

Version Control using GitHub Desktop



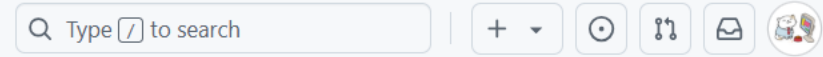
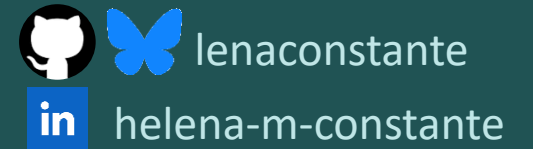
Helena M Constante

Version Control using GitHub Desktop

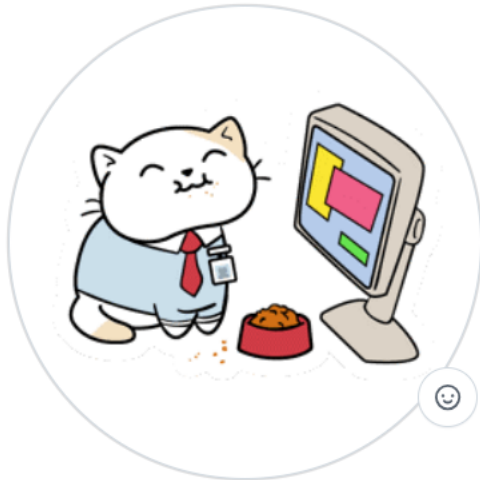
First steps

1. Create a GitHub account (<https://github.com/>)
2. Download and Install GitHub Desktop to your local machine
 - * University laptop - Software Centre
 - * Other laptops - <https://desktop.github.com/download/>

Github - Overview



[Overview](#) [Repositories](#) 17 [Projects](#) [Packages](#) [Stars](#) 1



Helena Constante

lenaconstante

Researcher since 2008. Holds a MSc in Public Health (UFSC/Brazil) and a PhD in Epidemiology and Public Health (UCL/UK). #equity #healthcare #caresystems

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1 follower · 8 following

Popular repositories

[Customize your pins](#)

[datasharing](#)

Public

Forked from [jtleeek/datasharing](#)

The Leek group guide to data sharing

[2021-CSCpublication](#)

Public

Do-file corresponding to the analyses of the paper entitled "The door is open, but not everyone may enter: Racial inequities in healthcare access across three Brazilian surveys" published in the Ci...

Stata

[Excel](#)

Public

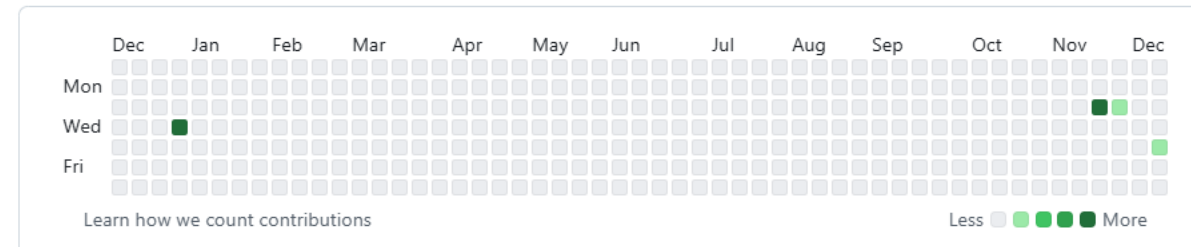
[CQC](#)

Public

Coffee, Quants & Codes

13 contributions in the last year

Contribution settings



Contribution activity

2024

2023

2022

2021

2020

2019

Github – Why?

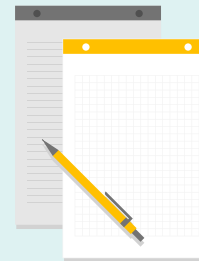
- **Platform:** A free hub for hosting, sharing, and managing code repositories that uses Git, a distributed version control system.
- **Version Control:** Tracks changes to files over time, enabling collaborative coding and rollback capabilities.
- **Community:** Millions of developers and organisations use GitHub for open-source and private projects.



Collaboration



Documentation



Integration



Community Support

No need to download Git if you are using GitHub Desktop, as it comes with a bundled version of Git



Git Bash

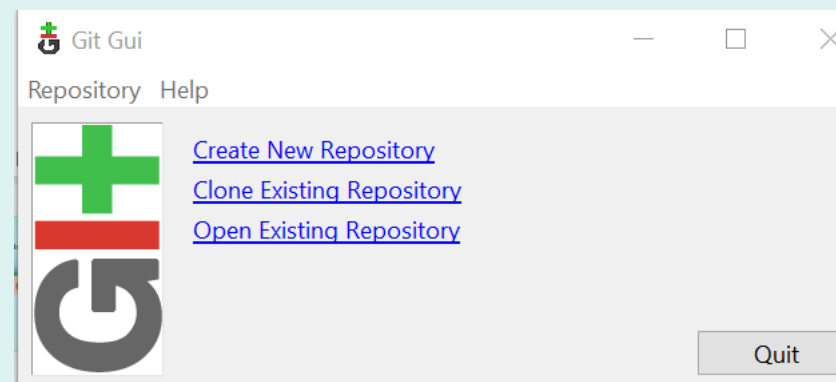
- A command-line for Git operations
- Great for complex operations (file operations)
- Direct execution of Git commands (e.g. git commit).

```
username@computername MINGW64 ~  
$ |
```



Git GUI

- User interface for Git operations
- Simple operations and helpful with drag-and-drop options
- Visual tools (no need to memorise commands)



GitHub Desktop - Overview

FileEditViewRepositoryBranchHelp

Current repository
CQC

Current branch
main

Fetch origin
Last fetched 2 hours ago

ChangesHistory

☒ 0 changed files

No local changes

There are no uncommitted changes in this repository. Here are some friendly suggestions for what to do next.

