commits" section for this release lists a commit "c56dfb2 : Add MIPS ISA (#290) (Stelios Karagiorgis) #290". At the bottom, a "Trending repositories" section is partially visible, showing "novuhq/novu". A red circle highlights the "New" button, which is a green rectangle with a computer icon and the text "New", located in the top right of the left sidebar.





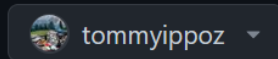
UNIVERSITÀ
DEGLI STUDI
FIRENZE

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DIPARTIMENTO DI
MATEMATICA E INFORMATICA
"ULISSE DINI"

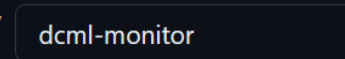
Lab Prep

Required fields are marked with an asterisk (*).

Owner *



Repository name *



✓ dcml-monitor is available.

Great repository names are short and memorable. Need inspiration? How about **laughing-journey** ?

Description (optional)



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

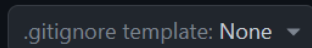
Initialize this repository with:



Add a README file

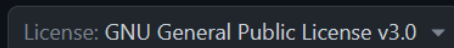
This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore



Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

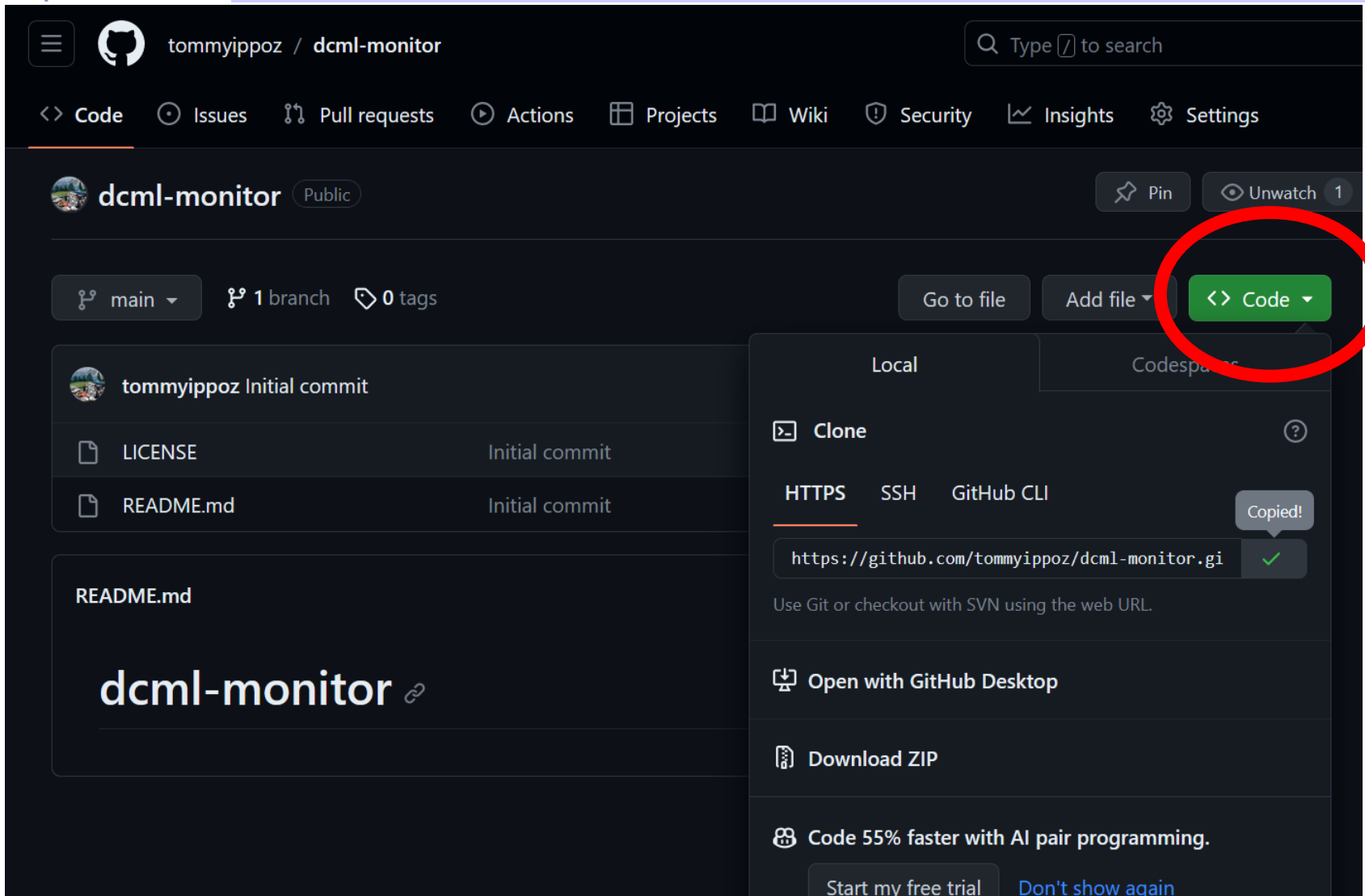


A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

RCL



Lab Prep



tommyipoz / dcml-monitor

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

dcml-monitor Public

main 1 branch 0 tags

Go to file Add file <> Code

tommyipoz Initial commit

File	Commit
LICENSE	Initial commit
README.md	Initial commit

README.md

dcml-monitor

Local Codespaces

Clone

HTTPS SSH GitHub CLI

Copied!

