

## Hands-on Lab: Creating and merging branches in your GitHub repo

Effort: 20 min



### Objectives

After completing this lab you will be able to:

1. Create a branch
2. Commit changes in the child branch
3. Open a pull request (PR)
4. Merge the PR into the master branch

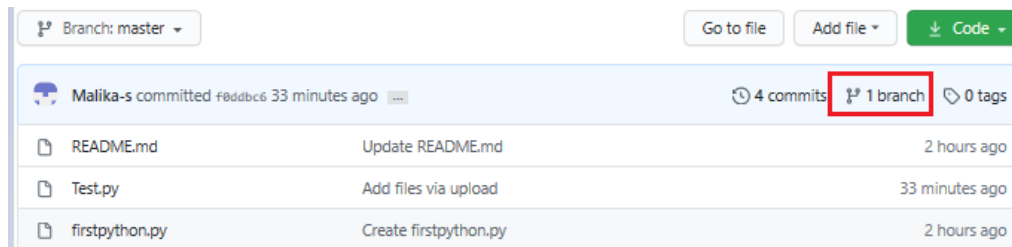
### Pre-requisites

This hands-on lab requires you to have already created a GitHub account, and added a project to it, as illustrated in the [previous lab](#)

### Exercise 1: Creating a branch

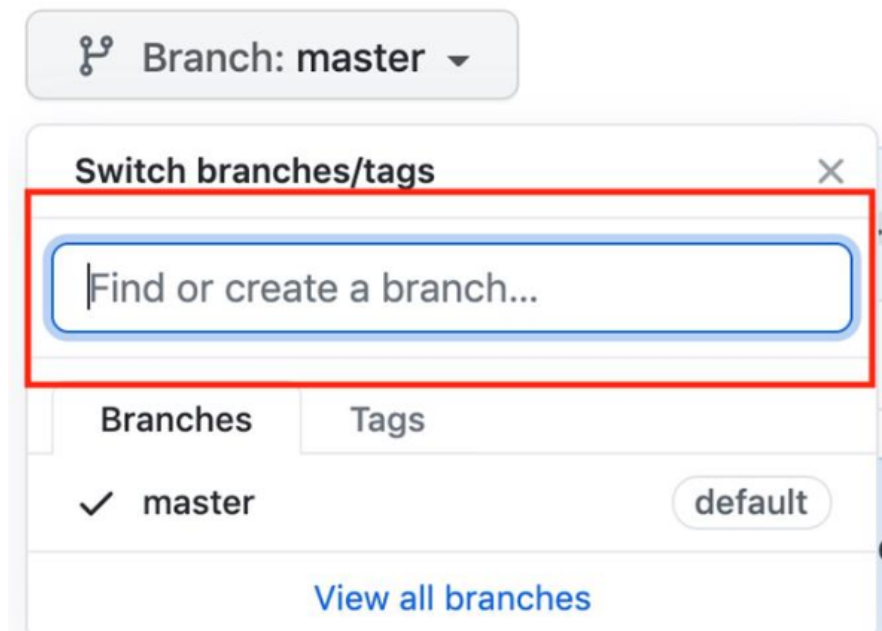
You can create or delete branches directly on GitHub.

Step 1: Currently, there is one branch as shown below:



Step 2: On GitHub, navigate to the main page of the repository.

Step 3: Click the Branch selector menu. Enter the name of the branch you want to create and press Enter.



Step 4: Observe that your repository has two branches Master and Child\_Branch(check using arrow).

The screenshot shows the GitHub repository page for the 'Child\_Branch'. At the top, a dropdown menu shows 'Branch: Child\_Branch'. Below it, a message states 'This branch is even with master.' To the right are buttons for 'Go to file', 'Add file', and 'Code'. Further down, a commit by 'Malika-s' is shown, with '4 commits' and '2 branches' highlighted. A table lists recent file changes: 'README.md' (Update README.md, 2 hours ago), 'Test.py' (Add files via upload, 35 minutes ago), and 'firstpython.py' (Create firstpython.py, 2 hours ago).

Whatever, is in the master file is copied to the child branch. But when we add a file or edit any file in child branch that will not reflect in the 'Master' branch.

## Exercise 2: Adding a file in the Child Branch

Step 1: Click Add file and select Create New file to create a file in the repository.

This screenshot shows the 'Add file' dropdown menu open on the GitHub repository page. The dropdown options are 'Create new file' (highlighted in blue) and 'Upload files'. The repository status above the dropdown indicates 'This branch is 3 commits ahead of master.' Below the dropdown, the commit history and file change table are visible, showing the same files as in the previous screenshot.

Step 2: Provide the file name and the extension of the file. For example, testchild.py and add the lines.

The screenshot shows the 'Create new file' dialog in GitHub. The file name 'testchild.py' is entered in the input field. Below the input field, there are tabs for 'Edit new file' and 'Preview'. The 'Edit new file' tab is active, showing a code editor with the following content:

```
1 ## Adding a new file in child branch
2 print ("Inside Child branch")
```

Step 3: Scroll down the page after adding the text. Add a description of the file (optional) and click Commit new file.

