Hands-on Lab: Getting Started with GitHub

Estimated time: **20 min**

In this lab, you will get started with GitHub by creating a GitHub account and project and adding a file to it using its Web interface.

Objectives

After completing this lab, you will be able to:

1. Describe GitHub
2. Create a GitHub account
3. Add a project and repo
4. Edit and create a file
5. Upload a file and Commit

GitHub Overview

First, let's introduce you to GitHub. GitHub is a collection of folders and files. It is a Git repository hosting service, but it adds many of its own features. Git is a command-line tool. It hosts and maintains a server via command line. GitHub provides this Git server and a Web-based graphical interface for you. It also provides access control and collaboration features, such as wikis and basic task management tools for every project. In addition, GitHub provides cloud storage for source code, supports all popular programming languages, and streamlines the iteration process. GitHub includes a free plan for individual developers and hosting Open Source projects.

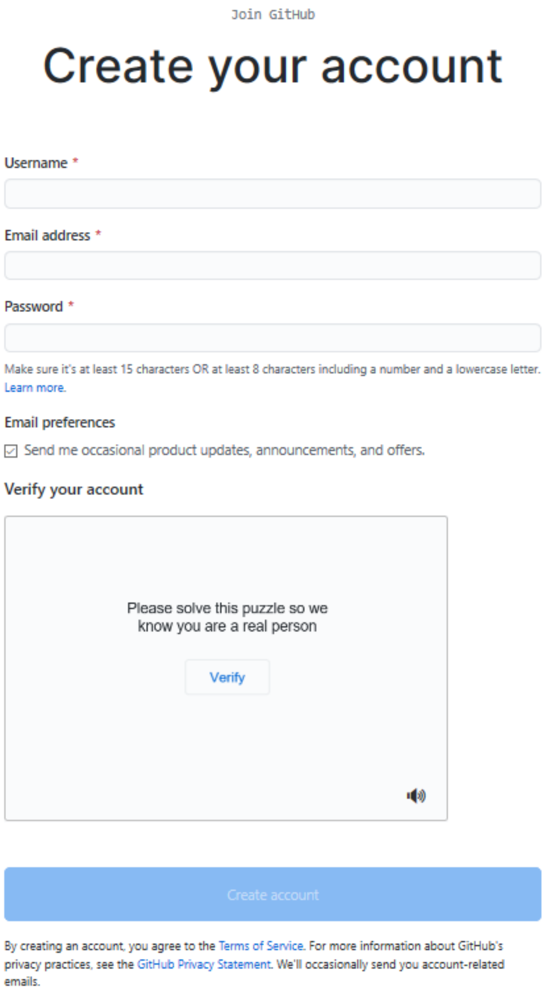
Exercise 1: Creating a GitHub Account

Please use the following steps to create an account on GitHub:

Step 1: Create an account: https://github.com/join

NOTE: If you already have a GitHub account, you can skip this step and simply log in to your account.

Step 2: Provide the necessary details to create an account as shown below:



Join GitHub

Create your account

Username *

Email address *

Password *

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. Learn more.

Email preferences

☑ Send me occasional product updates, announcements, and offers.

Verify your account

Please solve this puzzle so we know you are a real person

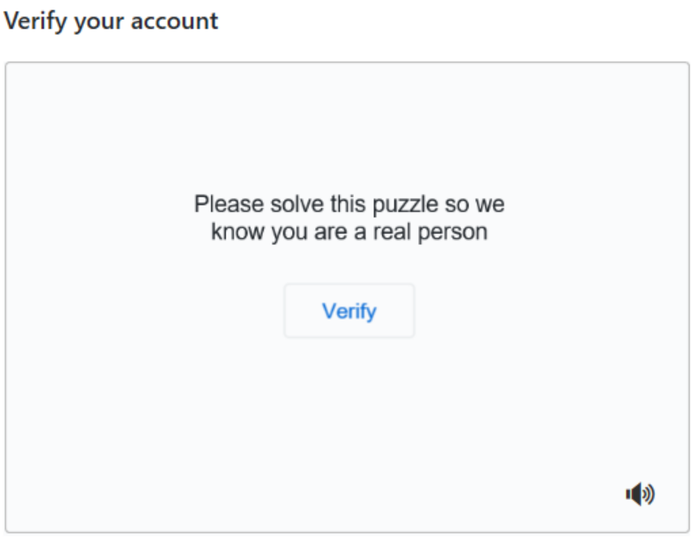
Verify

Create account

By creating an account, you agree to the Terms of Service. For more information about GitHub's privacy practices, see the GitHub Privacy Statement. We'll occasionally send you account-related emails.