Open the repository in your external editor

Select your editor in [Options](#)

Repository menu or **Ctrl** **Shift** **A**

Open in Visual Studio Code

View the files of your repository in Explorer


Repository menu or **Ctrl** **Shift** **F**

Show in Explorer


Open the repository page on GitHub in your browser

Repository menu or **Ctrl** **Shift** **G**

View on GitHub

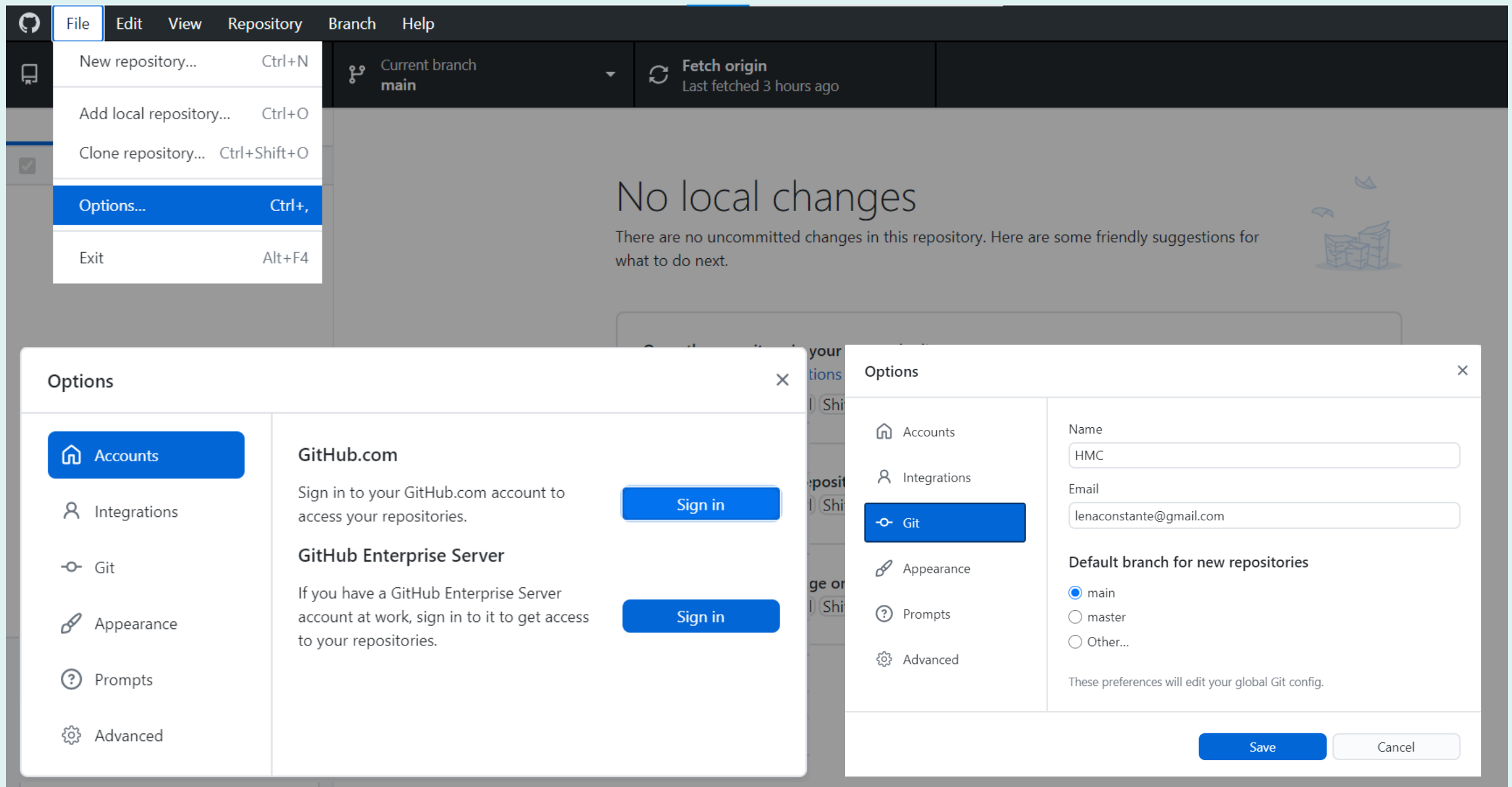
 Summary (required)

Description



Commit to main

GitHub Desktop – Setting up



The screenshot shows the GitHub Desktop application interface. The top menu bar includes File, Edit, View, Repository, Branch, and Help. The File menu is open, displaying options: New repository... (Ctrl+N), Add local repository... (Ctrl+O), Clone repository... (Ctrl+Shift+O), Options... (Ctrl+,), and Exit (Alt+F4). The main area shows "No local changes" with a message: "There are no uncommitted changes in this repository. Here are some friendly suggestions for what to do next." Below this, two "Options" dialog boxes are visible. The left dialog box has a sidebar with "Accounts" selected, showing options for GitHub.com, GitHub Enterprise Server, Git, Appearance, Prompts, and Advanced. The right dialog box shows the "Git" section with fields for Name (HMC), Email (lenaconstante@gmail.com), and Default branch for new repositories (main selected). Both dialog boxes have "Save" and "Cancel" buttons at the bottom.

File Edit View Repository Branch Help

New repository... Ctrl+N

Add local repository... Ctrl+O

Clone repository... Ctrl+Shift+O

Options... Ctrl+,

Exit Alt+F4

Current branch **main**

Fetch origin
Last fetched 3 hours ago

No local changes

There are no uncommitted changes in this repository. Here are some friendly suggestions for what to do next.

Options

- Accounts**
- Integrations
- Git
- Appearance
- Prompts
- Advanced

GitHub.com

Sign in to your GitHub.com account to access your repositories. **Sign in**

GitHub Enterprise Server

If you have a GitHub Enterprise Server account at work, sign in to it to get access to your repositories. **Sign in**

Options

- Accounts
- Integrations
- Git**
- Appearance
- Prompts
- Advanced

Name: HMC

Email: lenaconstante@gmail.com

Default branch for new repositories

☒ main
☐ master
☐ Other...