<https://github.com/tommyipoz/dcml-monitor.git>

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

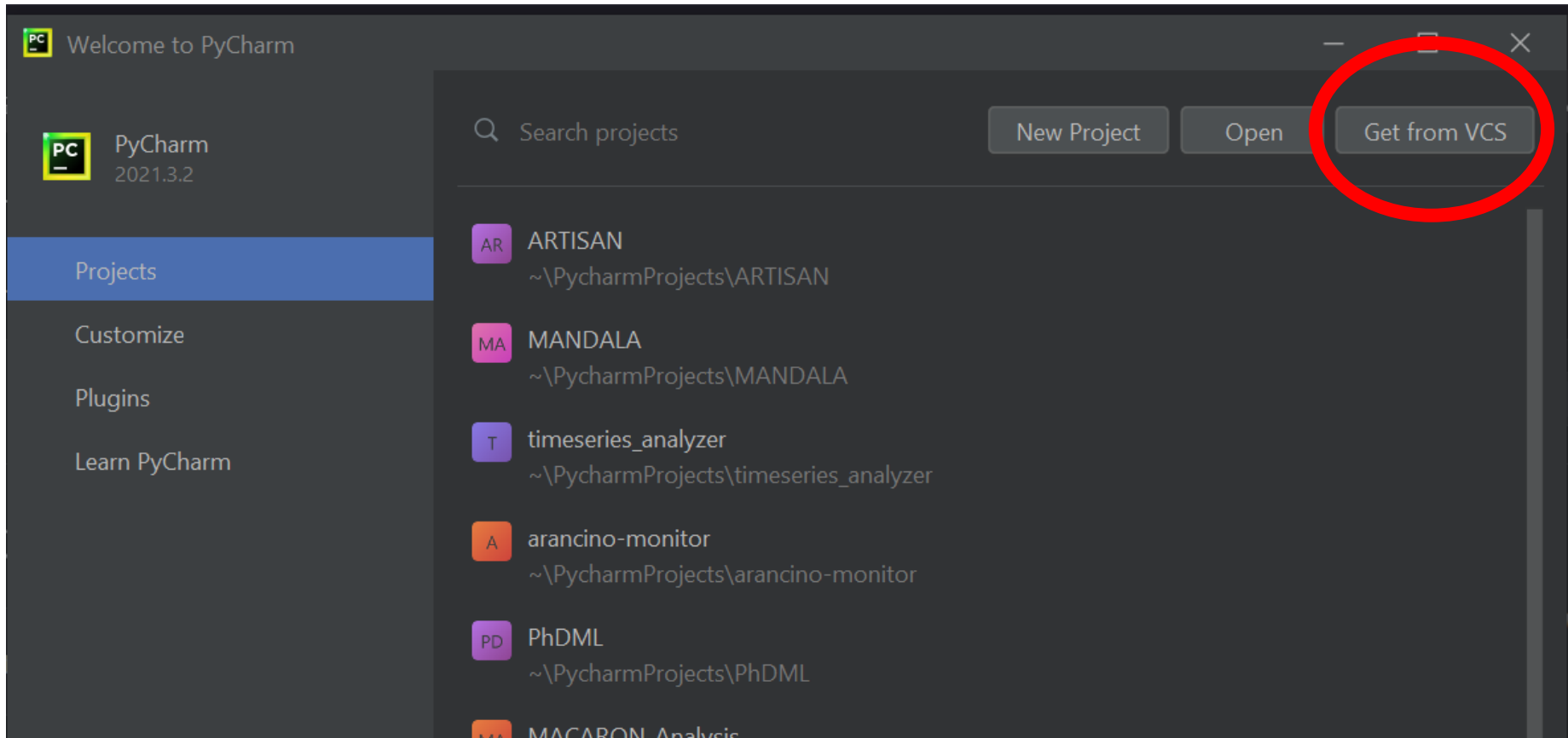
Code 55% faster with AI pair programming.

Start my free trial Don't show again

RCL

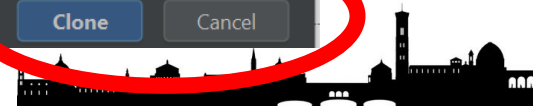
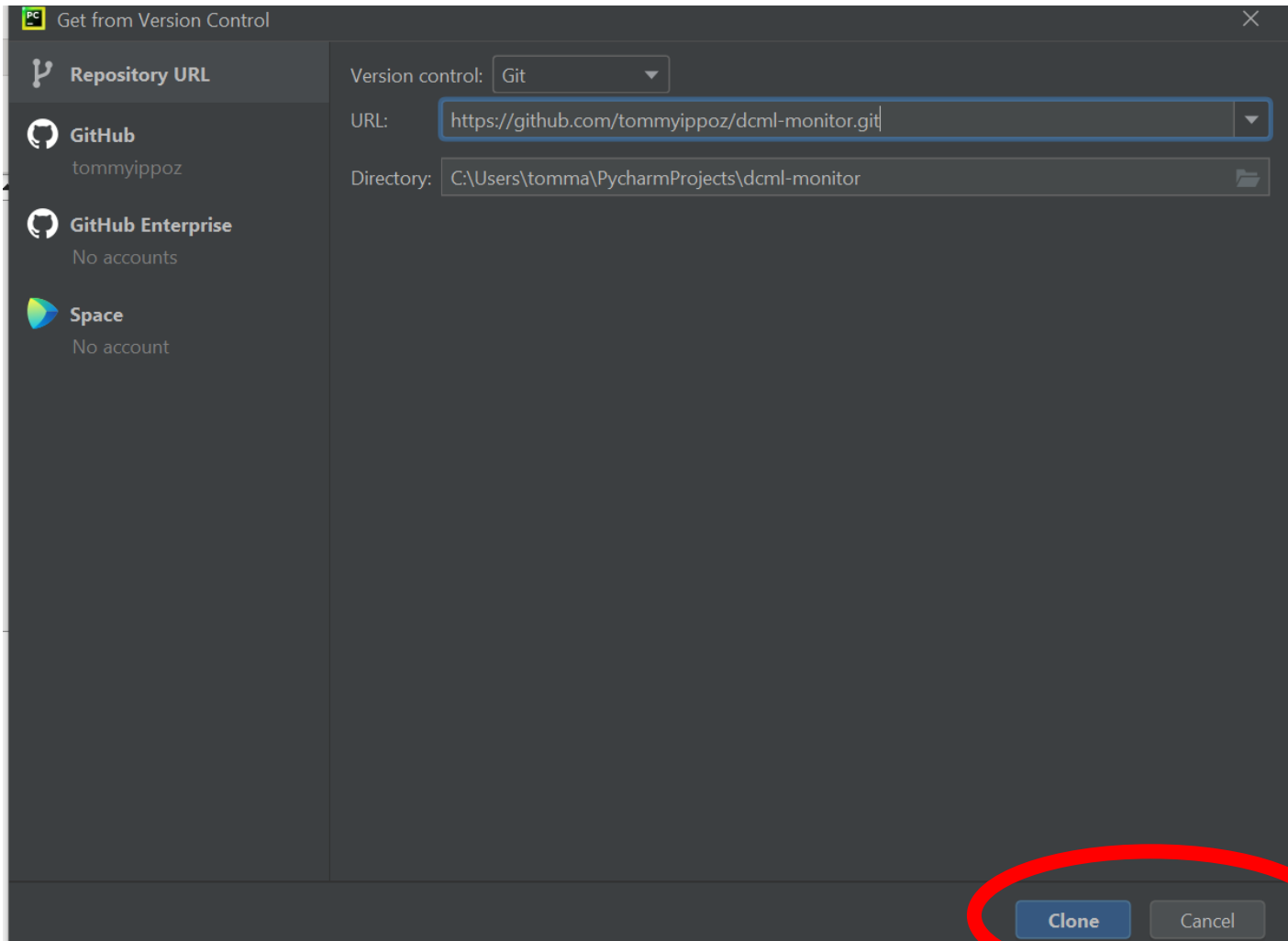


