

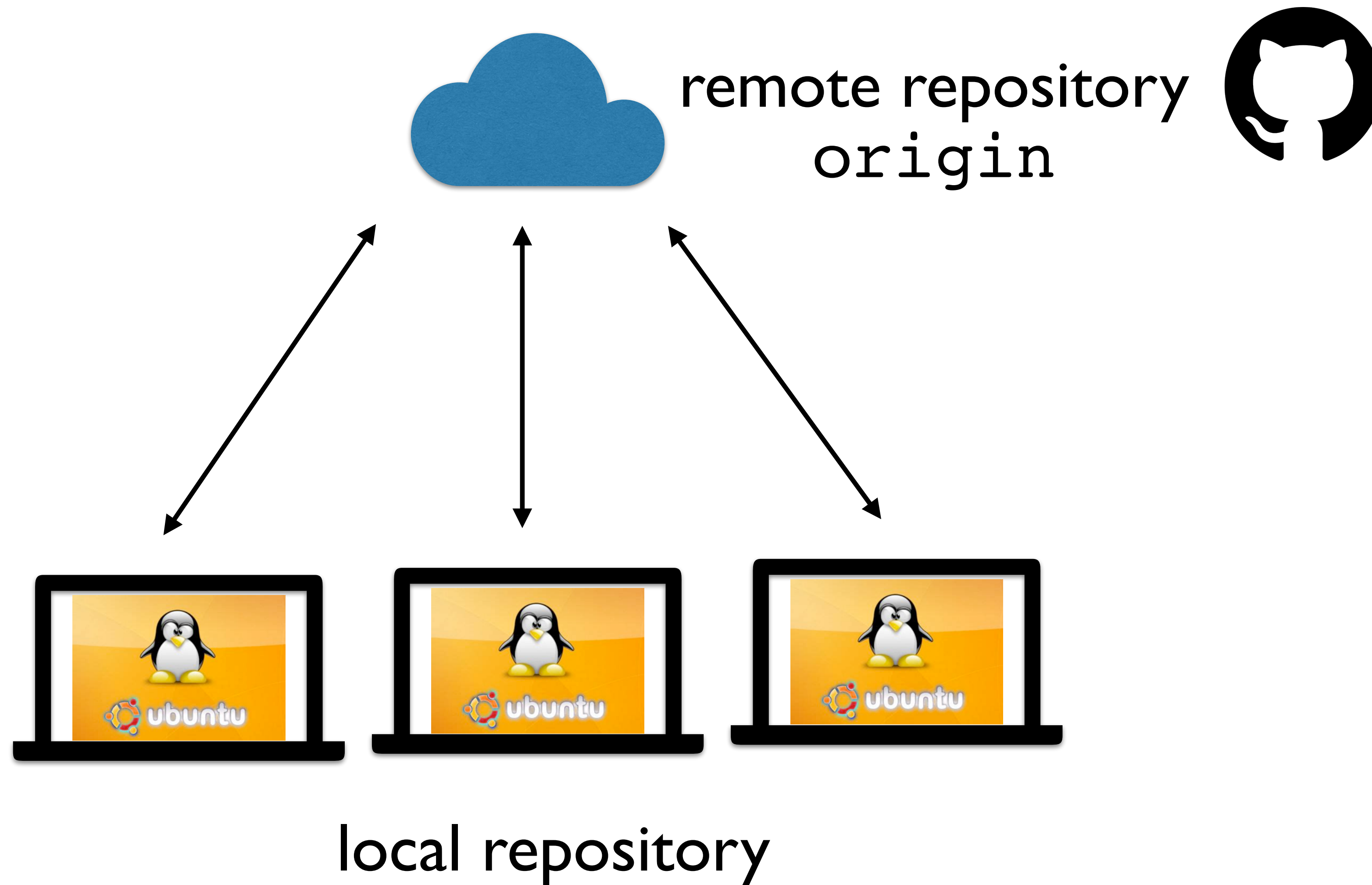
Web Programming

Git

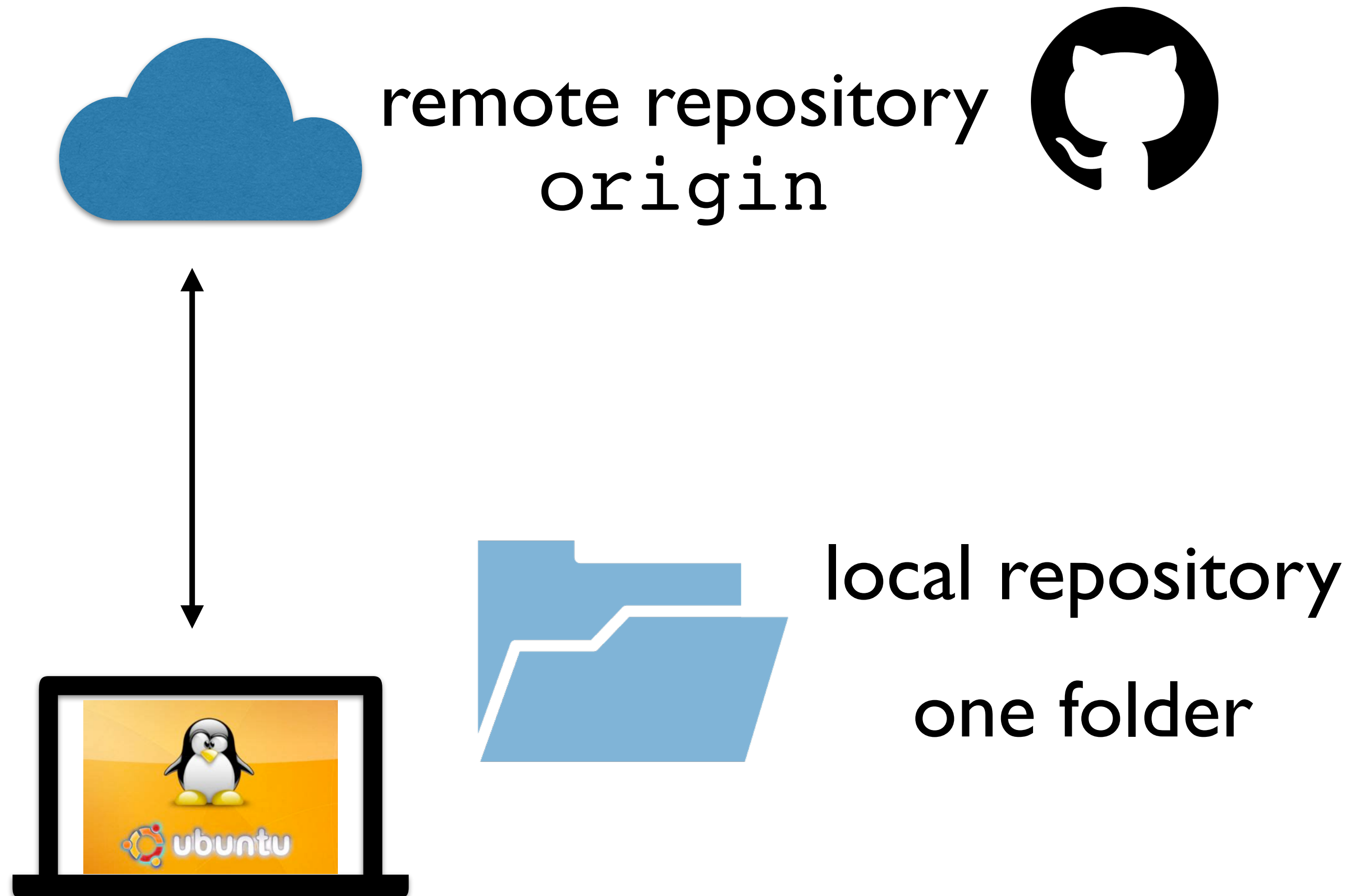
Git version control

- Collaborate on code
- Share changes
- Track changes
- Easy revert
- Easy to compare versions

Git setup



Git setup



Git workflow

Need command line
inside repository folder!

```
git pull
```

- Get changes from remote (origin) to local version

```
git add <filename>
```

- Add new files to local version

```
git commit -a -m"message"
```

- Mark new version locally

```
git push
```

- Add changes to remote

Git workflow

Need command line
inside repository folder!

```
git pull
```

- Get changes from remote (origin) to local version

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git add <filename>
```

- Add new files to local version