Click `Create account`.

Step 3: Click `Verify` to verify the account and click `Done`.

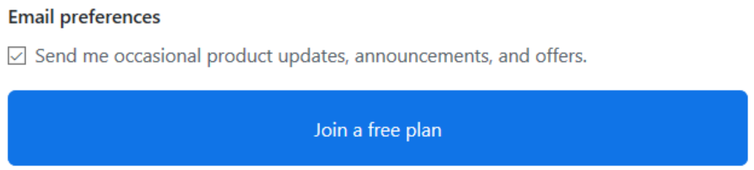


Verify your account

Please solve this puzzle so we know you are a real person

Verify

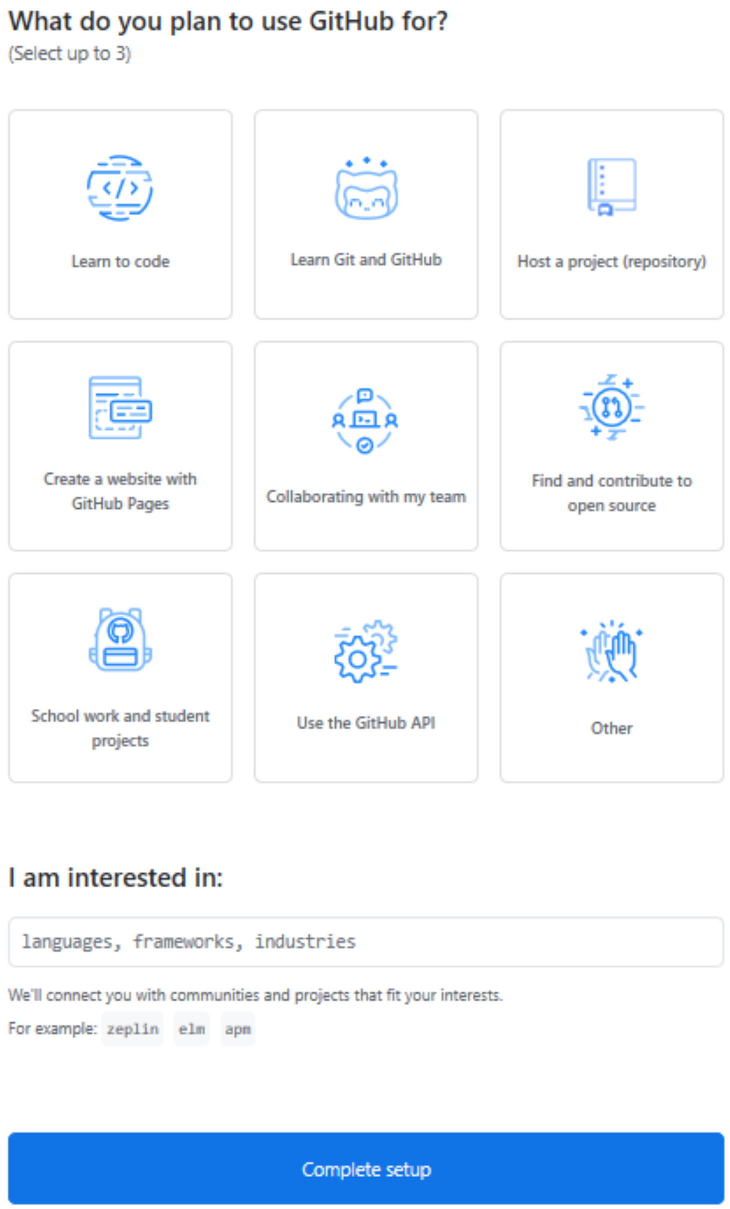
Step 4: After verification, click `Join a Free Plan`.