► Now we move to pycharm



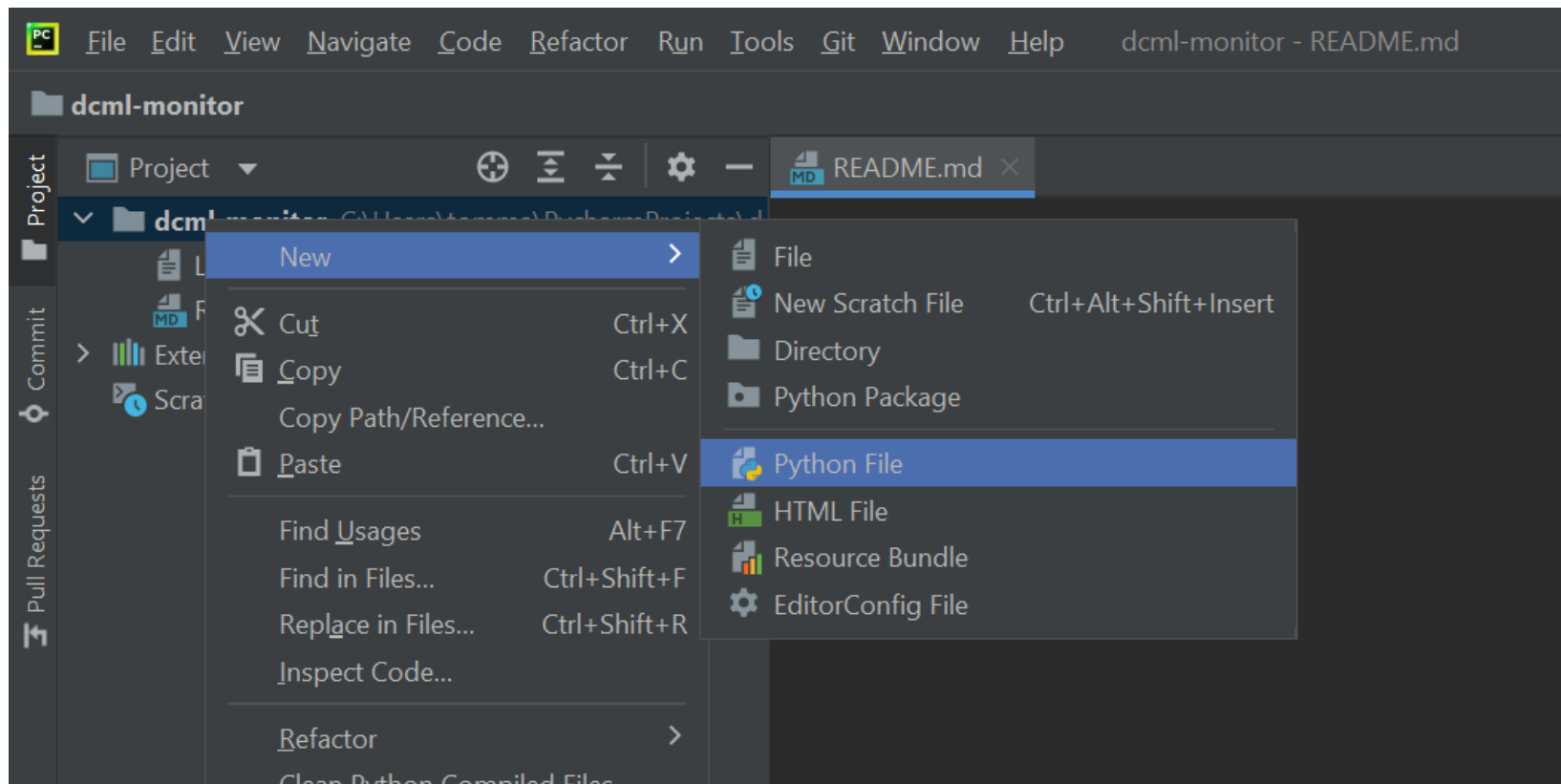
Lab Prep

► We paste what we copied before and clone



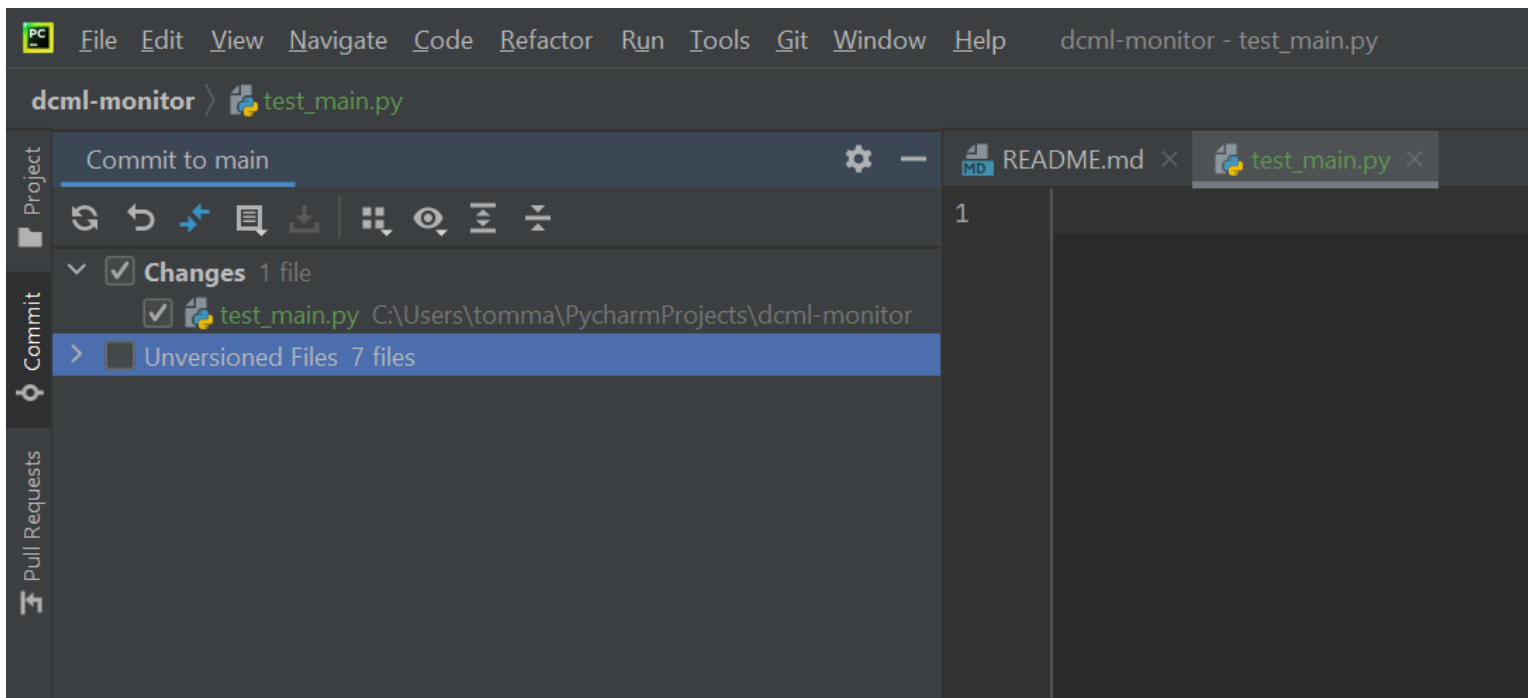
Lab Prep