```
git commit -a -m"message"
```

- Mark new version locally

```
git push
```

- Add changes to remote

Git setup course



remote repositories



assignments

<username>-labs

pull

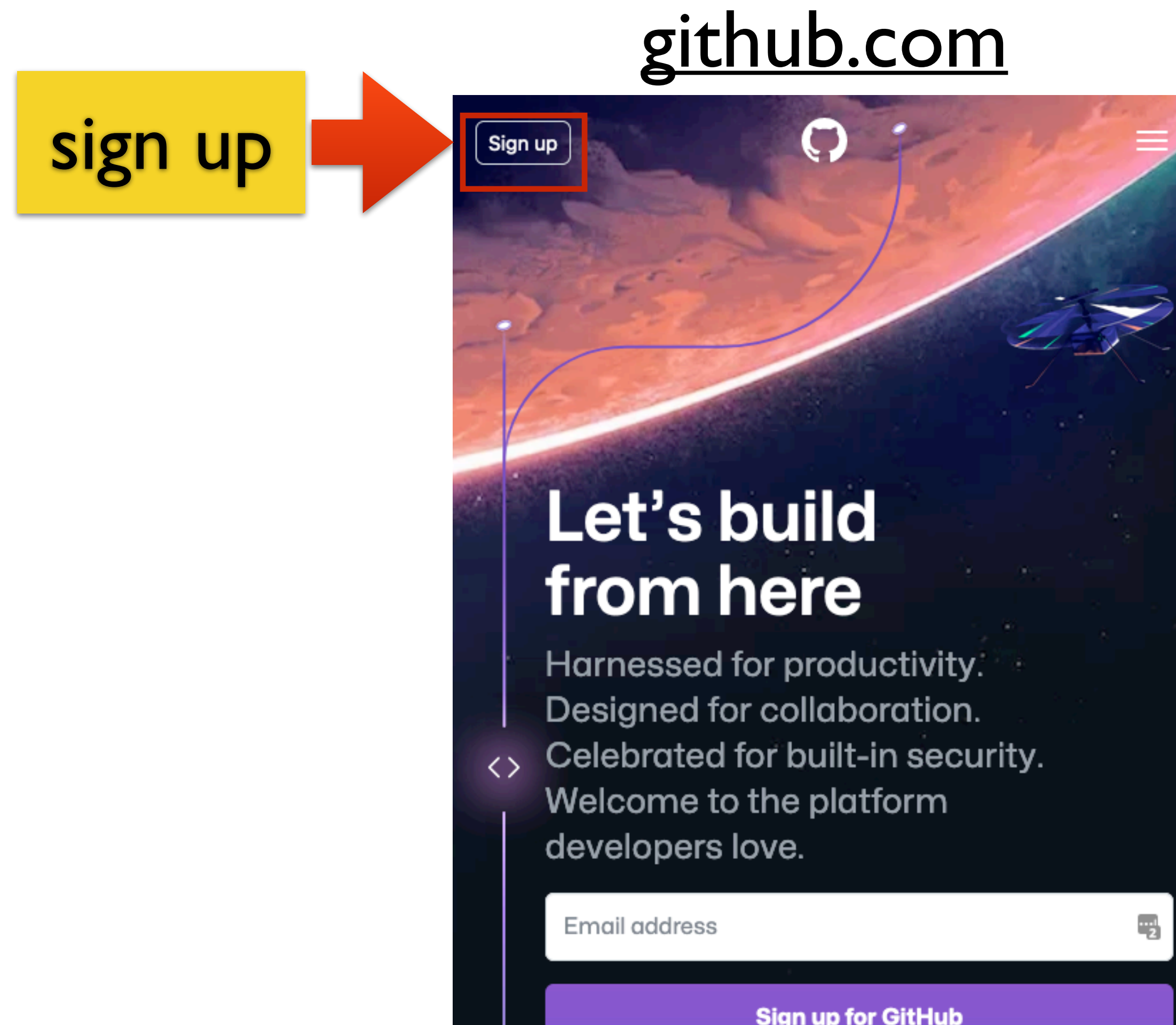
push



local repository


one folder

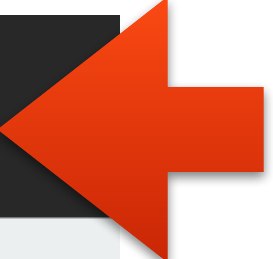
Quickfeed register



Quickfeed register

QuickFeed






click

Automated student feedback

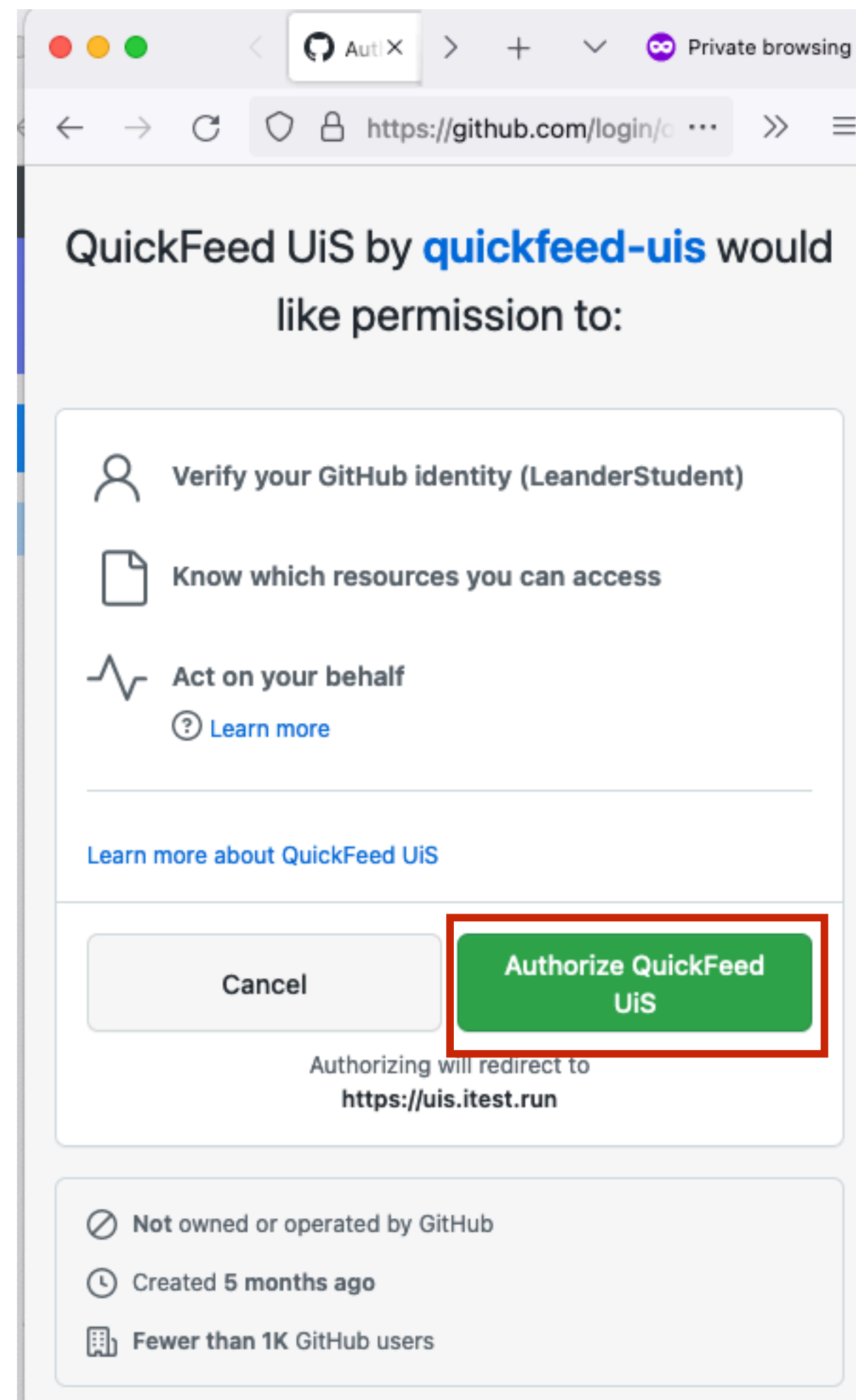
QuickFeed provides instantaneous feedback to students on their programming assignments. It is also a valuable tool for teachers when grading lab assignments.

[Learn more »](#)



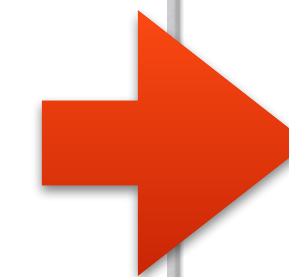
GitHub Integration

Quickfeed register



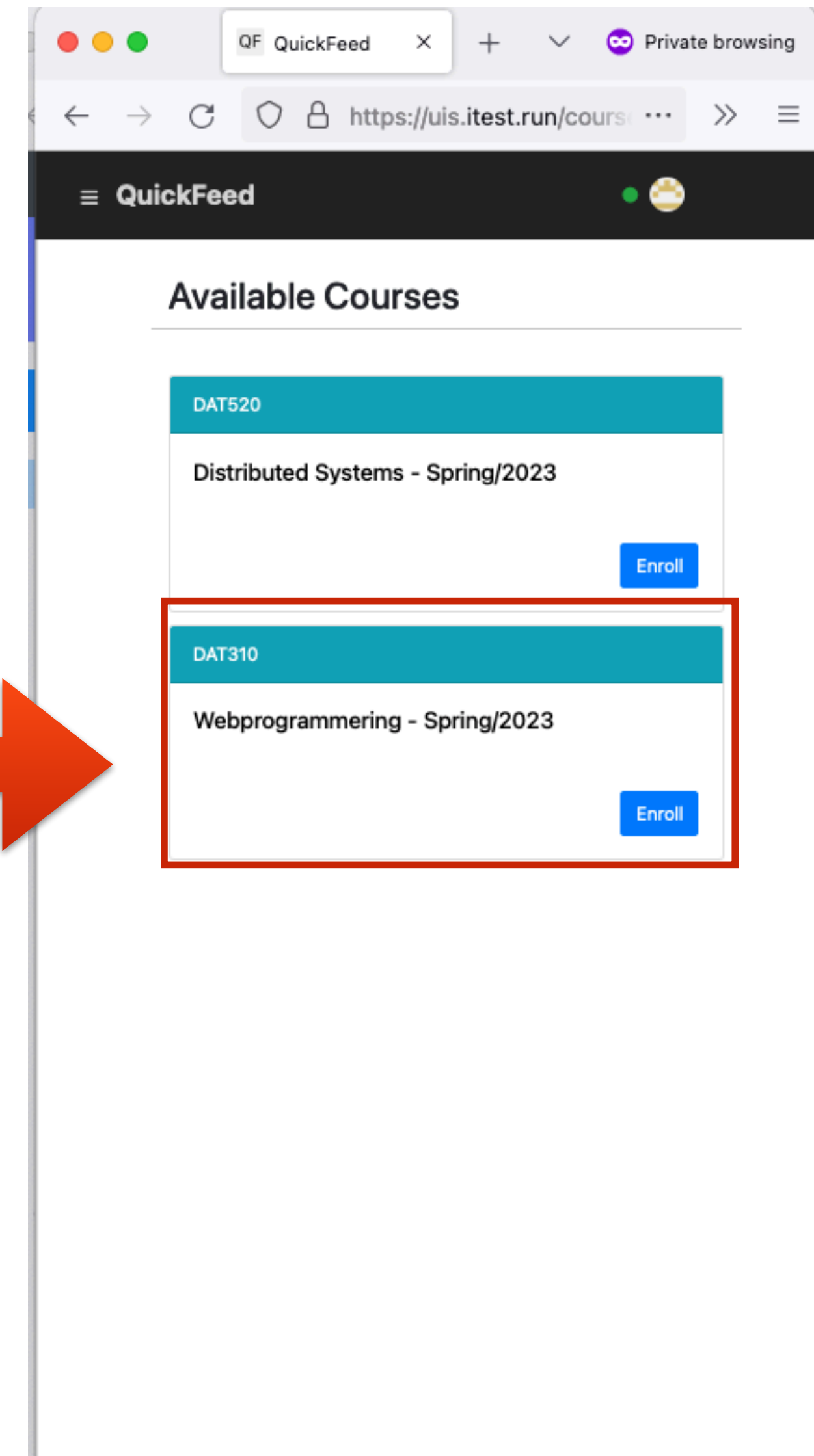
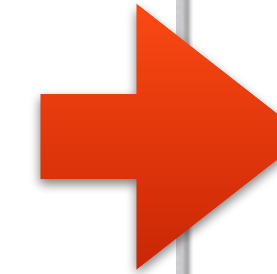
Quickfeed register

sign in to quickfeed
use name as on
canvas

A screenshot of a web browser showing the QuickFeed registration page. The browser's address bar displays 'https://uis.itest.run/profile'. The page has a dark header with the 'QuickFeed' logo and a user profile icon. Below the header, a light gray section contains the text 'Hi,' followed by 'You can edit your user information here.' and a bold instruction: 'Use your real name as it appears on Canvas to ensure that approvals are correctly attributed.' Below this is a registration form with a circular profile picture placeholder. The form includes three text input fields labeled 'Name', 'Email', and 'Student ID', and a blue 'Save' button at the