Email preferences

☑ Send me occasional product updates, announcements, and offers.

Step 5: Select the details as shown below and click `Complete setup`.



What do you plan to use GitHub for?

(Select up to 3)

Learn to code
Learn Git and GitHub
Host a project (repository)
Create a website with GitHub Pages
Collaborating with my team
Find and contribute to open source
School work and student projects
Use the GitHub API
Other

I am interested in:

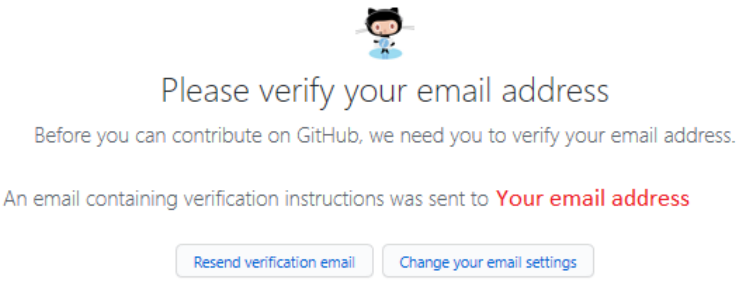
languages, frameworks, industries

We'll connect you with communities and projects that fit your interests.

For example: zeplin elm apm

Step 6: Go to your email, find the verification email from GitHub, and click the `Verify your email` button or link in that email to verify.

NOTE: If you do not receive the verification email, click `Resend verification email`.

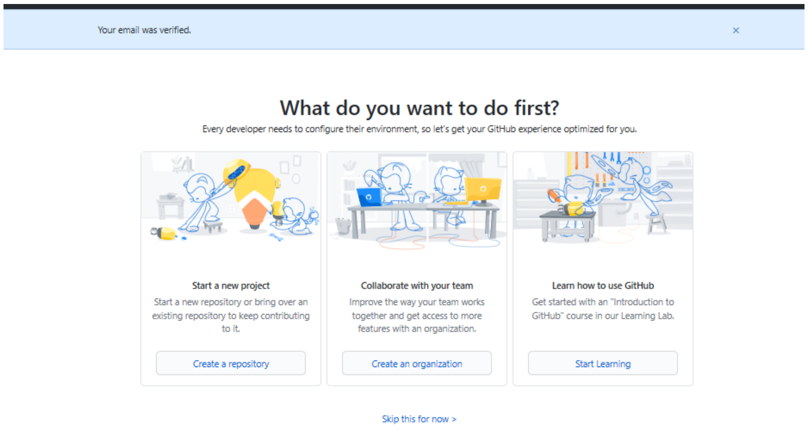


Please verify your email address

Before you can contribute on GitHub, we need you to verify your email address.

An email containing verification instructions was sent to Your email address

Email is verified.



Your email was verified.

What do you want to do first?

Every developer needs to configure their environment, so let's get your GitHub experience optimized for you.

Start a new project

Start a new repository or bring over an existing repository to keep contributing to it.

Collaborate with your team

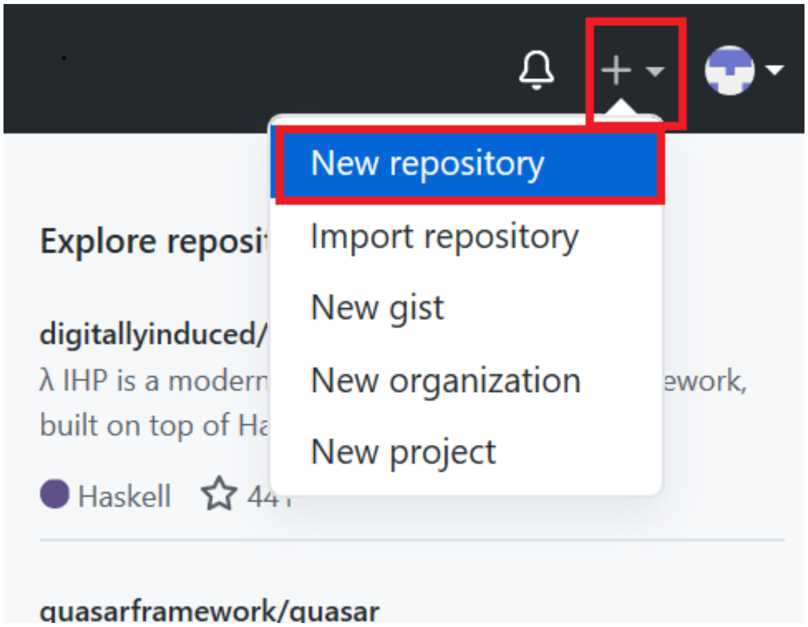
Improve the way your team works together and get access to more features with an organization.