- Working env is ready, now lets add a new py file and then try to commit



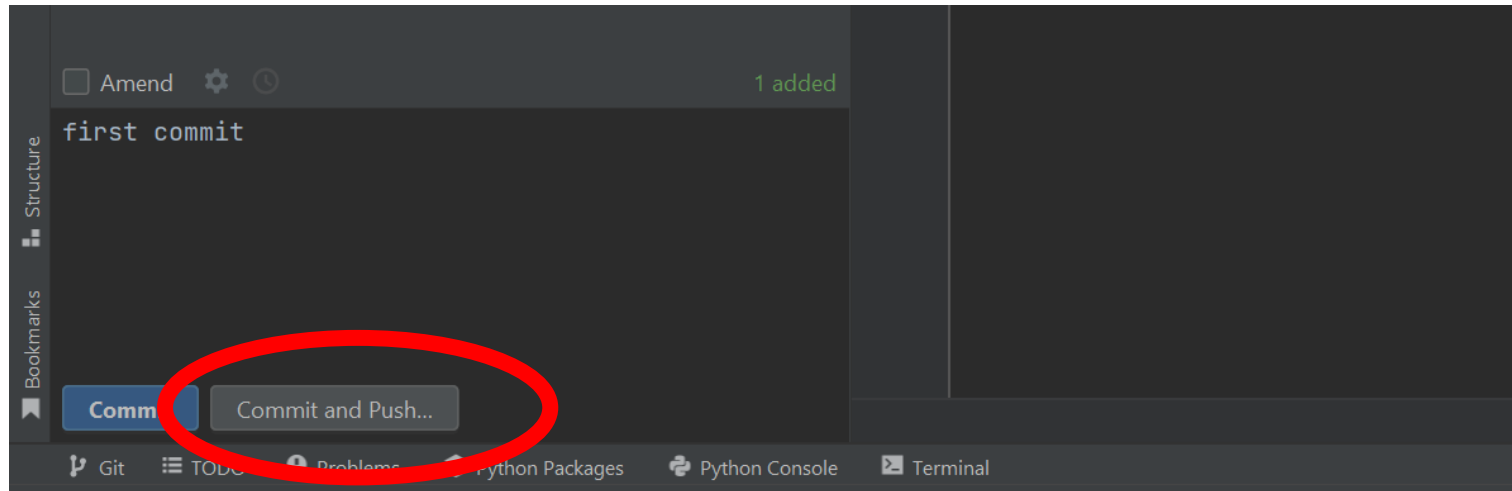
Lab Prep

- Committing changes means finalizing them.
 - We commit the addition of the file