bottom. Red text instructions are placed above the form: 'Fill in the form below to complete signup.', 'Use your *real name* as it appears on Canvas.', and 'If your name does not match any names on Canvas, you will not be granted access.' The entire form area is enclosed in a red rectangular border.

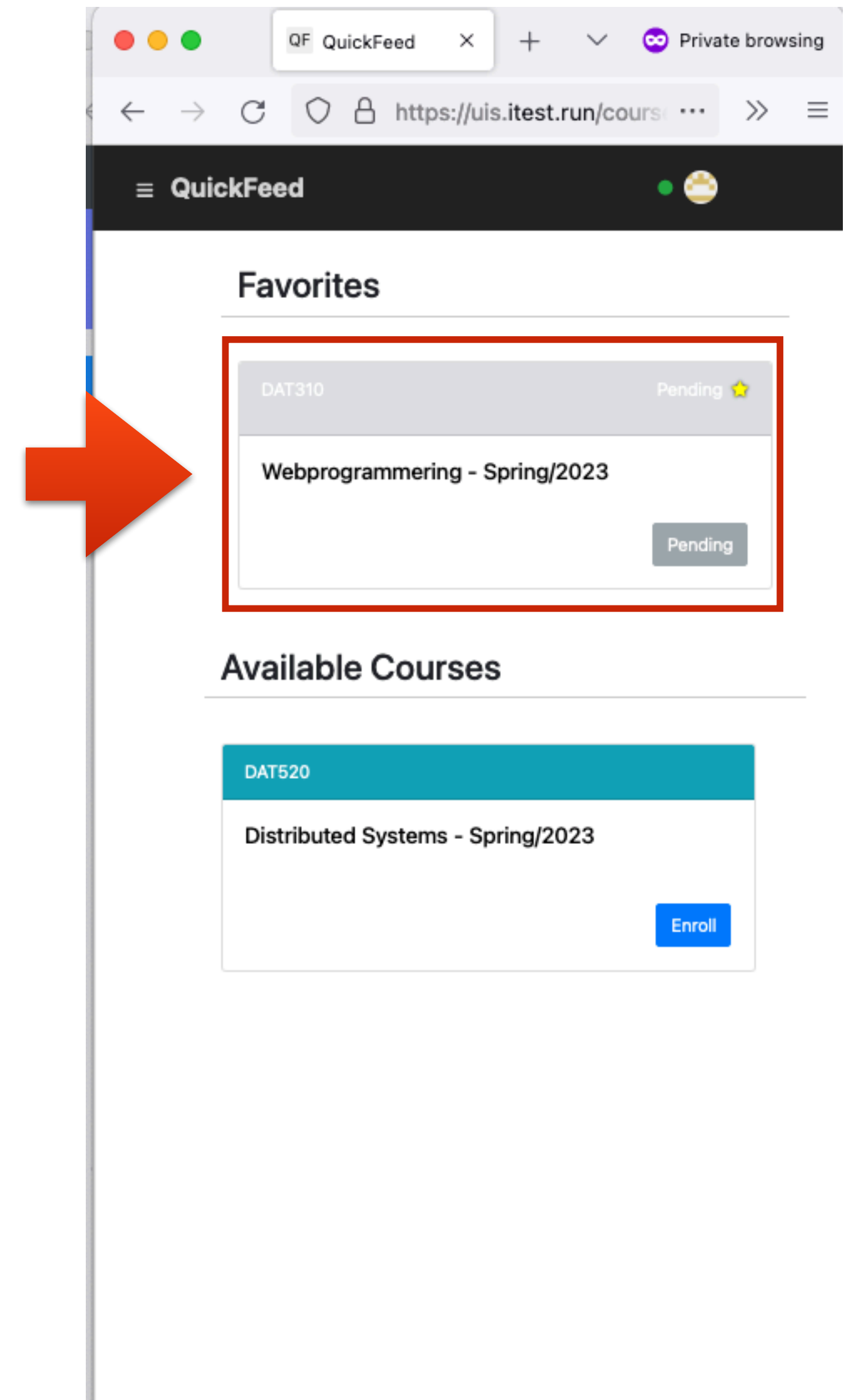
Quickfeed register

enrole DAT310



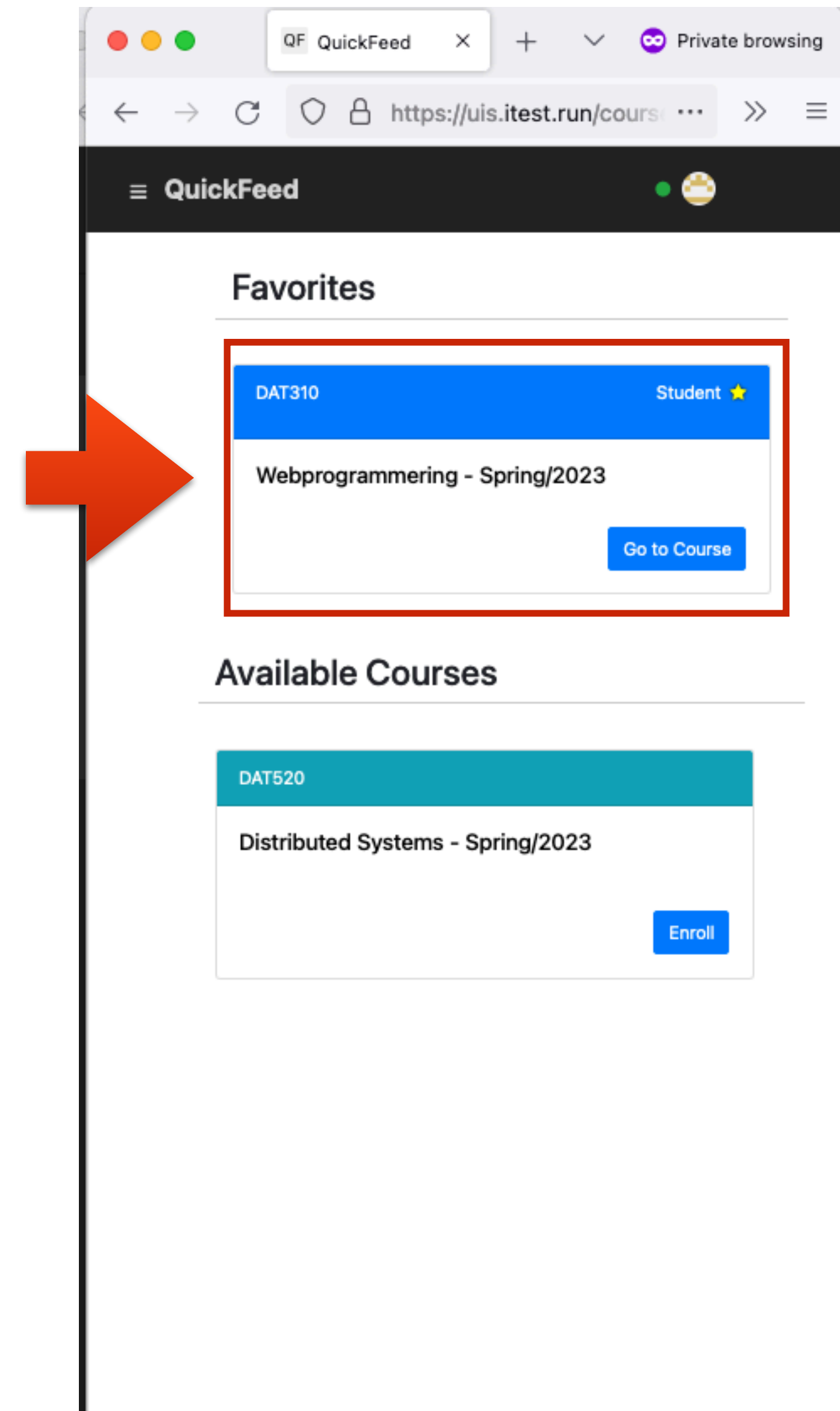
Quickfeed register

wait (manual approval)

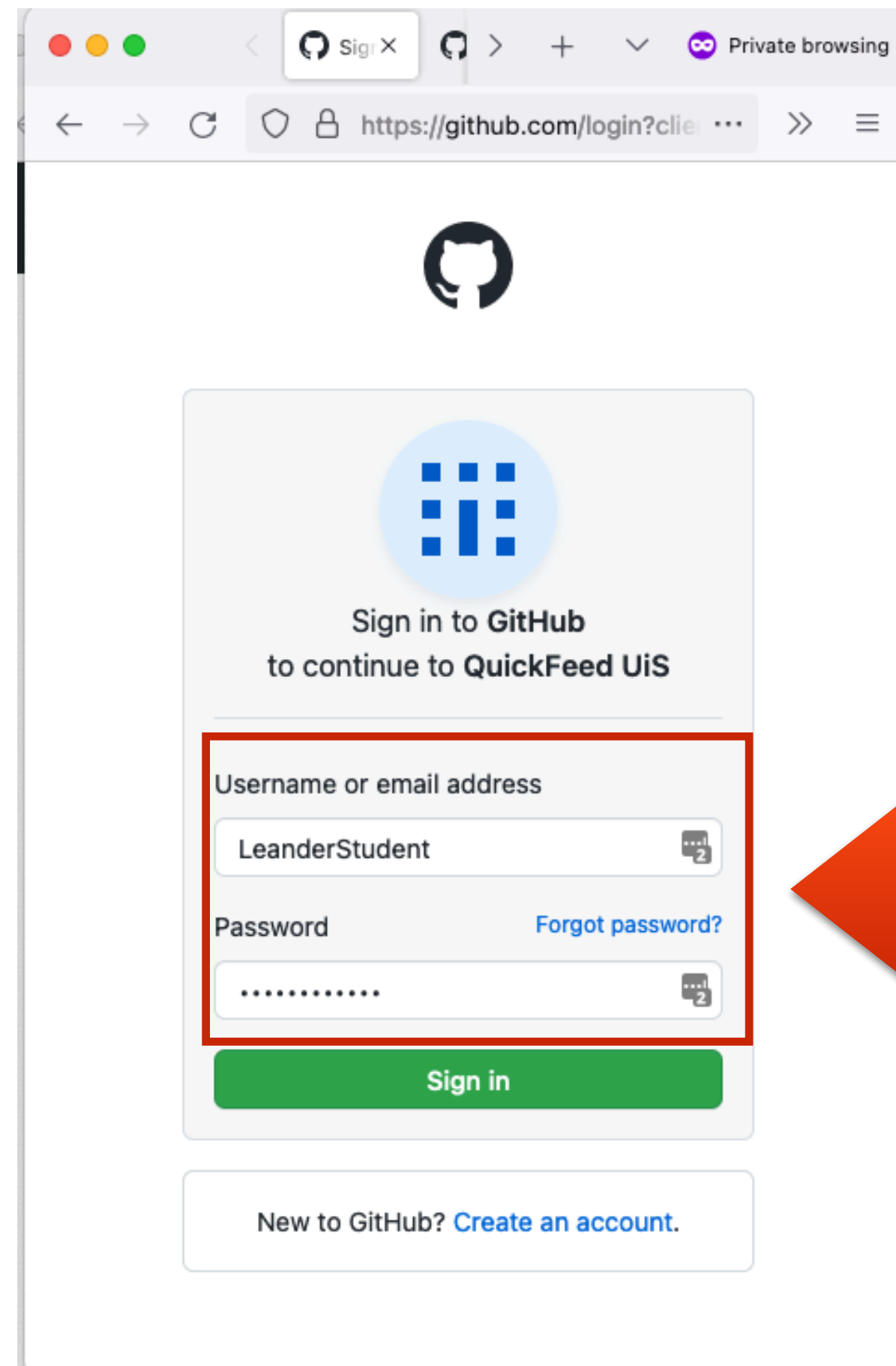


Quickfeed register

Approved



Quickfeed register



Sign in to GitHub
to continue to QuickFeed UiS

Username or email address
LeanderStudent

Password
.....

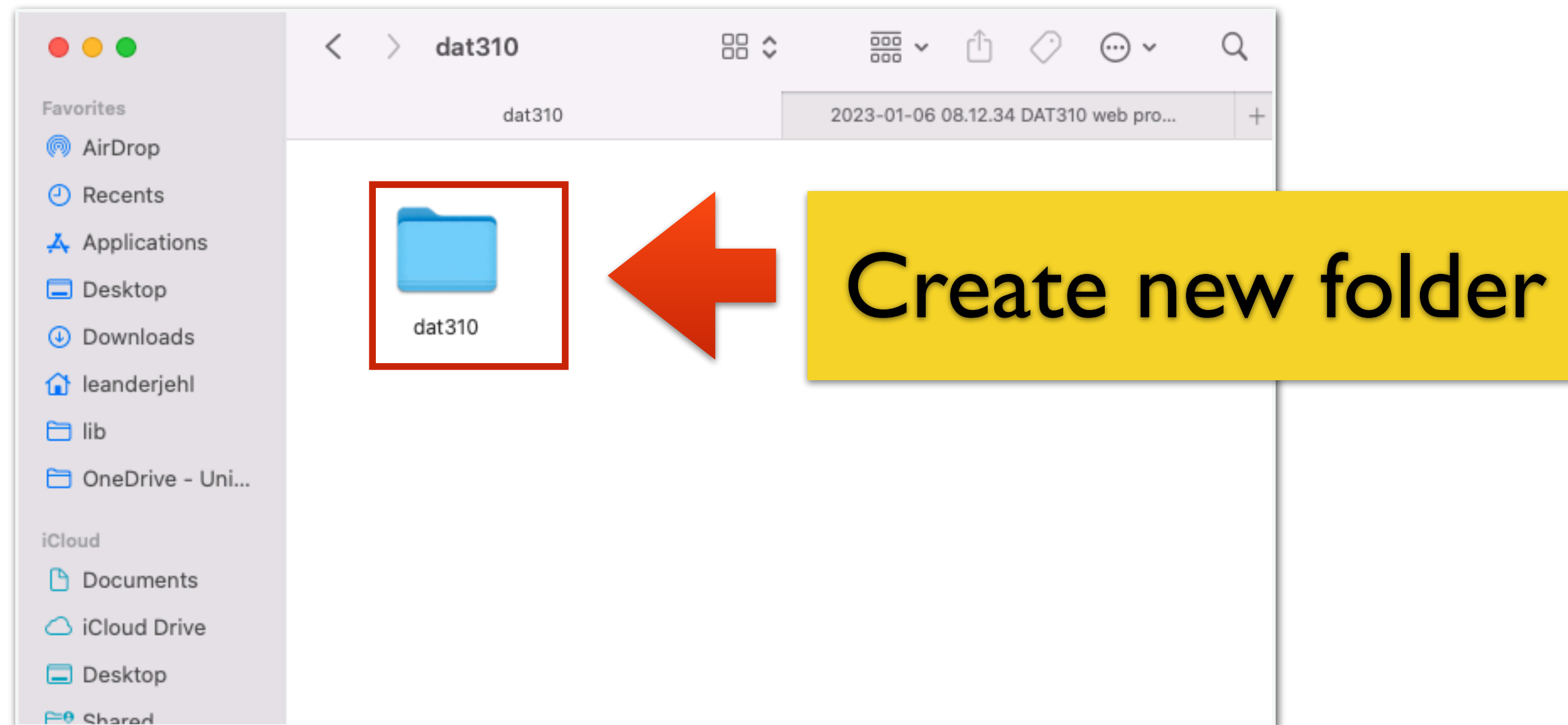
Forgot password?

Sign in

New to GitHub? [Create an account.](#)

log in

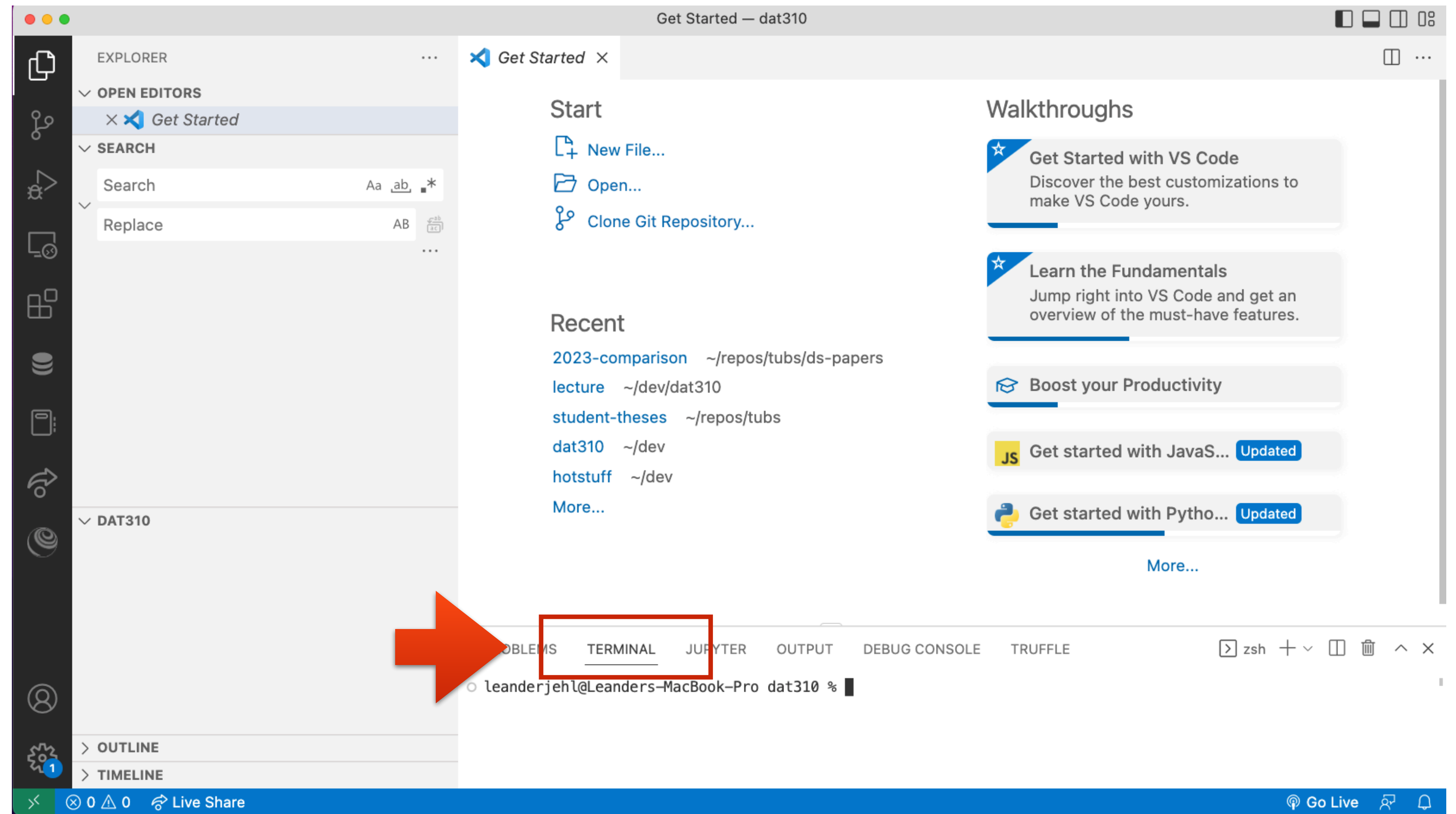
Setup locally



Setup locally

Open terminal

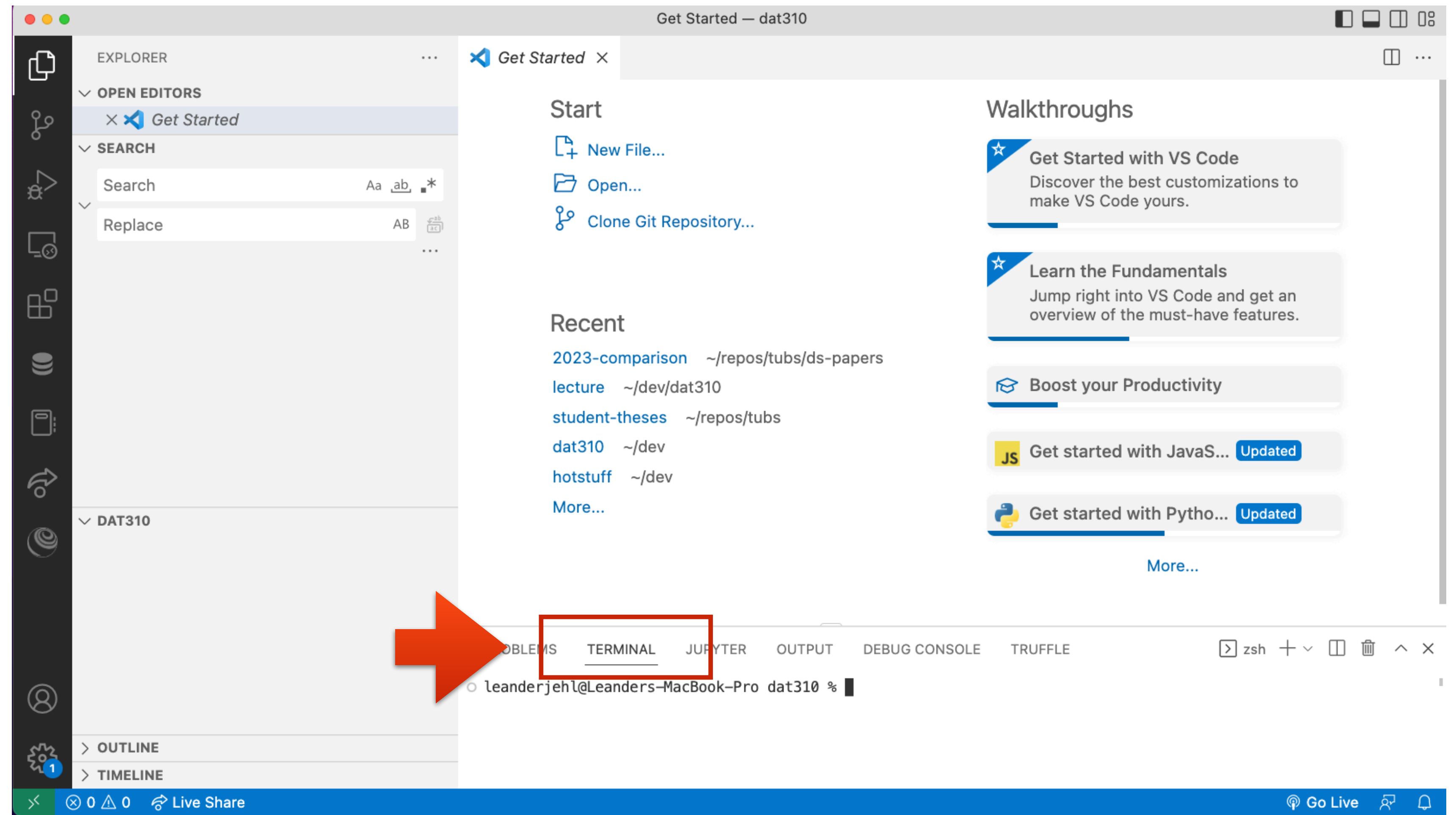
(move into folder
using `cd dat310`)



Setup locally

Open terminal

(move into folder
using `cd dat310`)



Setup locally



A screenshot of a VS Code terminal window. The terminal has a title bar with tabs for 'PROBLEMS', 'TERMINAL', 'JUPYTER', 'OUTPUT', 'DEBUG CONSOLE', and 'TRUFFLE'. The 'TERMINAL' tab is active. The terminal shows a prompt 'leanderjehl@Leanders-MacBook-Pro dat310 %' followed by the command 'git clone https://github.com/dat310-2023/LeanderStudent-labs assignments'. The terminal window has standard window controls (maximize, close, etc.) in the top right corner.