Learn how to use GitHub

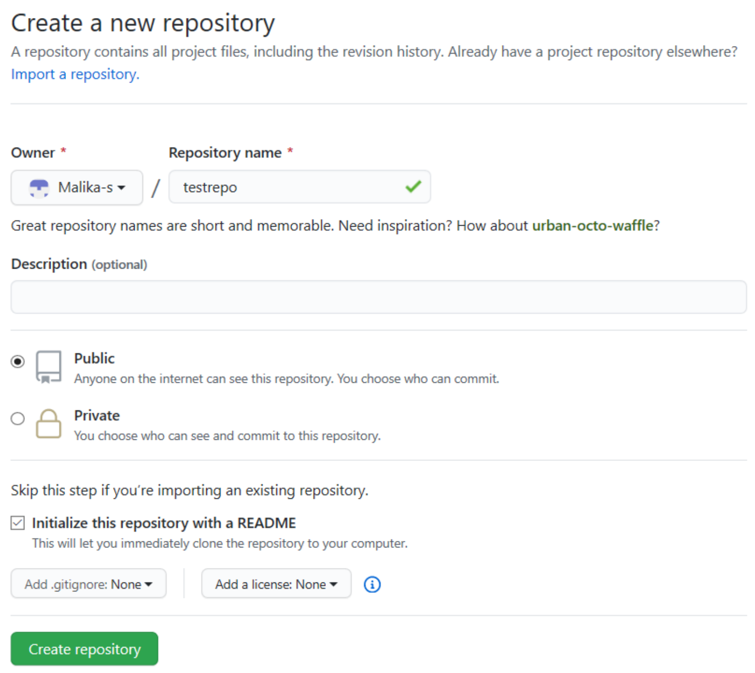
Get started with an "Introduction to GitHub" course in our Learning Lab.

Exercise 2: Adding a project and repo

Step 1: Click the + symbol and click `New repository`.



Step 2: Provide a name for the repository and initialize it with the empty `README.md` file.



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Owner * Malika-s / Repository name * testrepo ✓

Great repository names are short and memorable. Need inspiration? How about urban-octo-waffle?

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.

Skip this step if you're importing an existing repository.

☑ Initialize this repository with a README
This will let you immediately clone the repository to your computer.

Add .gitignore: None

Add a license: None

Click `create repository`.

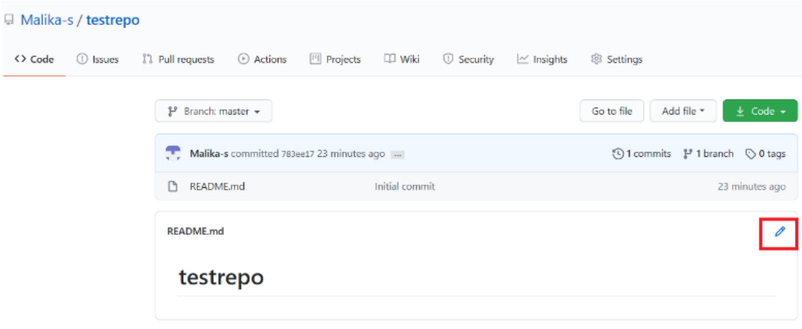
Now, you will be redirected to the repository you have created.

Let us start editing the repository.

