



# Git/GitHub Workshop-2

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Clarusway



## Part 1

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### Forking a project

The first thing we want to do is to fork an existing repository on GitHub.

#### What is forking?

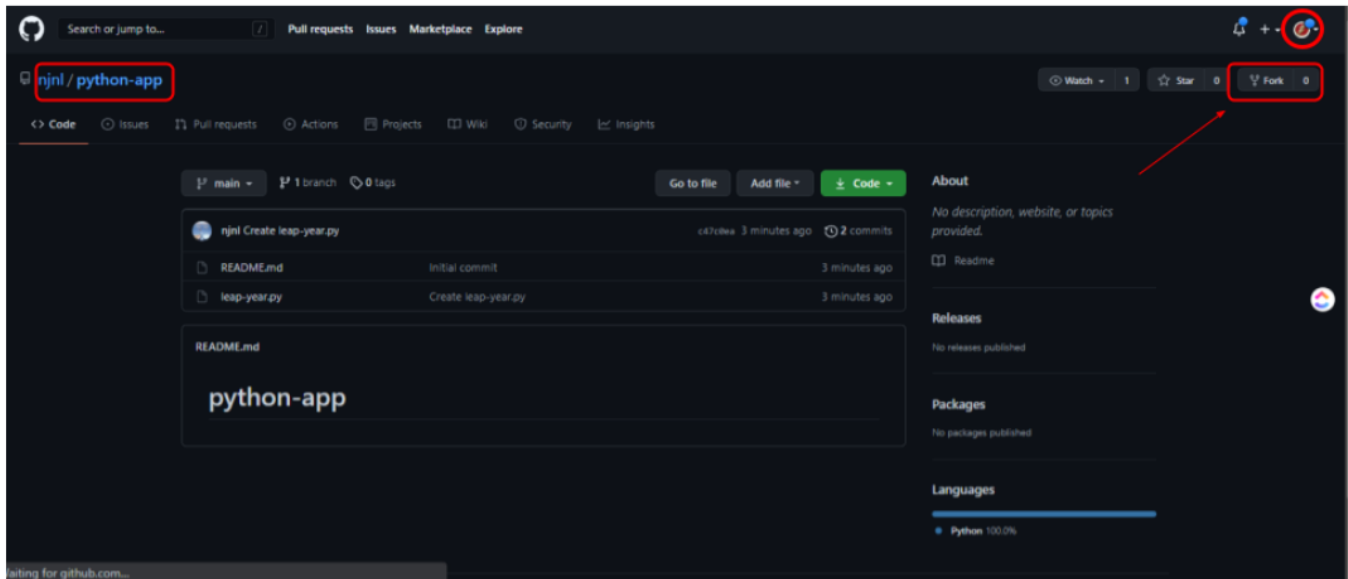
Forking a repository is great! You can make all of the mistakes you want without affecting the original project, or you may want to take the project in a different direction.

What is forking generally used for? Most of the time, people fork projects to propose changes to someone else's project.

So how do I do this "fork" thing anyway? Forking is a simple process of finding the repository you want to fork on GitHub in the top right corner, click on Fork.

- The lead will create a public repository with readme file and share the link with you.

(fork lead's repository: [https://github.com/\\$LEAD/\\$LEADS\\_REPO\\_NAME](https://github.com/$LEAD/$LEADS_REPO_NAME))



Note: How to propose changes to a project. The workflow is something like this:

1. Fork the repository
2. Create a fix (commit changes)
3. Submit a pull request to the original project

## Part 2

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To get started with Git, we have to do two things, first of all let's go ahead and configure Git with our name and email.

This is to identify who has done what on GitHub.

(naturally, if you're doing this on your local machine then you might already have this config stuff done)

Secondly, we need to create a local repository, we can do that by running the init command. `git init`, or the other way, we can **clone** an existing repository from GitHub.