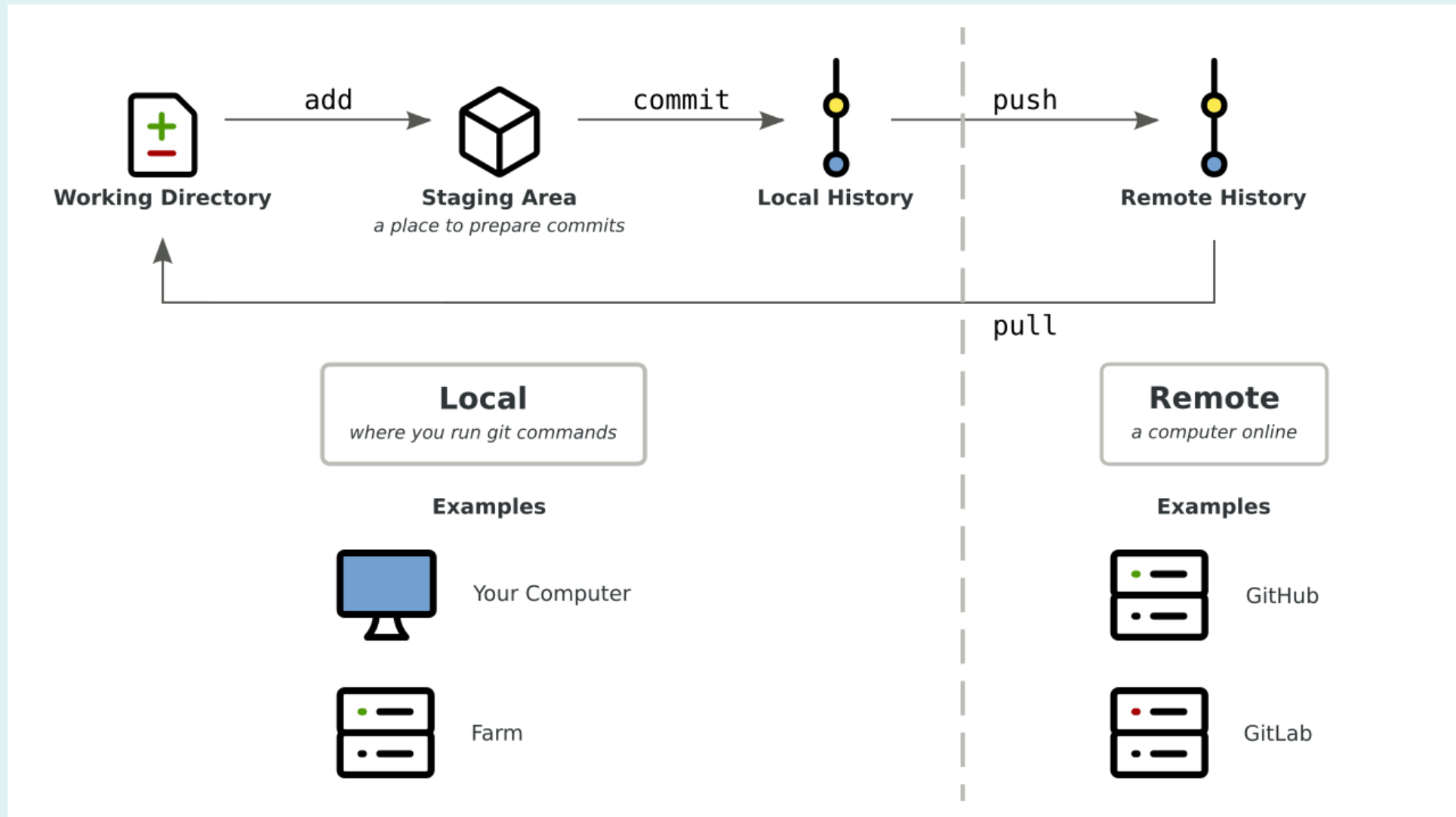
These preferences will edit your global Git config.