```
leanderjehl@Leanders-MacBook-Pro dat310 % git clone https://github.com/dat310-2023/LeanderStudent-labs assignments
```

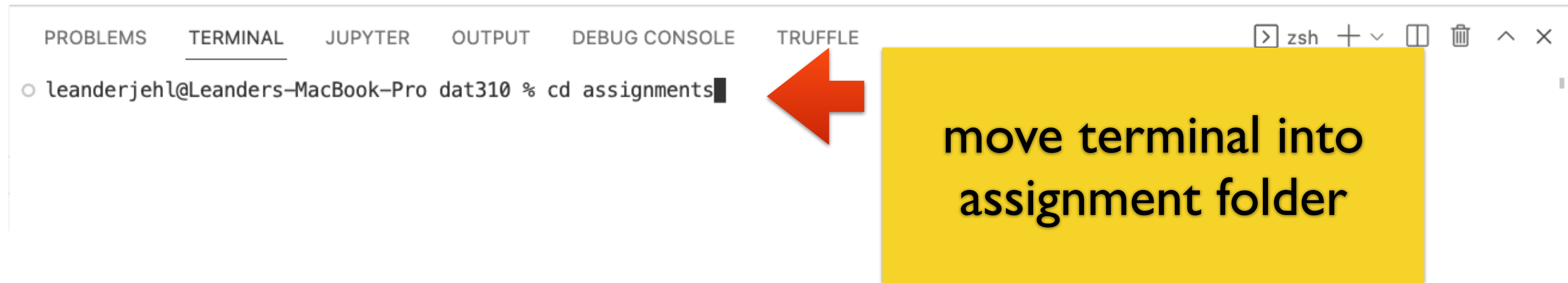
```
git clone https://github.com/dat310-2023/<username>-labs assignments
```

Setup locally