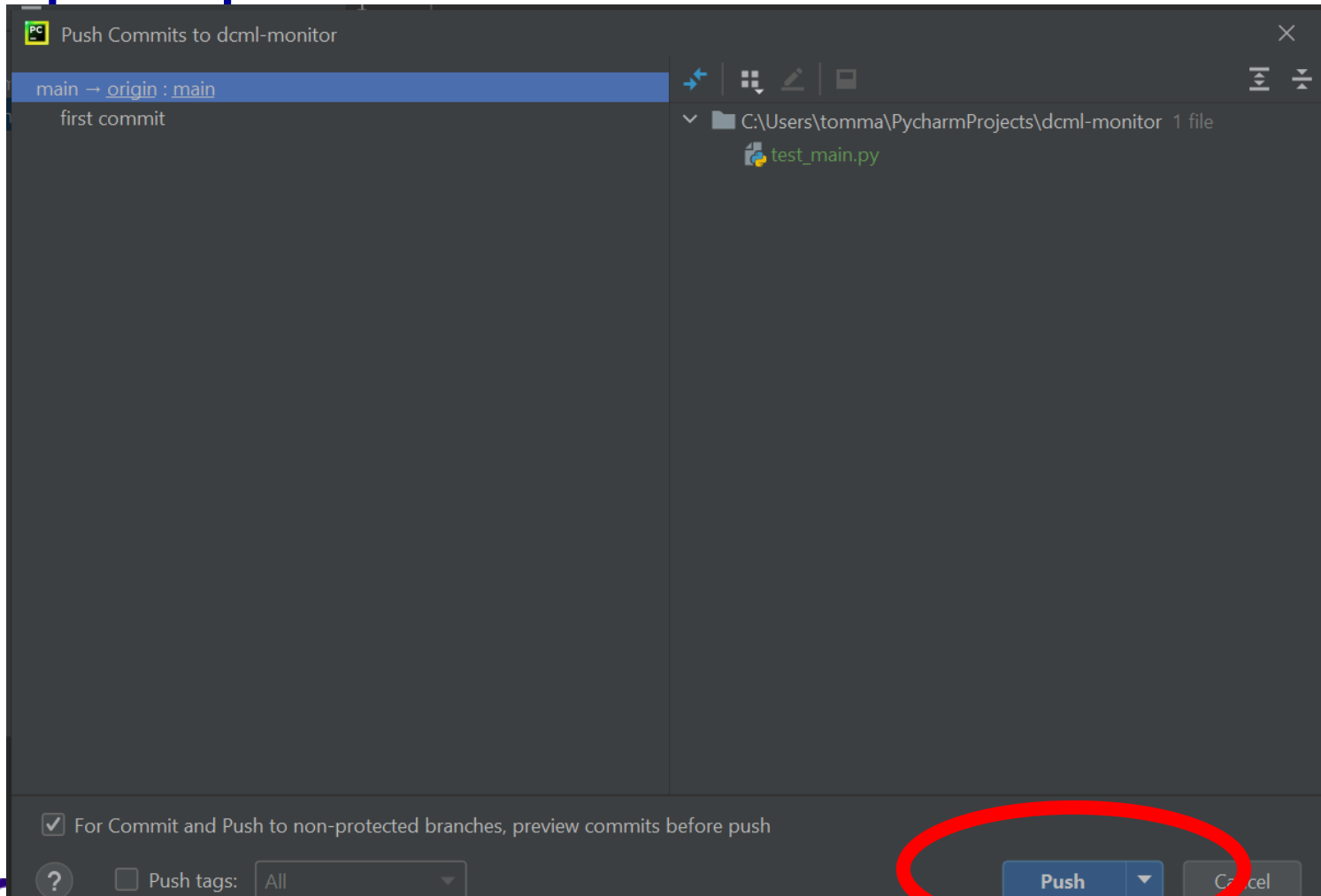
Lab Prep

- Committing changes means finalizing them.
 - We commit the addition of the file
 - Write a textual tag for it