Save Cancel

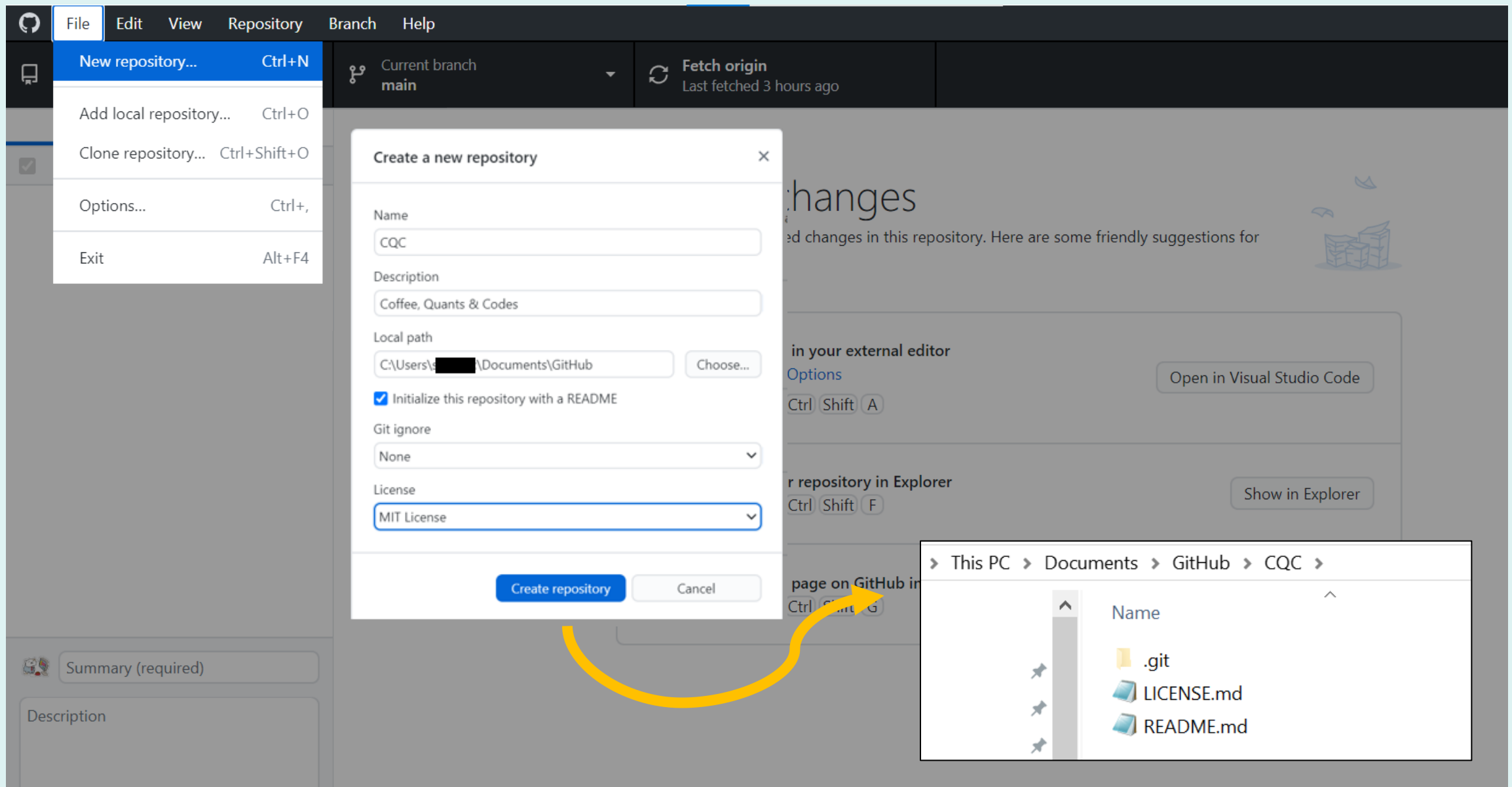
Working on your own repository



Git Workflow - Simplified



GitHub Desktop – Creating a repo



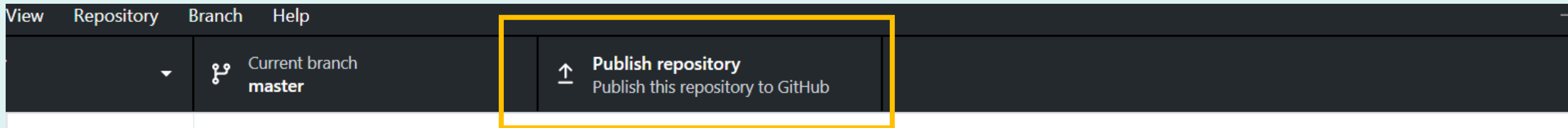
The screenshot shows the GitHub Desktop application interface. The 'File' menu is open, and 'New repository...' is selected. The 'Create a new repository' dialog box is displayed in the center. The dialog contains the following fields and options:

- Name:** CQC
- Description:** Coffee, Quants & Codes
- Local path:** C:\Users\... \Documents\GitHub (with a 'Choose...' button)
- Initialize this repository with a README:** ☒
- Git ignore:** None
- License:** MIT License

At the bottom of the dialog are 'Create repository' and 'Cancel' buttons. A yellow arrow points from the 'Create repository' button to a file explorer window. The file explorer shows the directory structure: This PC > Documents > GitHub > CQC >. The files listed in the directory are:

- .git
- LICENSE.md
- README.md

GitHub Desktop – Publishing the repo



Publish repository [X]

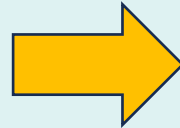
GitHub.com | GitHub Enterprise Server

Name
CQC

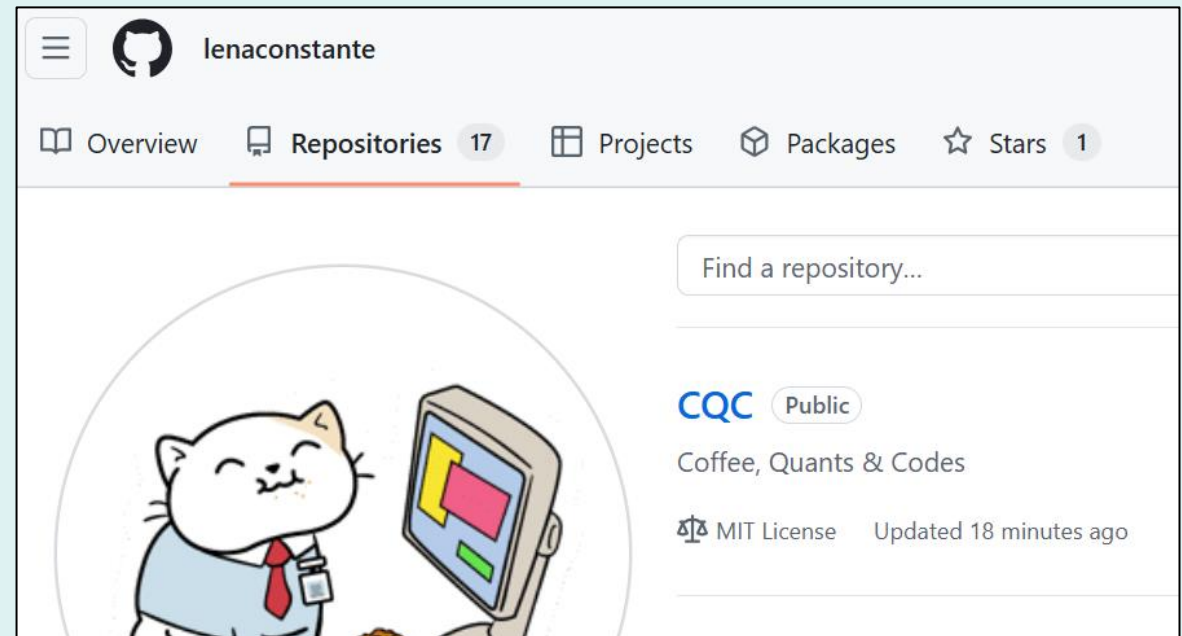
Description
Coffee, Quants & Codes

☐ Keep this code private

Publish repository Cancel

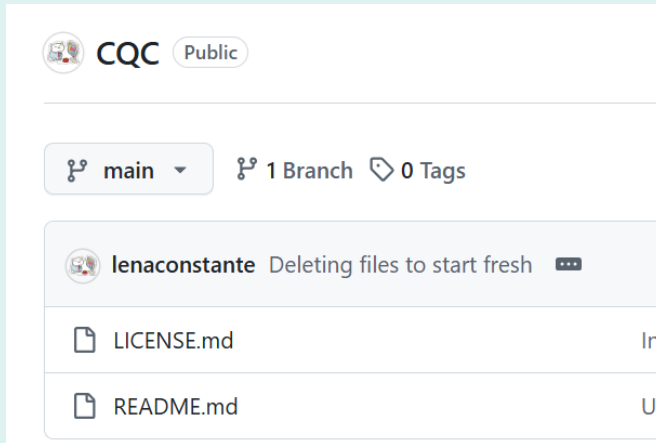


On github.com....