Exercise 3: Create and edit a file

Exercise 3a: Edit a file

Step 1: Once the repository is created, the root folder of your repository is listed by default, and has just one file, `ReadMe.md`. Click the pencil icon to edit the file.



Malika-s / testrepo

Branch: master

Malika-s committed 783ee17 23 minutes ago

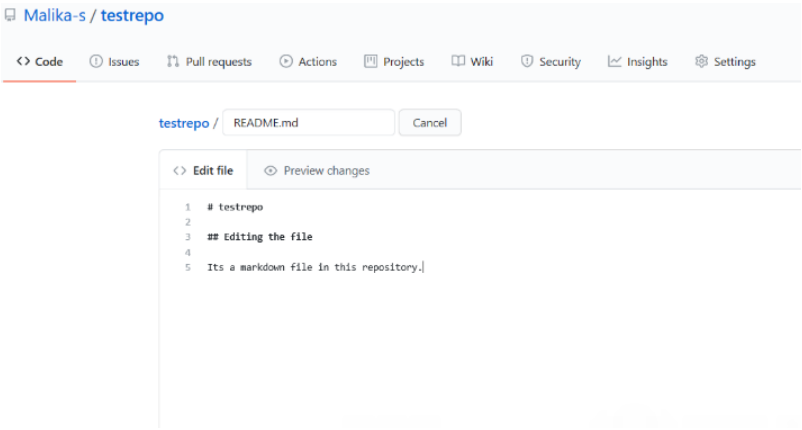
1 commits 1 branch 0 tags

README.md Initial commit 23 minutes ago

README.md

testrepo

Step 2: Add some text to the file.

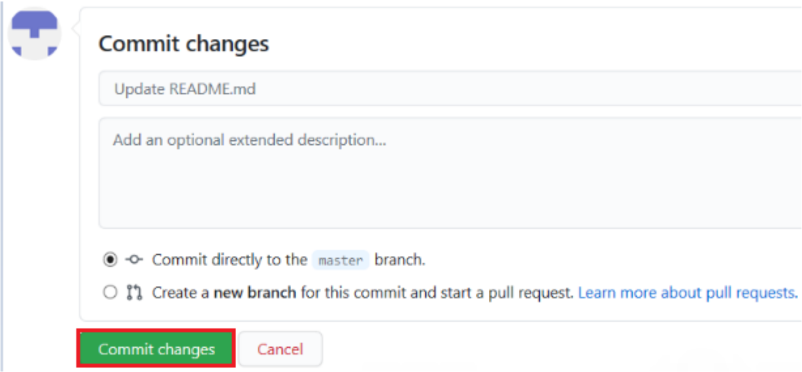

Malika-s / testrepo

```
# testrepo

## Editing the file

Its a markdown file in this repository.
```

Step 3: Scroll down the page after adding the text and click `Commit Changes`.


Commit changes

Update README.md

Add an optional extended description...

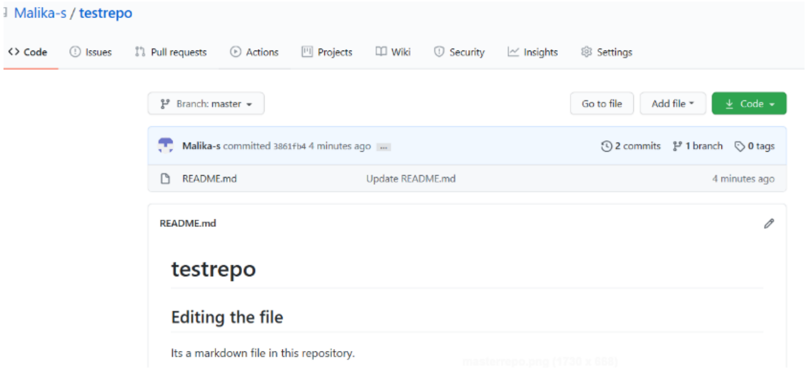
● Commit directly to the `master` branch.

○ Create a **new branch** for this commit and start a pull request. Learn more about pull requests.

Now, check that your file is edited with the new text.

Exercise 3b: Create a new file

Step 1: Click the repository name to return to the master branch, like in this testrepo.