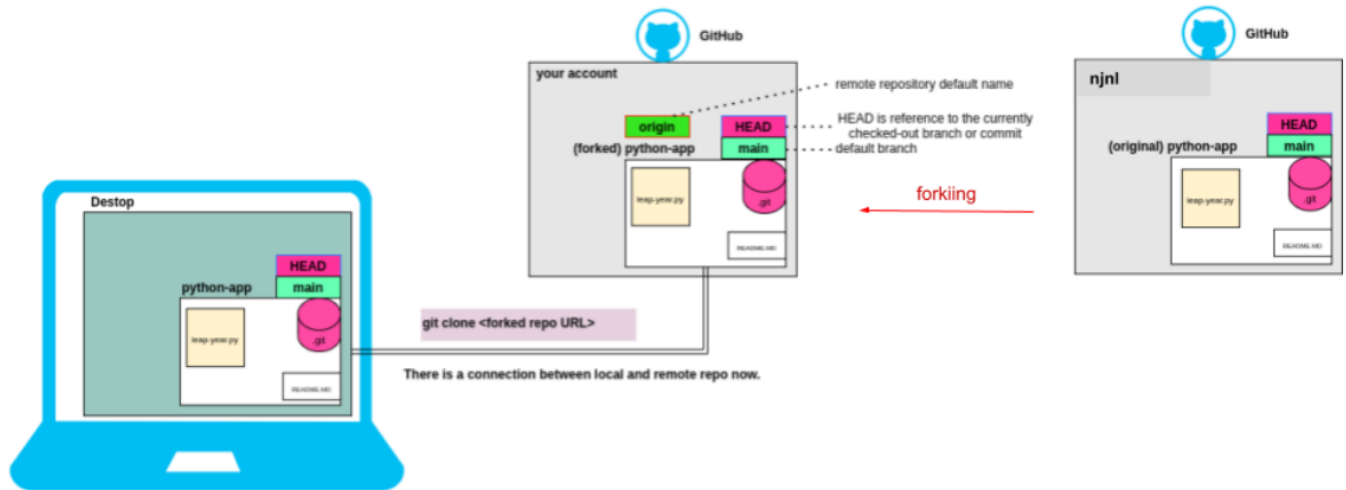
## Part 3

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### Cloning

The cloning command is awesome, not only does it get the repository, it also sets up the remote tracking for all of the branches.

- We are going to use the clone command to get our newly forked repo:



## Part 4

### Make your changes 1.

**Branching** is a way for you to work on different features in the code at the same without destroying the **master/main** branch.

The basic idea is to create a feature branch, do some work, then integrate it into the **master/main** branch. You can see a branch as a clean slate where you can do whatever you want without ruining someone else's work.

- Let's checkout the branches that exist, we can do that by running the command

The only branch for now is the **main** branch.

- You can create a new branch by typing `git branch <new-branch-name>` and then switch to it by running `git checkout <new-branch-name>` OR we can just type `git checkout -b <new-branch-name>` to do the same thing and life a little easier. Go ahead and create a branch with the name "**new-feature**".

## Make your changes 2

Now that we are on our feature branch, we are going to change one of the functions in our **leap-year.py** to use an iterative method because it is not working now, stage the changes and commit them to our feature-branch.

- Go ahead and open the **leap-year.py** in the text editor and change it.
- To check the status of our work so far, run the