GitHub Desktop – Creating a file

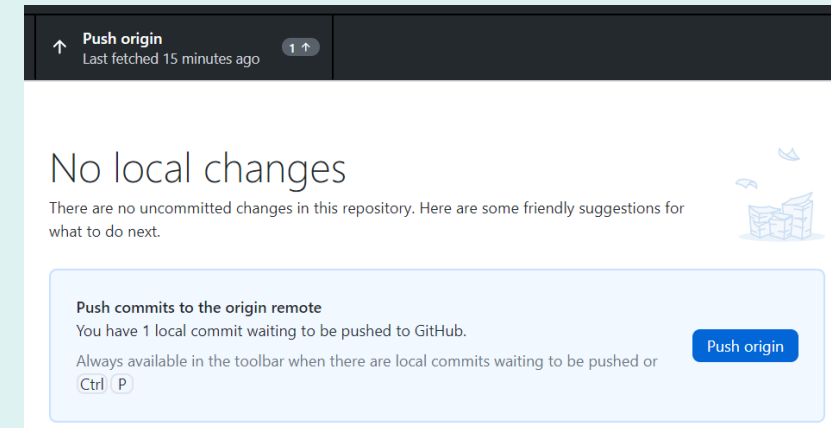
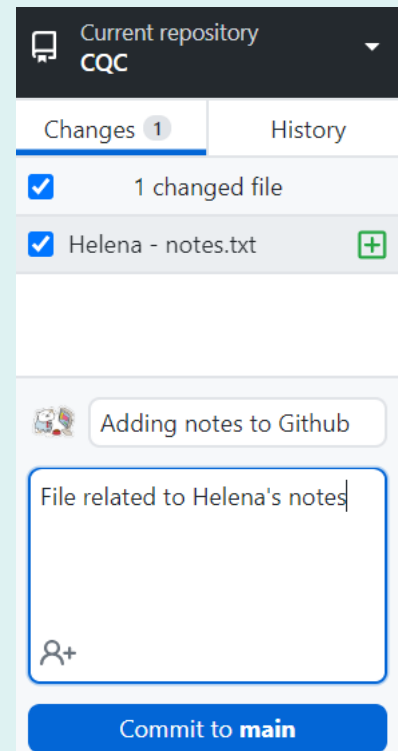
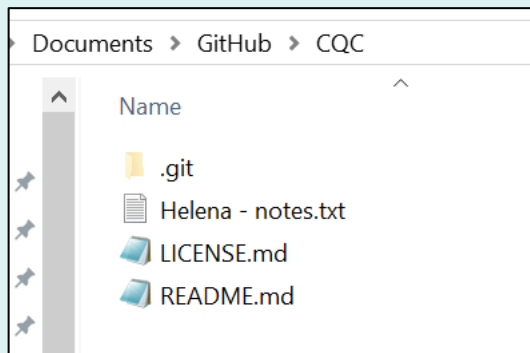
Before this is what it will look like in your GitHub repo



Your file will appear right away on your GitHub Desktop. When you are ready, **COMMIT** it to your local machine (GitHub Desktop) – **you will be adding this version to your file's history**

A file here means anything from R Scripts, Stata do-files, PDFs, etc.

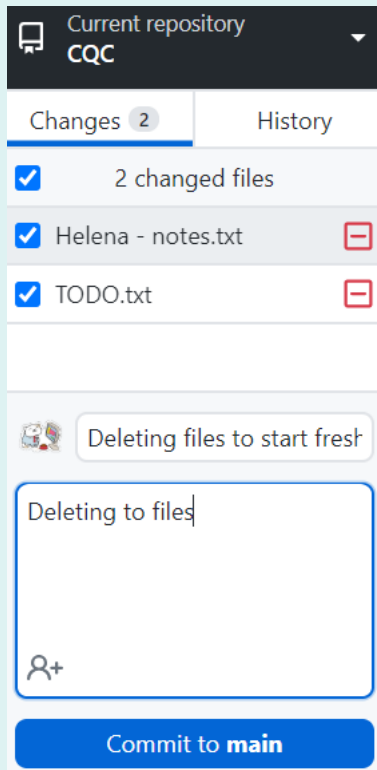
In your PC, create a .txt file (e.g. Helena- notes.txt)



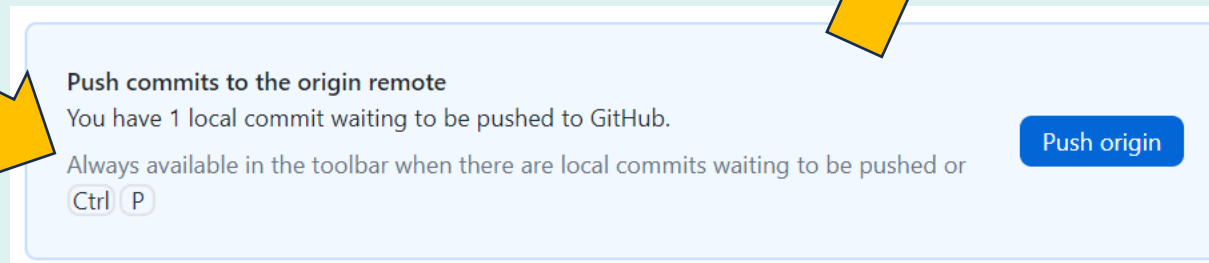
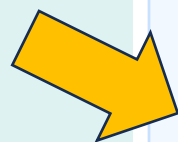
After **commit**, GitHub Desktop will ask if you want to **PUSH** this file to your GitHub (online). You can do many **commits** and not **push** your file to GitHub, but all **commits** will appear on GitHub once you **push**.

GitHub Desktop – Deleting a file

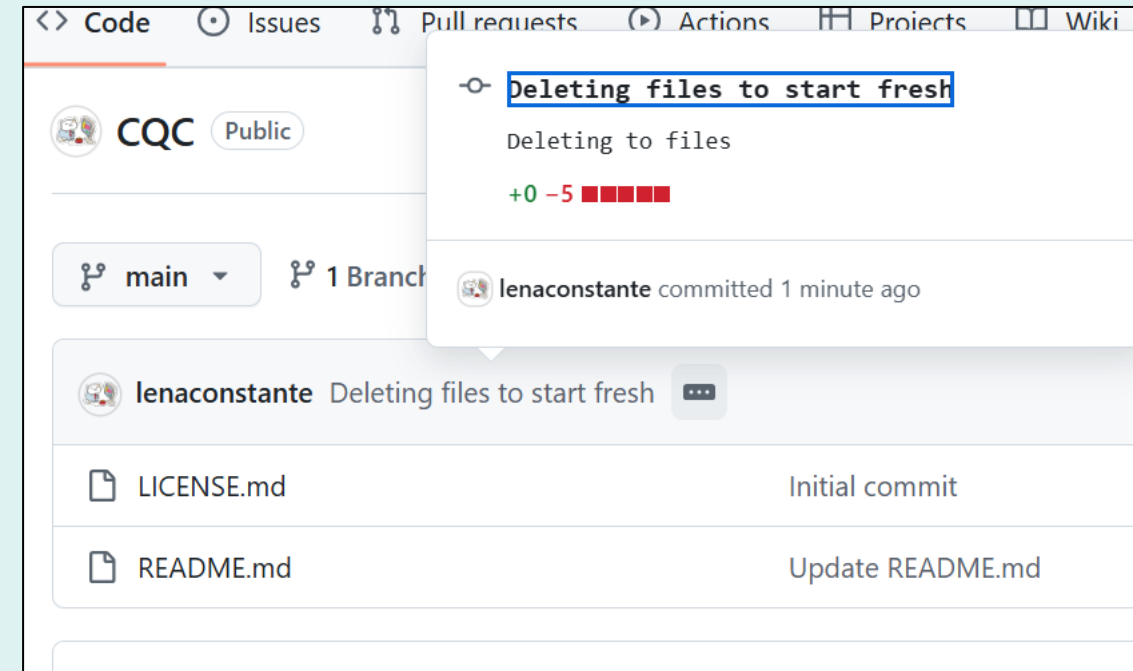
Here you can see I deleted from the folder (on my PC) two files. Then, I **COMMIT** this changes to my local machine