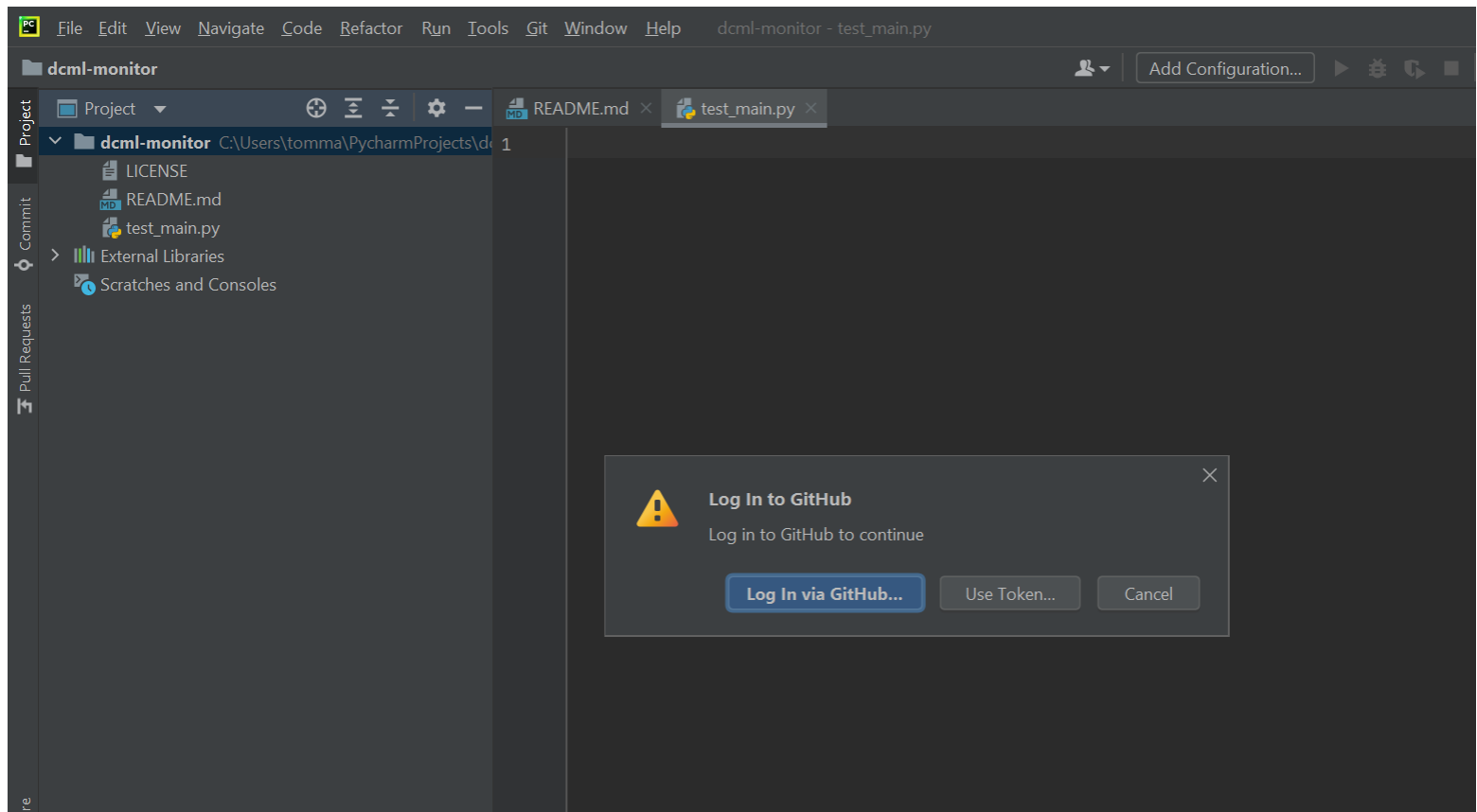
Remote Push

► It prompts a confirmation



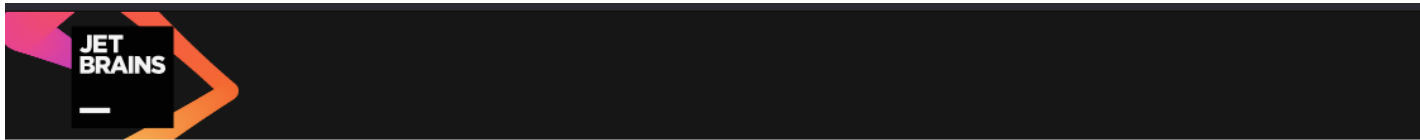
Remote Push

- Pushing to remote requires a token or authentication



Remote Push

- Pushing to remote requires a token or authentication



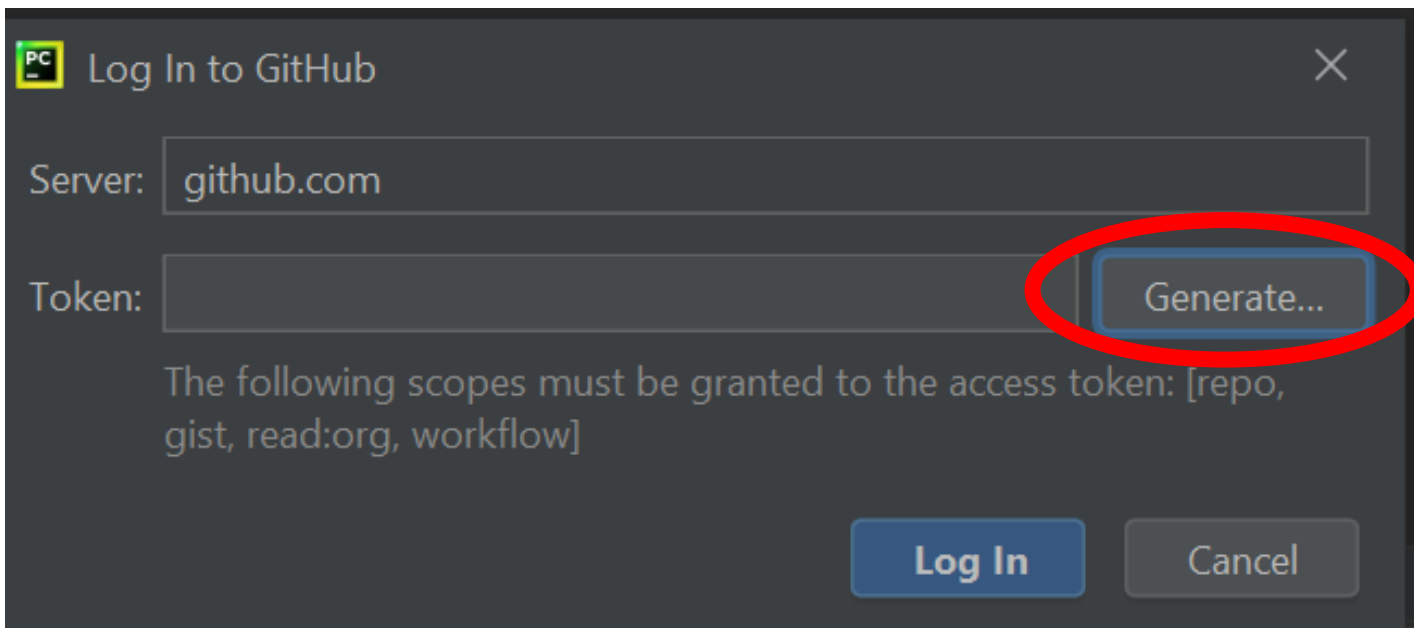
Please continue only if this page is opened from a [JetBrains IDE](#).

Authorize in GitHub



Creating GitHub Tokens

- Pushing to remote requires a token or authentication



A screenshot of a "Log In to GitHub" dialog box. The "Server:" field contains "github.com". The "Token:" field is empty. A red circle highlights a "Generate..." button located to the right of the "Token:" field. Below the fields, text states: "The following scopes must be granted to the access token: [repo, gist, read:org, workflow]". At the bottom right are "Log In" and "Cancel" buttons.

Log In to GitHub

Server: github.com

Token: Generate...