- Now you can stage the file by running the add command

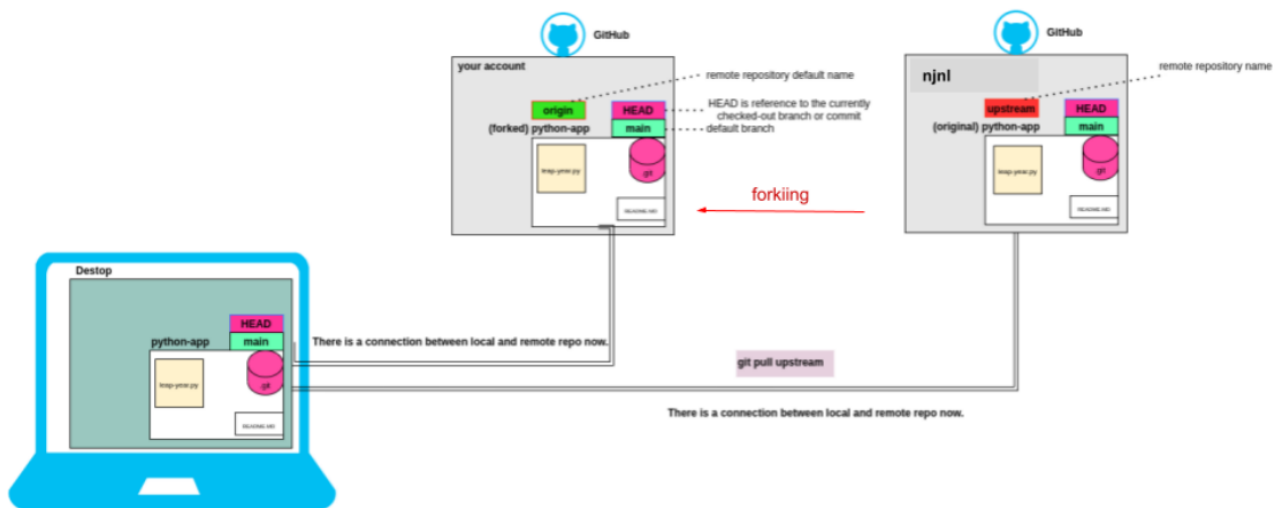
- Save the changes

## Part 5

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### Get latests changes from original repository.

Now there may have been some changes that are of interest in the original repository that we've forked from, let's take a look and get them. Specify a new remote **upstream** repository that will be synced with the fork



- Verify the new upstream repository you've specified for your fork.

- Download the all changes from original repository.

## Part 6

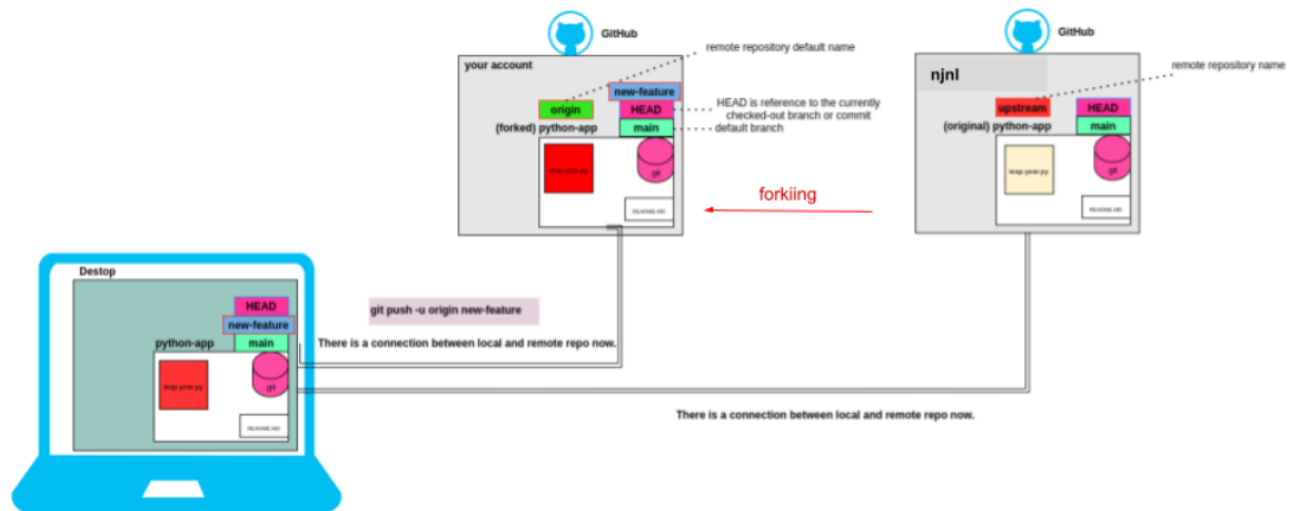
### Push!

Run the following command to push what you've done to the new-feature branch of your fork! (but it won't work)

**fatal: The current branch new-feature has no upstream branch.**

- To push the current branch and set the remote as upstream, use

or shortcut;



## Part 7

### Pull Request

This is the moment you've been waiting for, to make a pull request.