```
PROBLEMS  TERMINAL  JUPYTER  OUTPUT  DEBUG CONSOLE  TRUFFLE  zsh + ▢ 🗑 ^ ×  
● leanderjehl@Leanders-MacBook-Pro dat310 % git clone https://github.com/dat310-2023/LeanderStudent-labs assignments  
  Cloning into 'assignments'...  
  warning: You appear to have cloned an empty repository.  
○ leanderjehl@Leanders-MacBook-Pro dat310 %
```



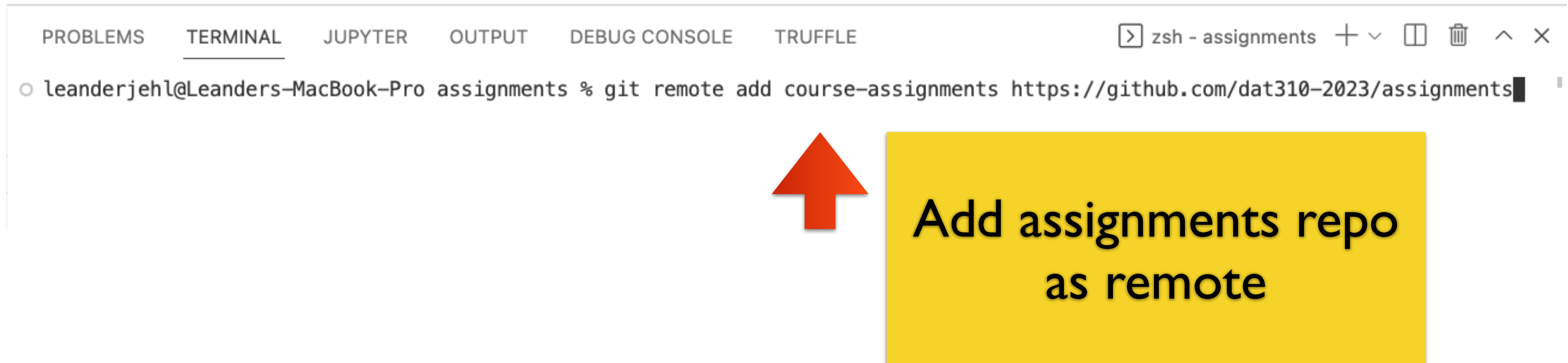
Setup locally



A screenshot of a VS Code terminal window. The terminal title bar shows tabs for PROBLEMS, TERMINAL, JUPYTER, OUTPUT, DEBUG CONSOLE, and TRUFFLE. The terminal content shows the command `cd assignments` being executed. A red arrow points from a yellow callout box to the terminal.