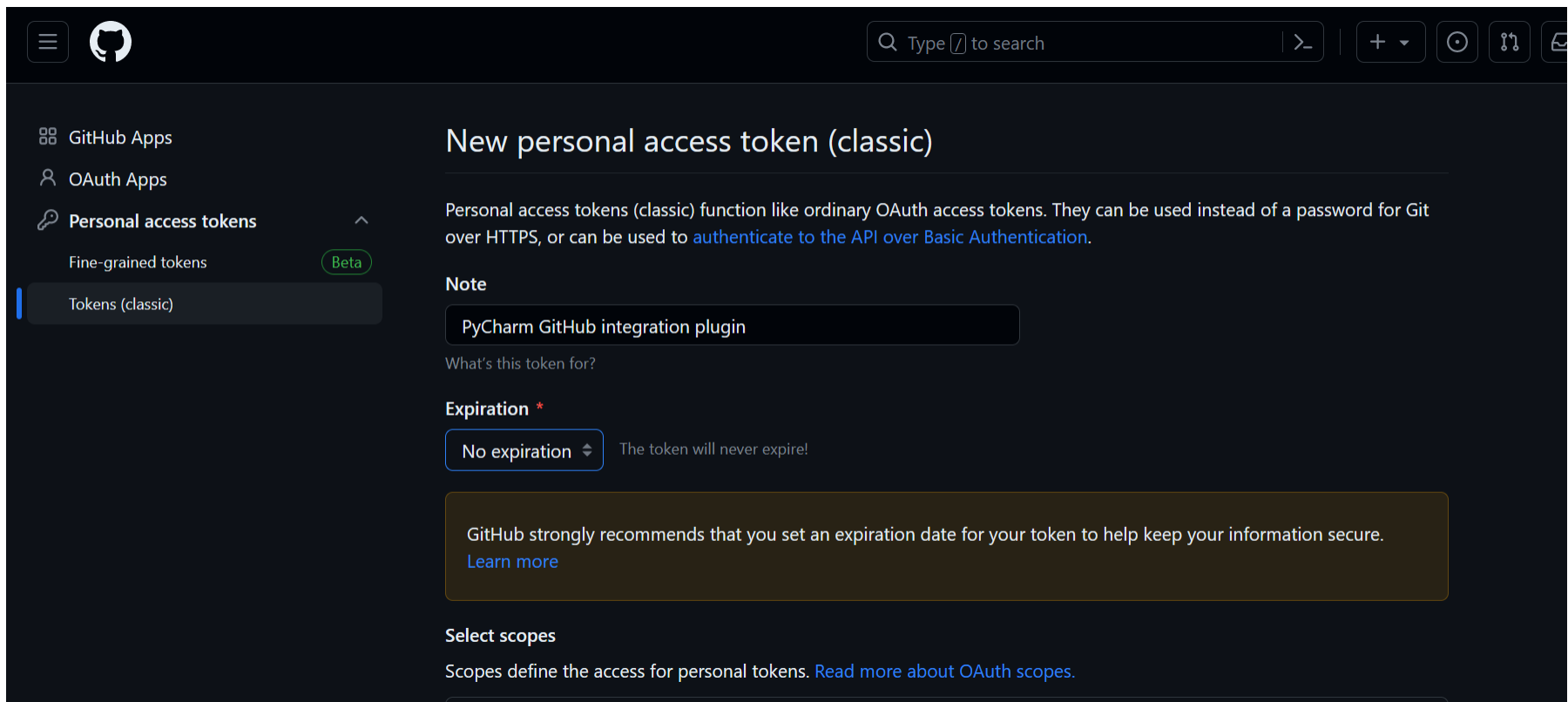
The following scopes must be granted to the access token: [repo, gist, read:org, workflow]