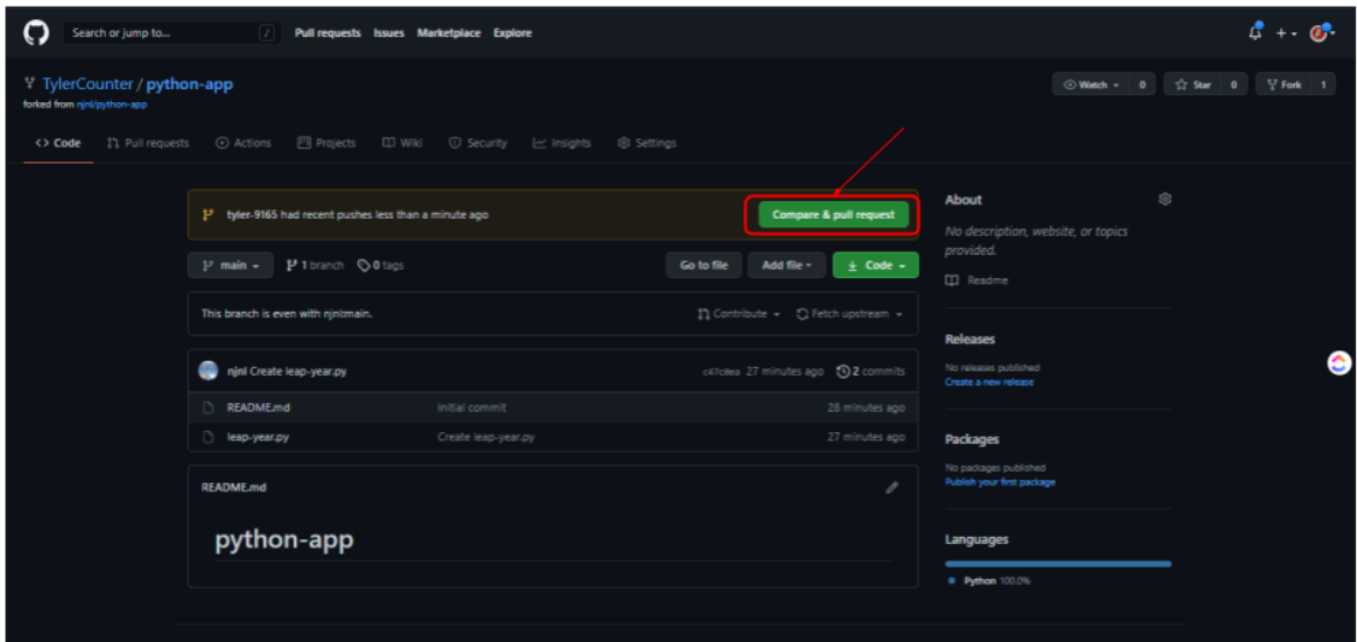
This is where you tell the owner of the original repository that you forked from that you would like them to merge your changes into their repository. You could say that you send them a request to pull your work. Whether or not they will accept, or even write back, is another question. They might not even know who you are.

How do I do it?

This is an operation performed on github.

- Go to the forked repository (in your own account).
- Click the big, friendly, green button that says "**compare & pull request**".

(Note: you can also reach "pull request" button if click "branches" button)



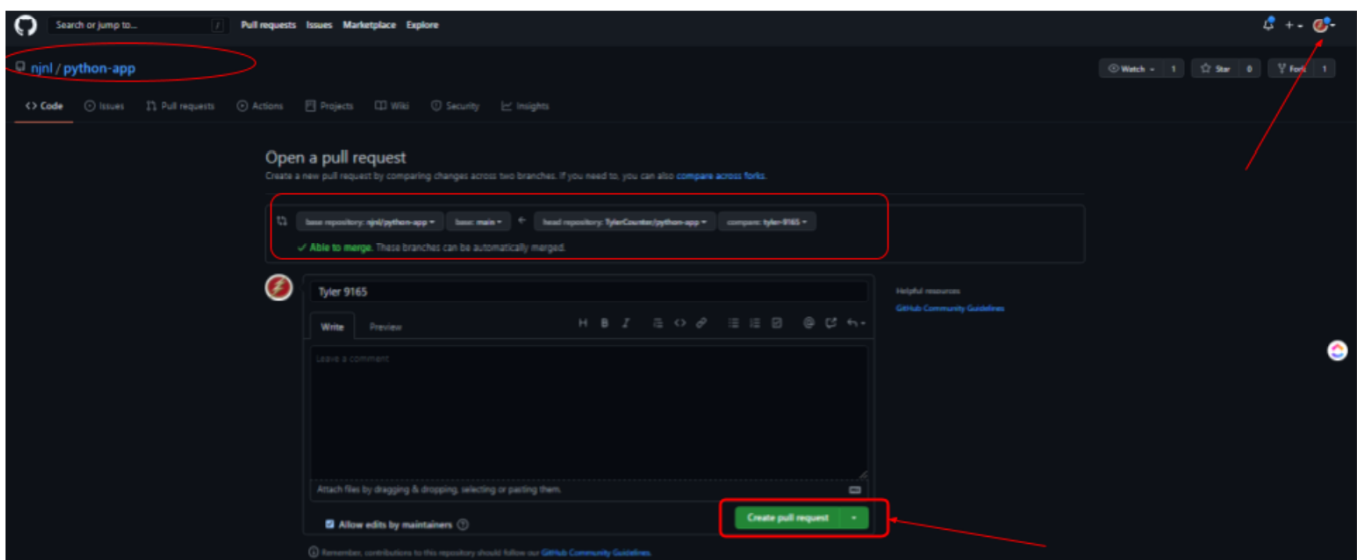
Now, find the text that says "compare across forks" as part of the sentence right underneath the large "Open a pull request".