```
leanderjehl@Leanders-MacBook-Pro dat310 % cd assignments
```

move terminal into assignment folder

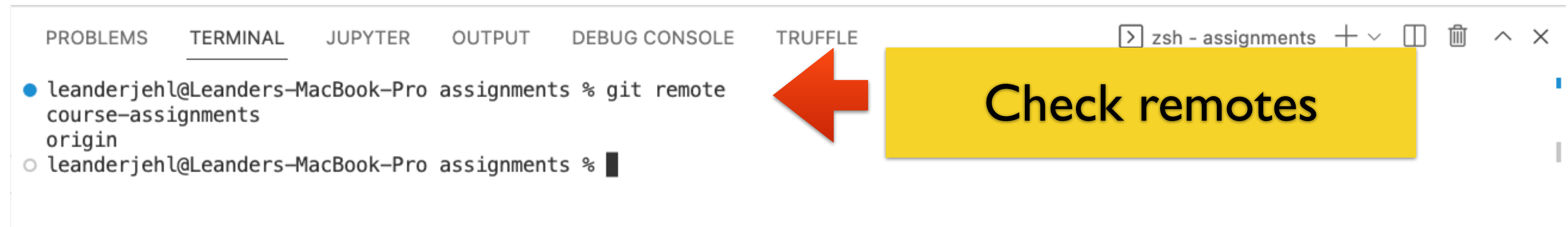


A screenshot of a VS Code terminal window. The terminal title bar shows tabs for PROBLEMS, TERMINAL, JUPYTER, OUTPUT, DEBUG CONSOLE, and TRUFFLE. The terminal content shows the command `git remote add course-assignments https://github.com/dat310-2023/assignments` being executed. A red arrow points from a yellow callout box to the terminal.