... and PUSH them to my online repo



Github.com....



+0 – no modifications in the original repository
-5 – 5 rows removed (TODO.txt had 5 lines)

**Contributing to
someone else's
repository**



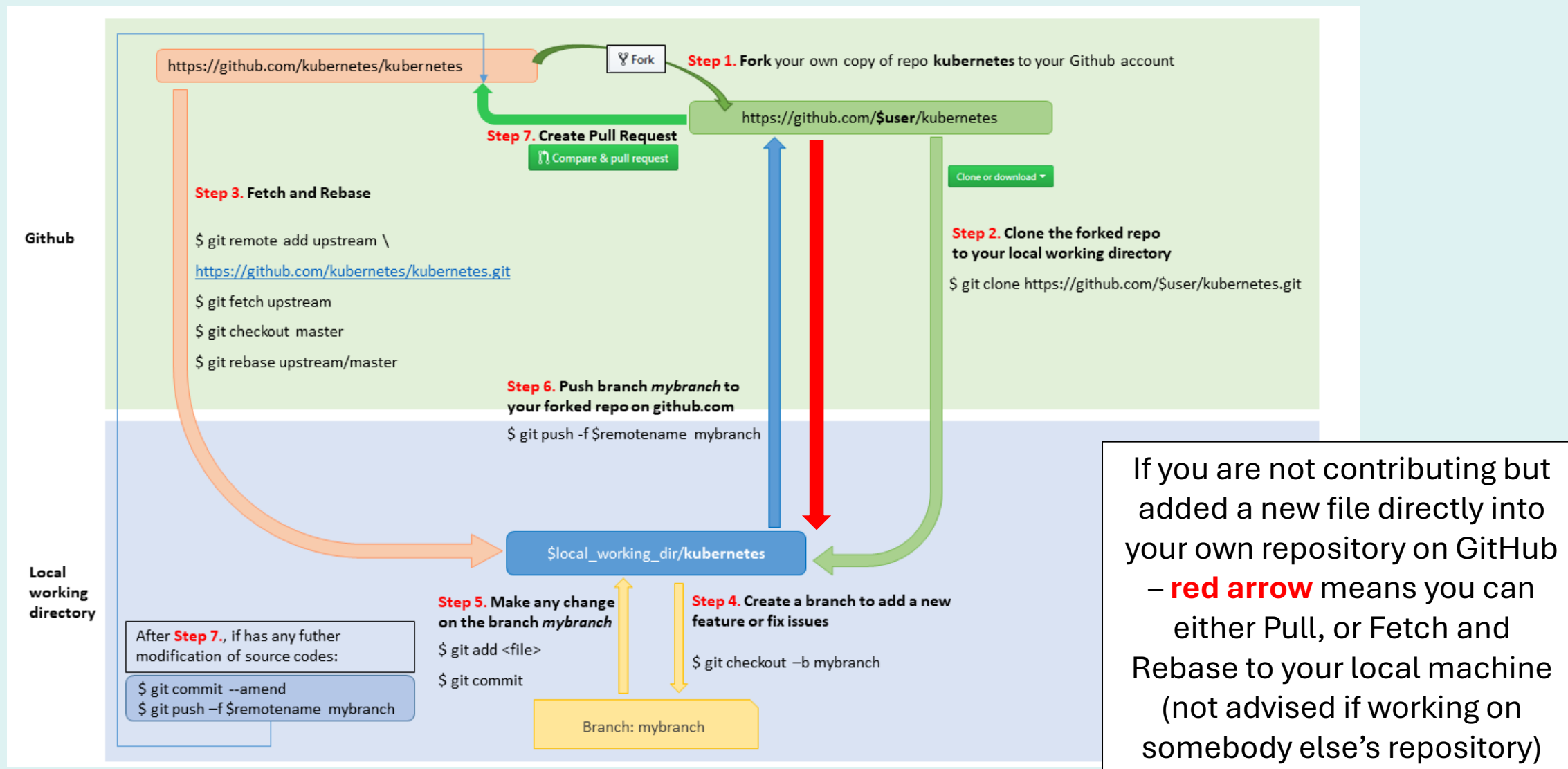
Git Workflow - Contribution



lenaconstante



helena-m-constante



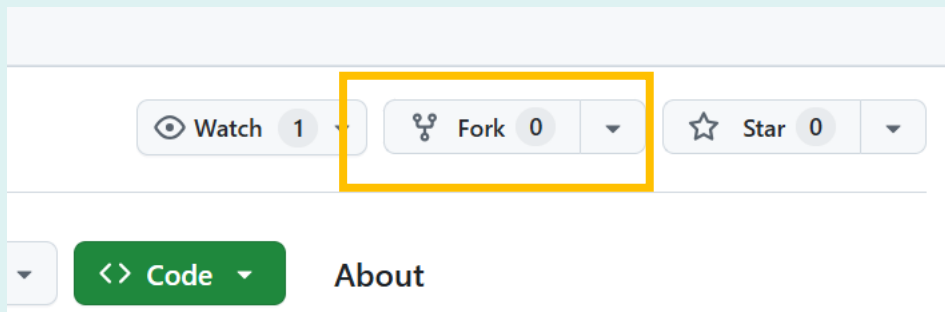
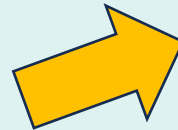
GitHub – Fork a repo

CQC Public

Forked from [lenaconstante/CQC](#)

Coffee, Quants & Codes

 MIT License Updated 2 weeks ago




Create a new fork

A *fork* is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.