Malika-s / testrepo

Malika-s committed 3861fb4 4 minutes ago ... 2 commits 1 branch 0 tags

README.md Update README.md 4 minutes ago

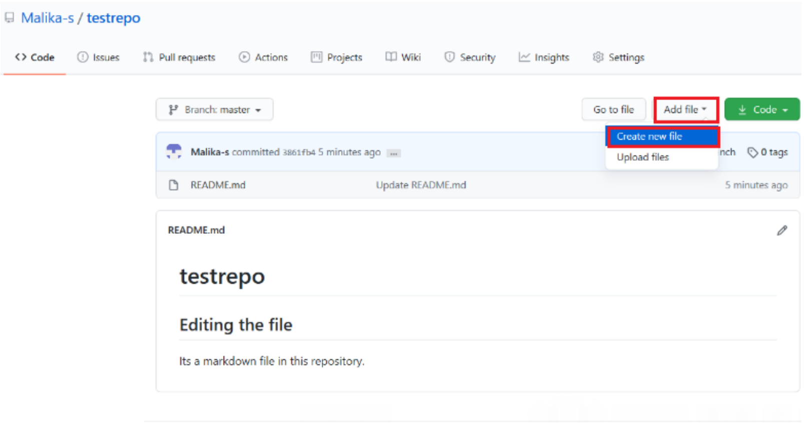
README.md

testrepo

Editing the file

Its a markdown file in this repository.

Step 2: Click `Add file` and select `Create New file` to create a file in the repository.



Malika-s committed 3861fb4 5 minutes ago

README.md Update README.md 5 minutes ago

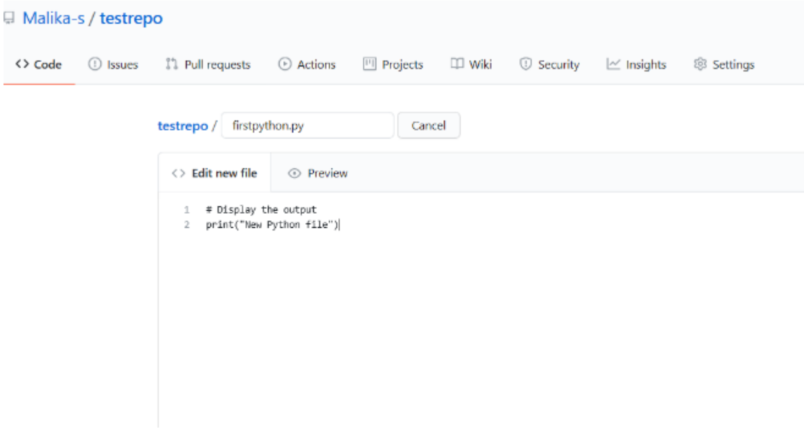
README.md

testrepo

Editing the file

Its a markdown file in this repository.

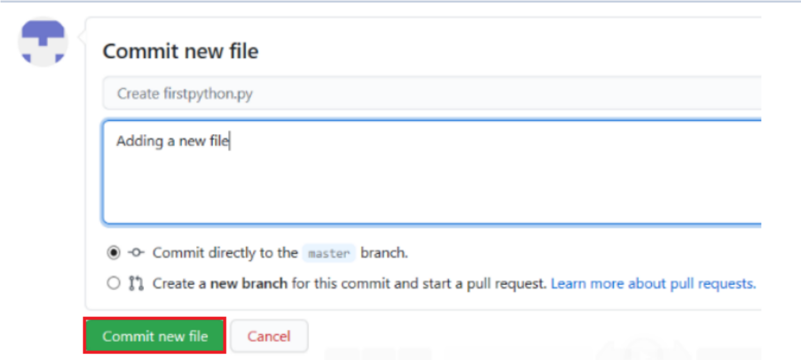
Step 3: Provide the file name and the extension of the file. For example, firstpython.py and add the lines.



firstpython.py

```
# Display the output
print("New Python file")
```

Step 4: Scroll down the page after adding the text. `Add description` of the file (optional) and click `Commit new file`.