This screenshot shows the 'Commit new file' dialog. The title is 'Commit new file'. Below the title, there is a text input field containing 'Create testchild.py'. Below that is a larger text area with the placeholder 'Add an optional extended description...'. At the bottom, there are two radio button options: 'Commit directly to the Child\_Branch branch.' (which is selected) and 'Create a new branch for this commit and start a pull request. Learn more about pull requests.' At the very bottom are 'Commit new file' and 'Cancel' buttons.

The file has added to the child branch.

## Exercise 3: Open a Pull Request

You can check the master branch now there is no testchild.py file by selecting the Branch selector menu.

Branch: master ▾ Go to file Add file ▾

Malika-s committed 92fe776 1 minute ago ... 9 commits 2 branches

README.md	Update README.md	7
Test.py	Add files via upload	5
firstpython.py	Create firstpython.py	7

Or you can also compare the file as shown below with the option given Compare and pull request.

Child\_Branch had recent pushes less than a minute ago **Compare & pull request**

Branch: Child\_Branch ▾ Go to file Add file ▾ Code ▾

This branch is 3 commits ahead of master. Pull request Compare

Malika-s committed eb5ced2 3 minutes ago ... 7 commits 2 branches 0 tags

README.md	Update README.md	3 hours ago
Test.py	Add files via upload	1 hour ago
firstpython.py	Create firstpython.py	2 hours ago
testchild.py	Create testchild.py	3 minutes ago

Step 1: Scroll down the page, you will get 1 file changed

Showing 1 changed file with 2 additions and 0 deletions. Unified Split

testchild.py

```

... @@ -0,0 +1,2 @@
1 + ## Adding a new file in child branch
2 + print ("Inside Child branch")

```

Step 2: Scroll up and create a pull request using the option Create Pull request. In the highlight, you can see the arrow which means that you are comparing and creating a pull request. Add the comments (optional) to create a request.

## Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).

base: master ← compare: Child\_Branch ✓ Able to merge. These branches can be automatically merged.

Child branch

Write Preview H B I i <> @ @ @ @ @ @ @ @ @ @

Want to change in the master branch.

Attach files by dragging & dropping, selecting or pasting them.



**Create pull request** ▾

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).



## Exercise 4: Merge the Pull Request

To accept the pull request, click the Pull Requests tab to see a summary of pending pull requests. If you are happy with the changes, click Merge Pull request to accept the pull request and perform the merge. You can add a comment if you want.


## Child branch #1




 Open Malika-s wants to merge 3 commits into `master` from `Child_Branch` 

Conversation 0 Commits 3 Checks 0 Files changed 1


 Malika-s commented 2 minutes ago Owner  ...


Want to change in the master branch.

 Malika-s added 3 commits 25 minutes ago

 Create testchild	Verified	9767921
 Delete testchild	Verified	48b4479
 Create testchild.py	Verified	eb5ced2

Add more commits by pushing to the `Child_Branch` branch on Malika-s/testrepo.



 Continuous integration has not been set up  
[GitHub Actions](#) and [several other apps](#) can be used to automatically catch bugs and enforce style.

 This branch has no conflicts with the base branch  
Merging can be performed automatically.



Merge pull request You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

- Once you click Merge Pull request, you will see a button Confirm merge.


## Child branch #1




 Open Malika-s wants to merge 3 commits into `master` from `Child_Branch` 

Conversation 0 Commits 3 Checks 0 Files changed 1


 Malika-s commented 4 minutes ago Owner  ...

Want to change in the master branch.

 Malika-s added 3 commits 27 minutes ago

 Create testchild	Verified	9767921
 Delete testchild	Verified	48b4479
 Create testchild.py	Verified	eb5ced2


Add more commits by pushing to the `Child_Branch` branch on Malika-s/testrepo.

 Merge pull request #1 from Malika-s/Child\_Branch

Child branch

Confirm merge Cancel

Your request has now merged successfully.

 Pull request successfully merged and closed  
You're all set—the `child_branch` branch can be safely deleted. Delete branch

Now, the child branch has completely merged with the Master branch. You can check the Master branch is having the testchild.py file.

Branch: master

Go to file

Add file

Code

Malika-s committed 7a7c576 3 minutes ago

8 commits

2 branches

0 tags

README.md	Update README.md	3 hours ago
Test.py	Add files via upload	1 hour ago
firstpython.py	Create firstpython.py	3 hours ago
testchild.py	Create testchild.py	21 minutes ago

## Summary

In this document, you have learned how to create a branch, edit and commit the changes, open a pull request and merge the request.

## Author(s)

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## Changelog

Date	Version	Changed by	Change Description
2020-07-16	0.4	Malika Singla	Spell check, steps added
2020-07-14	0.3	Rav Ahuja	Changed logo, updated title, intro, objectives, added Effort, Authors and Changelog
2020-07-13	0.2	Malika Singla	Added to GitLab and made some formatting changes, added objectives, etc.
2020-06-30	0.1	Malika Singla	Drafted initial version