Required fields are marked with an asterisk (*).

Owner *

 lenaconstante

Repository name *

CQC

✓ Your new repository will be created as CQC-.
The repository name can only contain ASCII letters, digits, and the characters ., -, and _.

By default, forks are named the same as their upstream repository. You can customize the name to distinguish it further.

Description (optional)

Coffee, Quants & Codes

☒ Copy the `main` branch only

Contribute back to lenaconstante/counter-app-react by adding your own branch. [Learn more.](#)

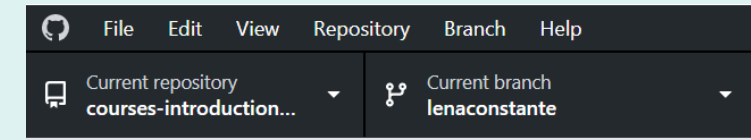
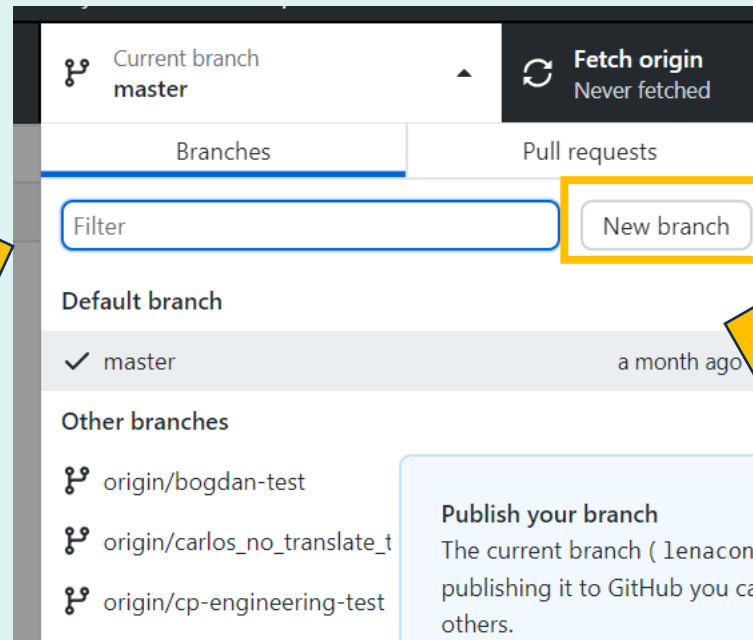
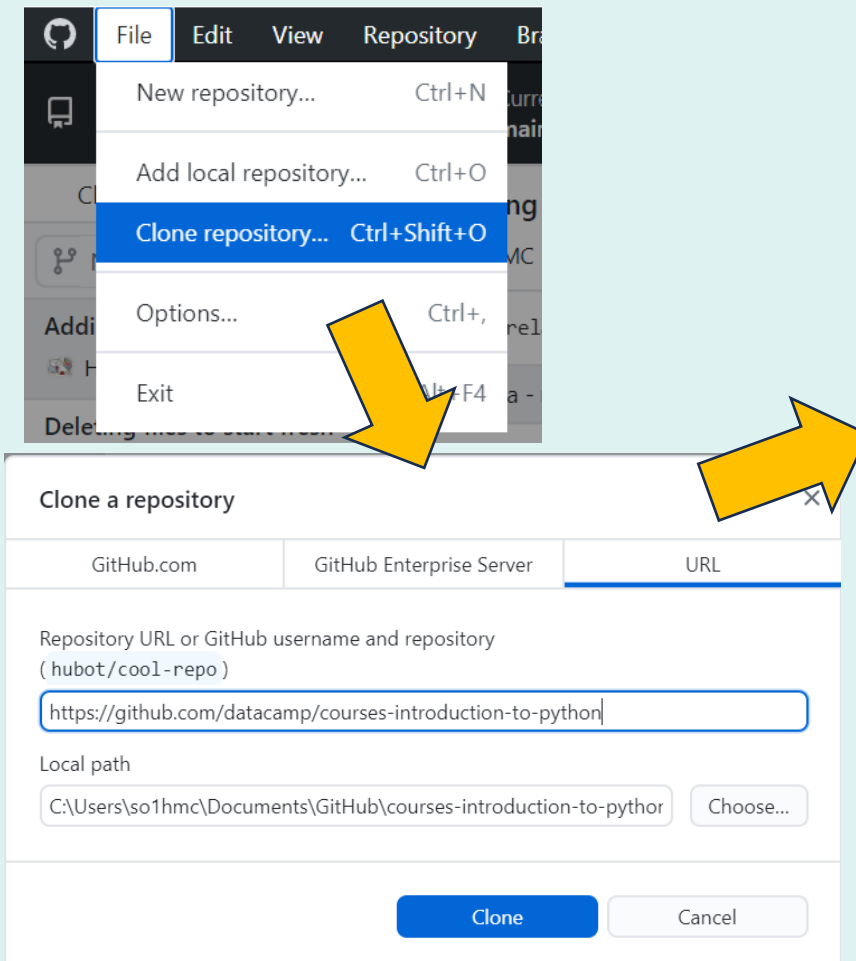
 You are creating a fork in your personal account.

Create fork

GitHub Desktop – Clone a repo

Cloning downloads the repository to your computer so you can work on it locally.