Create firstpython.py

Adding a new file

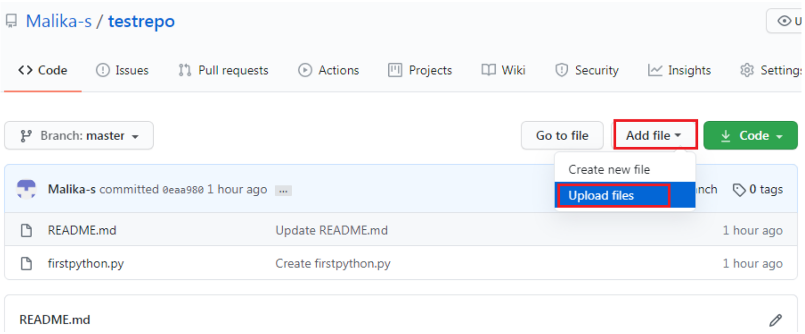
● Commit directly to the `master` branch.

○ Create a **new branch** for this commit and start a pull request. Learn more about pull requests.

Step 5: Your file is now added to your repository, and the repository listing shows when the file was added and changed.

Exercise 4: Upload a file & Commit

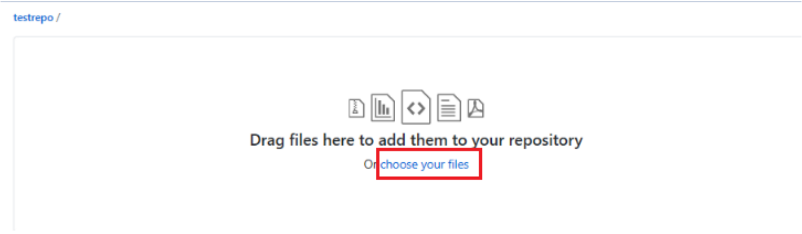
Step 1: Click `Add file` and select `Upload files` to upload a file (any .txt, .ipynb, .png file) in the repository from the local computer.



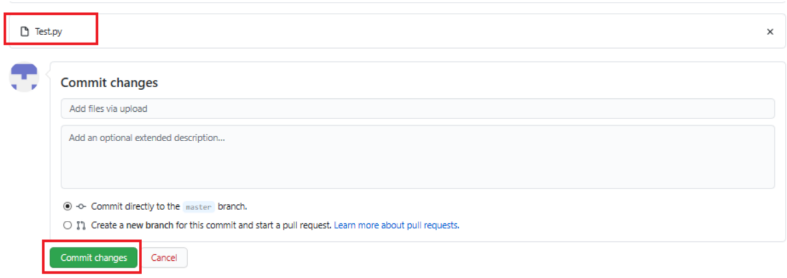
Malika-s committed 0eaa980 1 hour ago

README.md	Update README.md	1 hour ago
firstpython.py	Create firstpython.py	1 hour ago

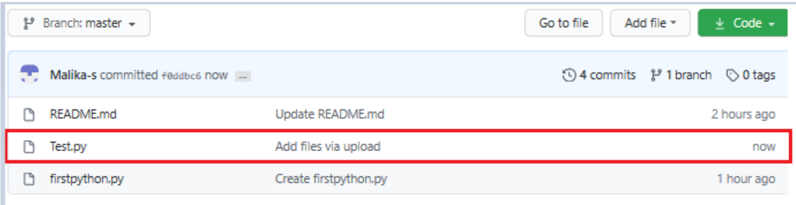
Step 2: Click `choose your files` and select any files from your computer.



Step 3: Once the file finishes uploading, click `Commit changes`.


Test.py
Commit changes
Add files via upload
Add an optional extended description...
● Commit directly to the master branch.
○ Create a new branch for this commit and start a pull request. Learn more about pull requests.
Commit changes
Cancel

Step 4: Now, your file is uploaded in the repository.



Malika-s committed f0ddbc6 now

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

Summary

In this document, you have learned how to create a new repository, add a new file, edit a file, upload a file in a repository, and commit the changes.

Author(s)

Romeo Kienzler

Malika Singla

Other Contributor(s)

Rav Ahuja

Skills Network