```
leanderjehl@Leanders-MacBook-Pro assignments % git remote add course-assignments https://github.com/dat310-2023/assignments
```

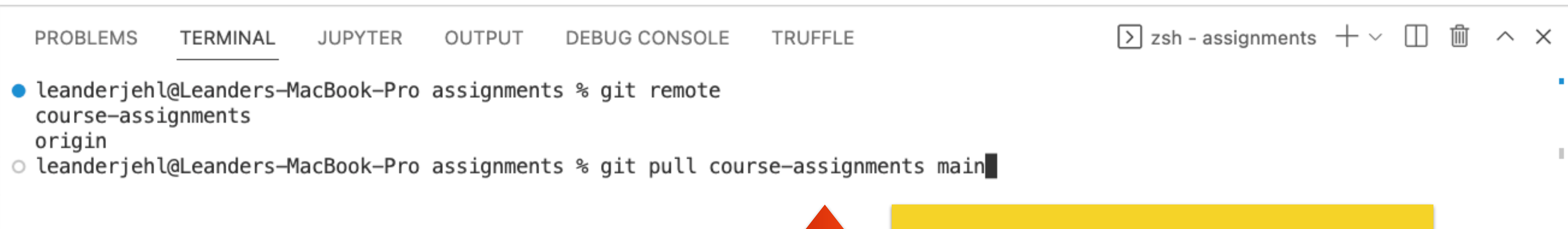
Add assignments repo as remote

Setup locally



A terminal window with tabs: PROBLEMS, TERMINAL, JUPYTER, OUTPUT, DEBUG CONSOLE, TRUFFLE. The terminal shows the command `git remote course-assignments origin` being entered. A red arrow points from a yellow box labeled "Check remotes" to the terminal.

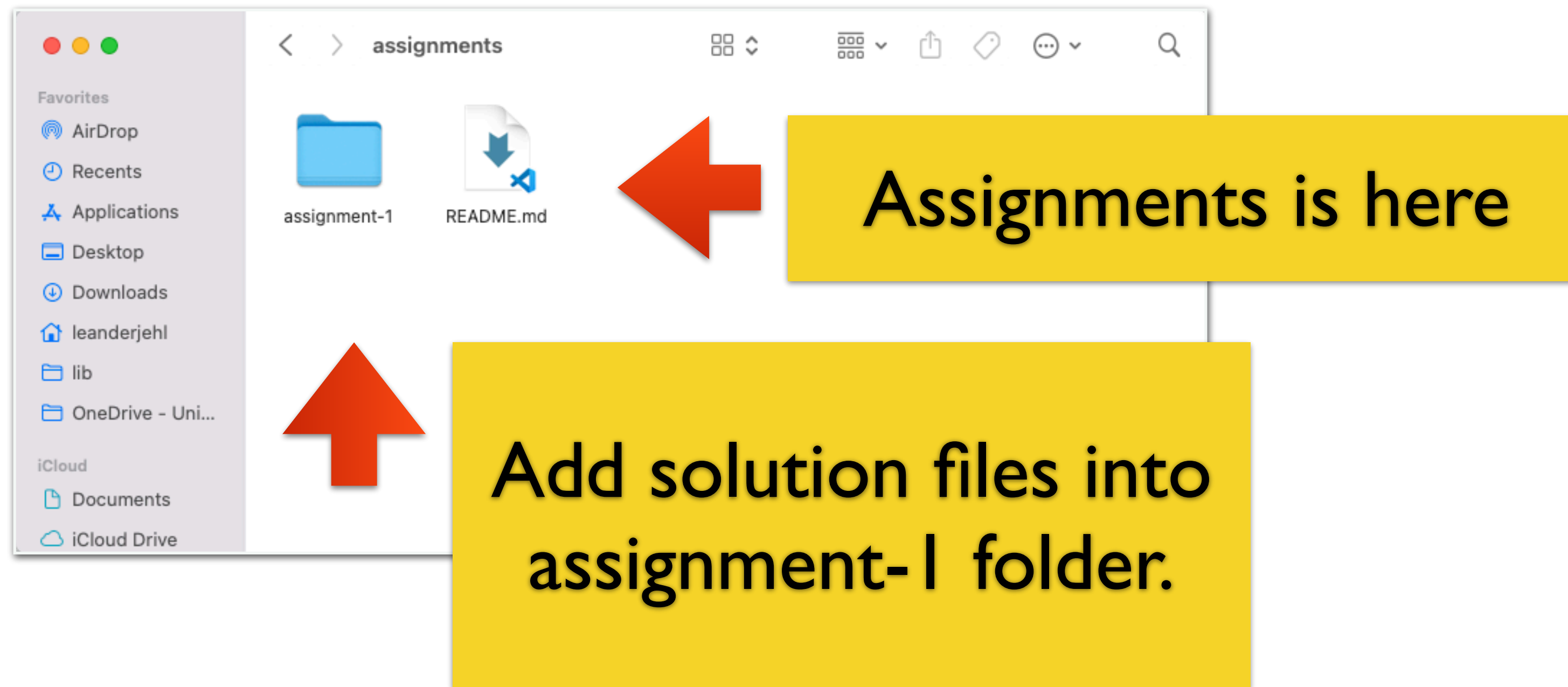
```
leanderjehl@Leanders-MacBook-Pro assignments % git remote  
course-assignments  
origin  
leanderjehl@Leanders-MacBook-Pro assignments %
```



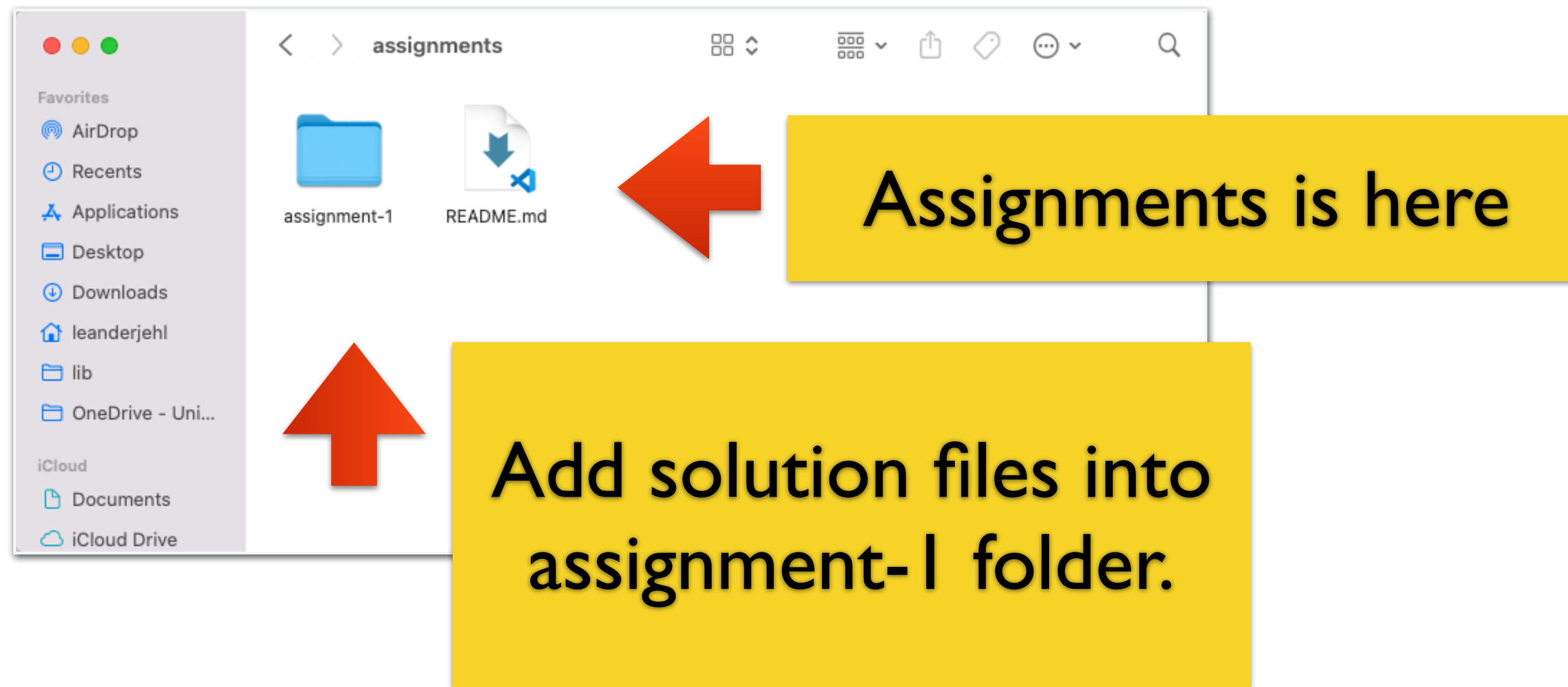
A terminal window with tabs: PROBLEMS, TERMINAL, JUPYTER, OUTPUT, DEBUG CONSOLE, TRUFFLE. The terminal shows the command `git pull course-assignments main` being entered. A red arrow points from a yellow box labeled "Pull assignment files to local main" to the terminal.

```
leanderjehl@Leanders-MacBook-Pro assignments % git remote  
course-assignments  
origin  
leanderjehl@Leanders-MacBook-Pro assignments % git pull course-assignments main
```

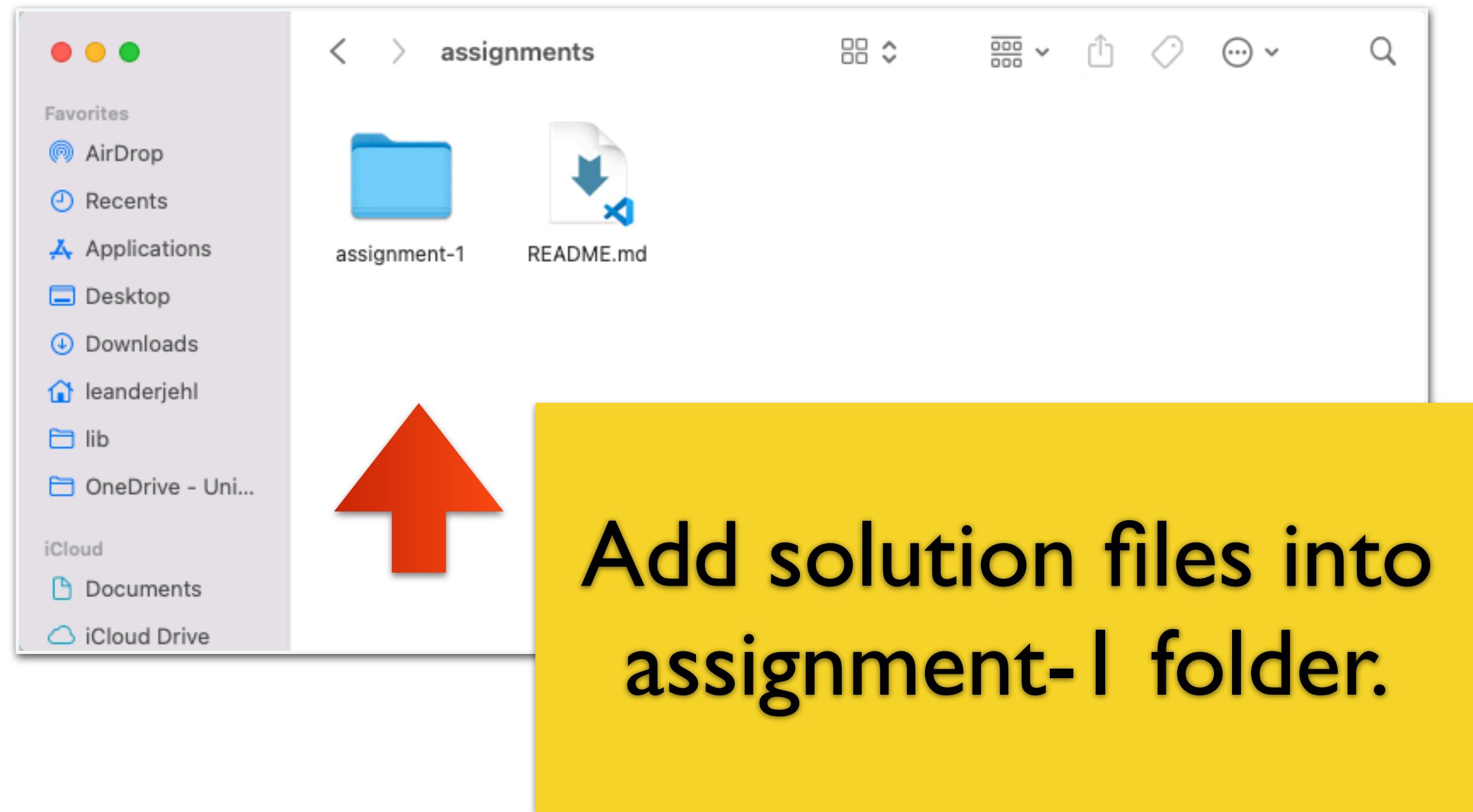
Setup locally



Setup locally

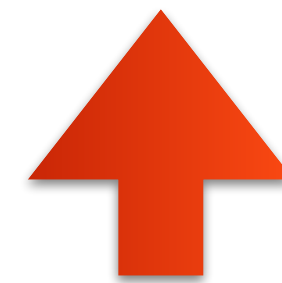


Submit



Submit

```
PROBLEMS 2 TERMINAL JUPYTER OUTPUT DEBUG CONSOLE TRUFFLE zsh - assignments + v [ ] [ ] ^ X
leanderjehl@Leanders-MacBook-Pro assignments % git add assignment-1
```



Add solution files from
assignment-1 folder
to git