Before making changes to the project, you should create a new branch. Creating a branch separates your changes from the main code so you can work without affecting the original project – it will keep all changes in one's branch – good practice in the GitHub world



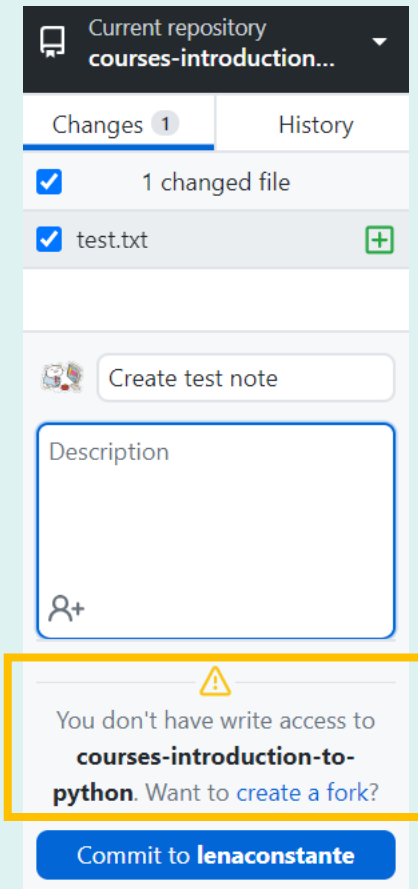
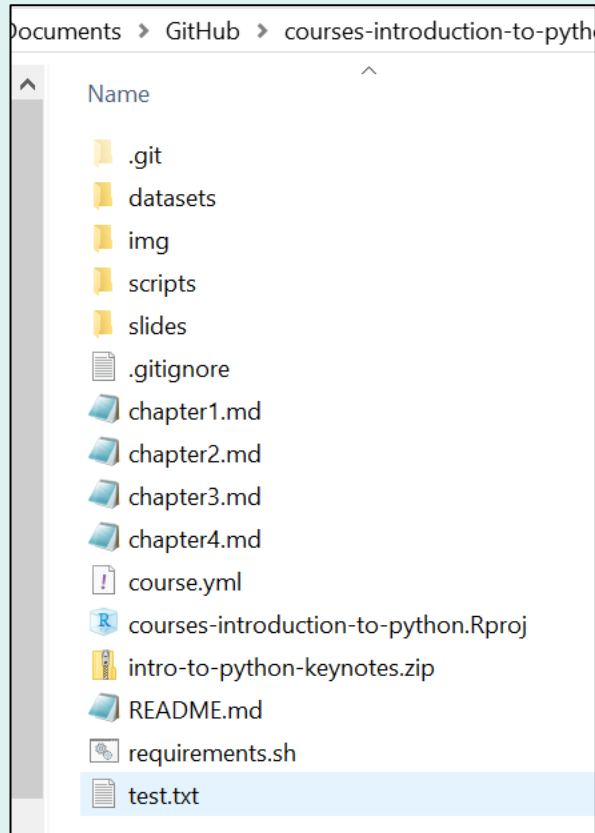
Publish your branch

The current branch (lenaconstante) hasn't been published to the remote yet. By publishing it to GitHub you can share it, open a pull request, and collaborate with others.

Always available in the toolbar or **Ctrl P**

Publish branch

GitHub Desktop – Make changes



For some reason, even after forking the repository on GitHub online, when I clone the repository on my GitHub Desktop and try to commit changes, it asks to fork again – not sure why, but we need to Fork it.

Publish your branch

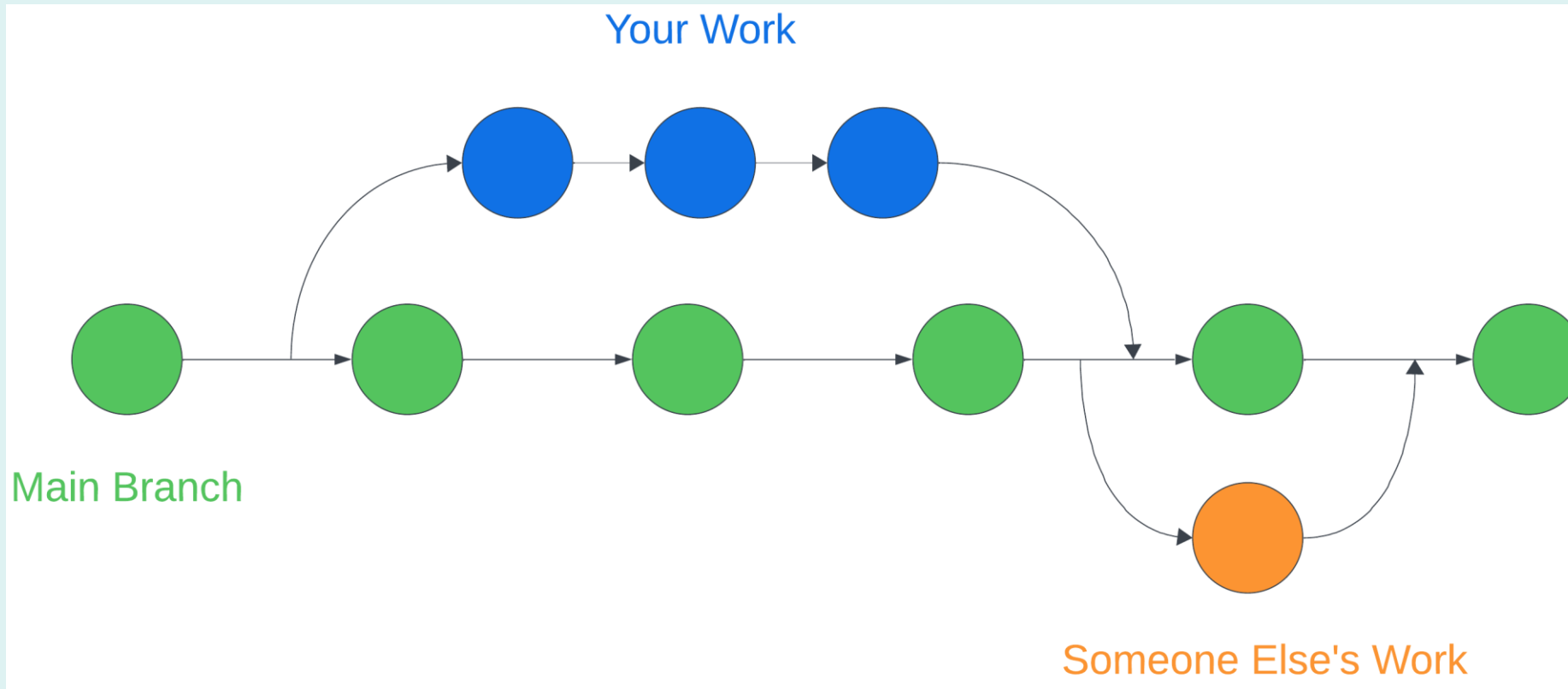
The current branch (lenaconstante) hasn't been published to the remote yet. By publishing it to GitHub you can share it, open a pull request, and collaborate with others.

Always available in the toolbar or **Ctrl** **P**

Publish branch

GitHub Desktop – Pull request

A **PULL REQUEST** asks the original repository owner to review and merge your changes into their project



Thanks! Questions?



Helena M Constante