Log In Cancel



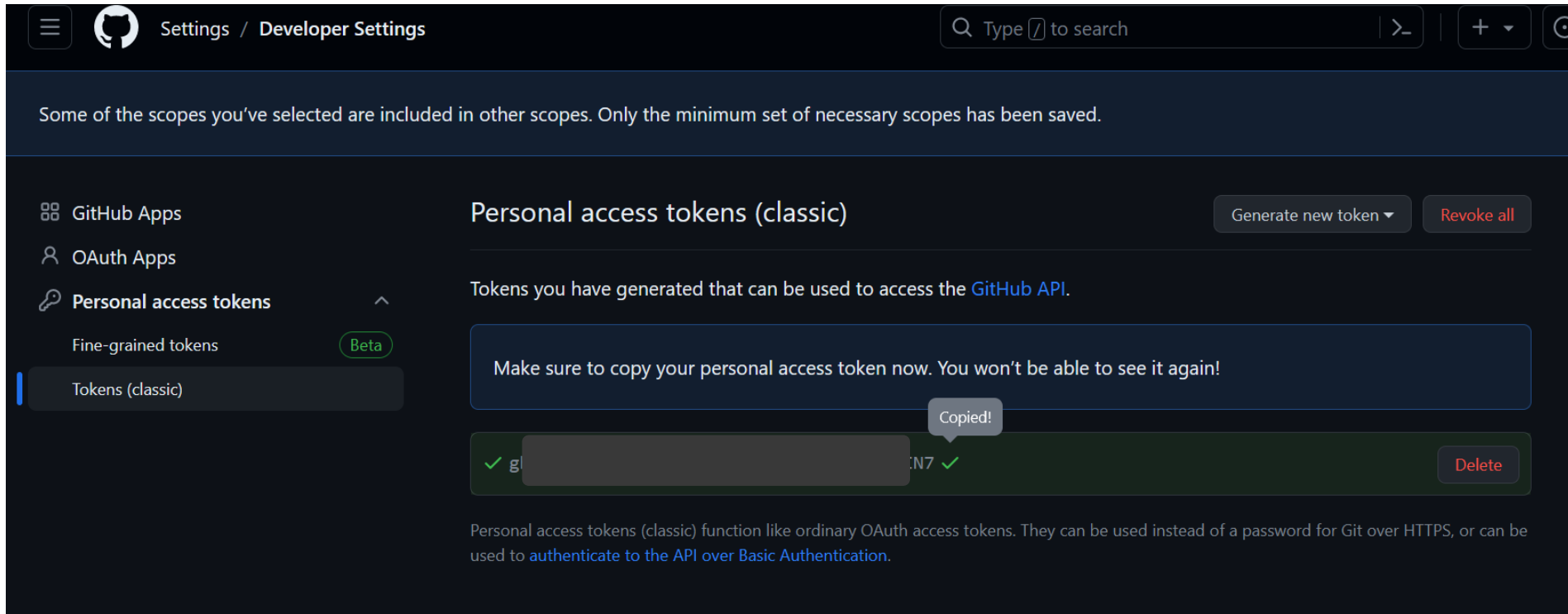
Creating GitHub Tokens

► Pushing to remote requires a token or authentication



Creating GitHub Tokens

► Pushing to remote requires a token or authentication



The screenshot shows the GitHub Developer Settings page. The left sidebar contains a menu with 'GitHub Apps', 'OAuth Apps', 'Personal access tokens' (selected), 'Fine-grained tokens' (marked Beta), and 'Tokens (classic)'. The main content area is titled 'Personal access tokens (classic)' and includes a 'Generate new token' button and a 'Revoke all' button. A message states: 'Some of the scopes you've selected are included in other scopes. Only the minimum set of necessary scopes has been saved.' Below this, it says 'Tokens you have generated that can be used to access the GitHub API.' A large blue box with white text says: 'Make sure to copy your personal access token now. You won't be able to see it again!'. A green box shows a token starting with 'gh_' followed by a redacted token ID 'CN7' and a green checkmark. A 'Copied!' tooltip is visible above the token. A 'Delete' button is next to the token. At the bottom, a note explains: 'Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to authenticate to the API over Basic Authentication.'

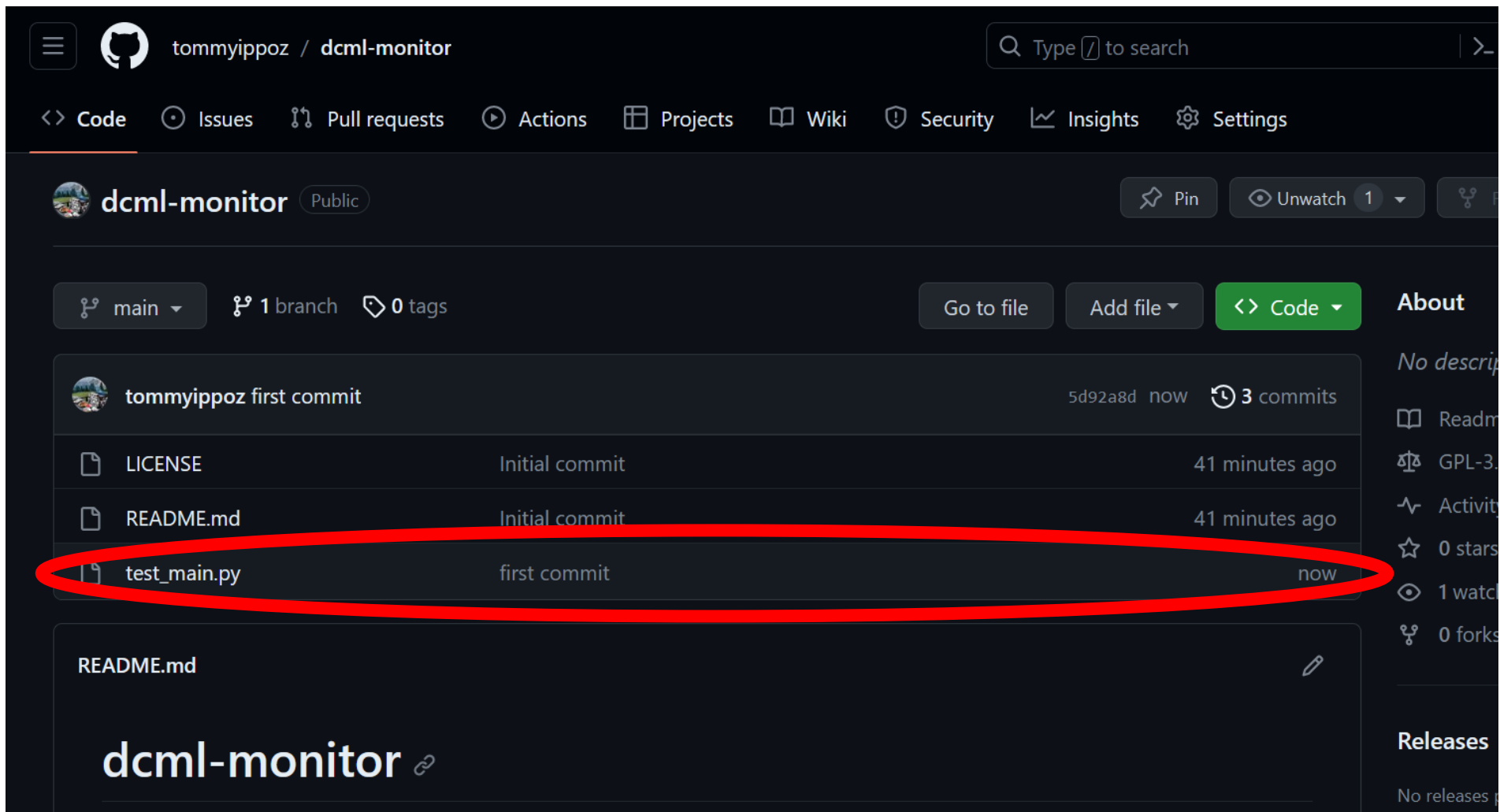


Creating GitHub Tokens

- ▶ Now you are good to go with pushes and commits
 - Tokens are thought for a single-application, single-repo use, you should organize them accordingly
- ▶ Now you can copy-paste the token in PyCharm
 - The push will finalize



Repo Update



The screenshot shows the GitHub interface for the repository 'dcml-monitor' by user 'tommyipoz'. The repository is public and has 1 branch and 0 tags. The file list shows three files: 'LICENSE', 'README.md', and 'test_main.py'. The 'test_main.py' file is highlighted with a red oval. The repository has 3 commits, with the most recent commit being 'tommyipoz first commit' 41 minutes ago. The repository description is 'No description provided for this repository'. The repository has 0 stars, 1 watcher, and 0 forks. The repository is linked to a project named 'dcml-monitor'.



Lets Try it Together

► Hands-On Experimentation!