```
PROBLEMS 2 TERMINAL JUPYTER OUTPUT DEBUG CONSOLE TRUFFLE
leanderjehl@Leanders-MacBook-Pro assignments % git add assignment-1
leanderjehl@Leanders-MacBook-Pro assignments % git status
On branch main
Your branch is based on 'origin/main', but the upstream is gone.
(use "git branch --unset-upstream" to fixup)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   assignment-1/table.html

leanderjehl@Leanders-MacBook-Pro assignments %
```

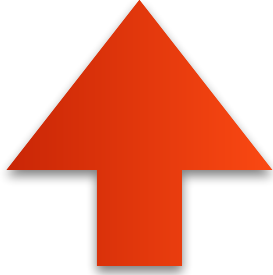
Check using git status

Submit

PROBLEMS 2 TERMINAL JUPYTER OUTPUT DEBUG CONSOLE TRUFFLE

zsh - assignments + ▢ 🗑 ^ ✕

- leanderjehl@Leanders-MacBook-Pro assignments % git commit -m"assignment1 done"
[main c3c2cb7] assignment1 done
1 file changed, 12 insertions(+)
create mode 100644 assignment-1/table.html
- leanderjehl@Leanders-MacBook-Pro assignments % █

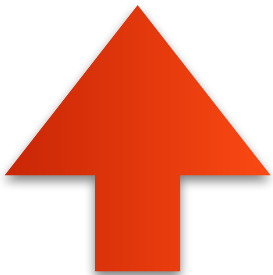


Create commit with message

PROBLEMS 2 TERMINAL JUPYTER OUTPUT DEBUG CONSOLE TRUFFLE

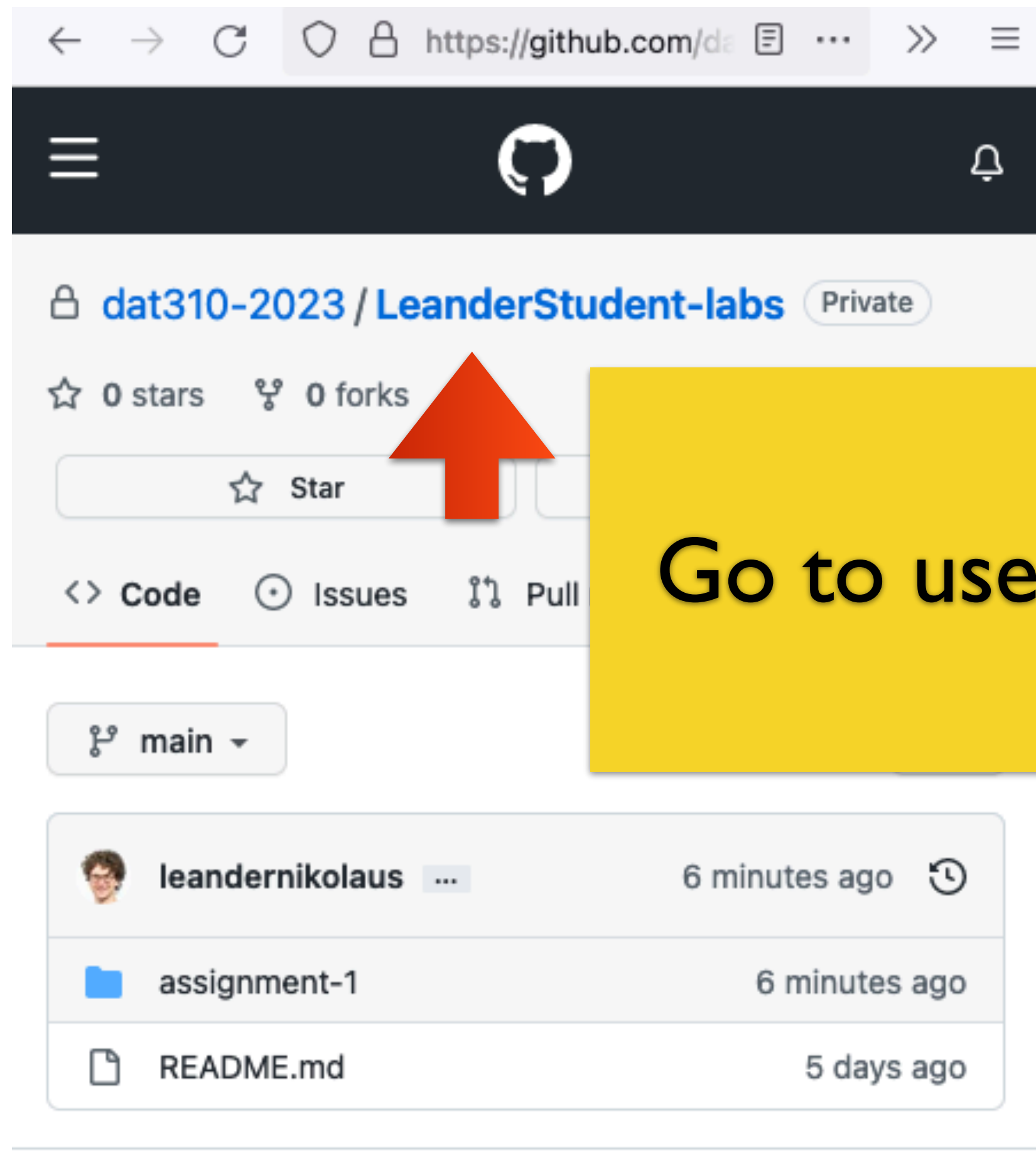
zsh - assignments + ▢ 🗑 ^ ✕

- leanderjehl@Leanders-MacBook-Pro assignments % git push█

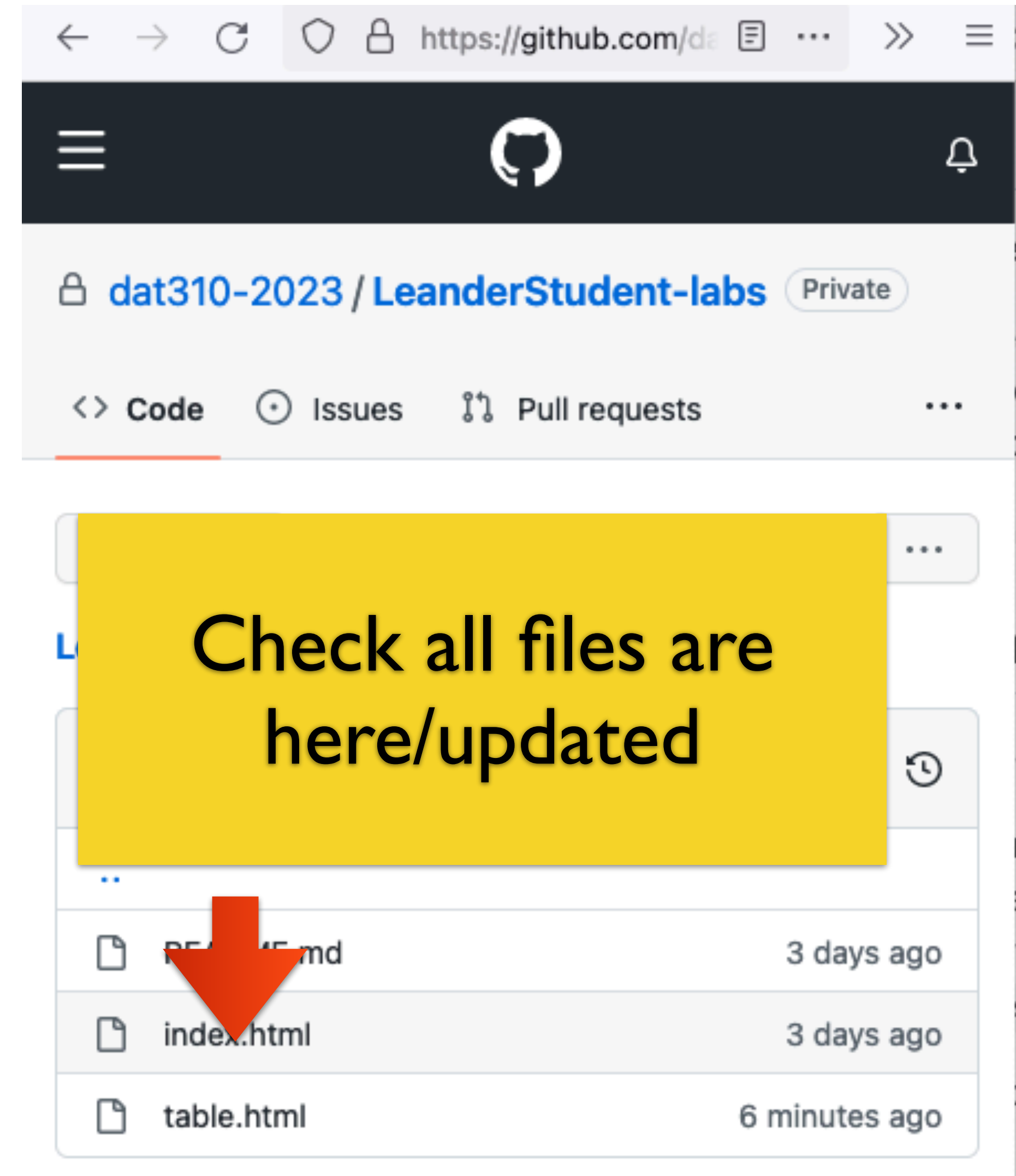


Push to you labs repo

Submit



Go to username-labs



Check all files are here/updated