It should say something like this:

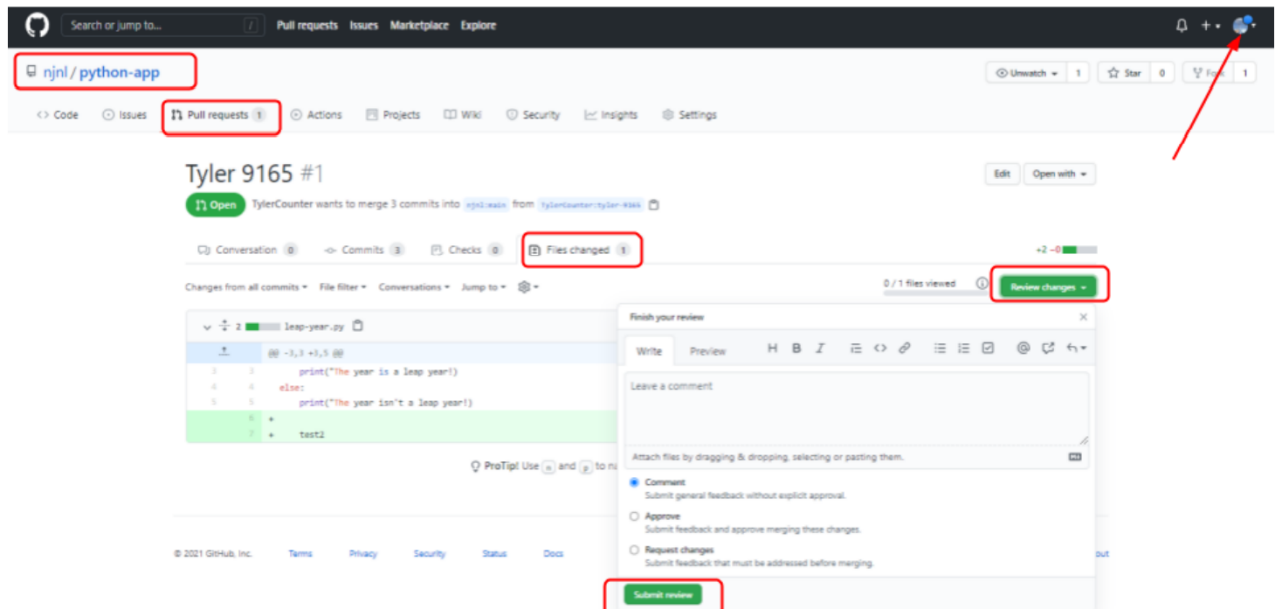
**base repository: owner/repo-name base:branch <-- head repository:your-name/repo-name compare:branch**

Write something nice about it so that the owner knows what you (at least tried to ) accomplish.

- Then click the "Create pull request"



- Wait for the answer of the owner of the original repo.
- Owner of the original repo:
  - Click "**Files changed**".
  - Click the "**Review changes**"



- Owner can have 3 options "comment", "Approve" or "Request changes".
- Click "**submit review**"
- Then click "**Merge pull request**"
- Finally "**Confirm merge**"



Tyler 9165 #1

Open

TylerCounter wants to merge 3 commits into `tyler-9165` from `TylerCounter:tyler-9165`

Conversation

Commits

Checks

Files changed

TylerCounter commented 5 minutes ago

No description provided.

TylerCounter added 3 commits 22 minutes ago

updated `loop-year.py`

updated `loop-year.py`

updated `loop-year.py`

njnl approved these changes now

View changes

Add more commits by pushing to the `tyler-9165` branch on `TylerCounter/python-app`.

Changes approved

1 approving review [Learn more](#)

1 approval

Continuous integration has not been set up

This branch has no conflicts with the base branch

Merge pull request

Reviews

Assignees

Labels

Projects

Milestone

Linked issues

Notifications

Perfect, you have just contributed someone else's project 😊

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