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

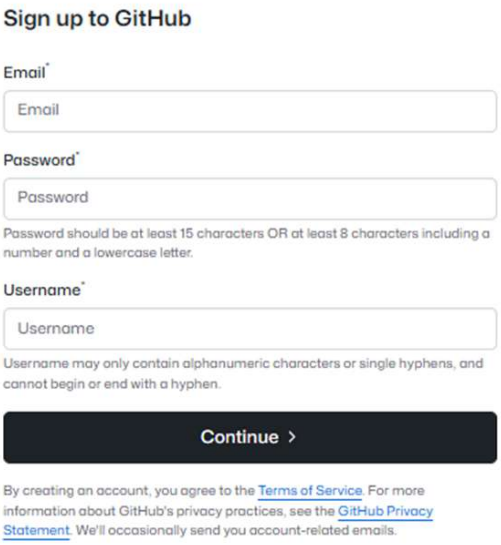
GitHub Overview

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

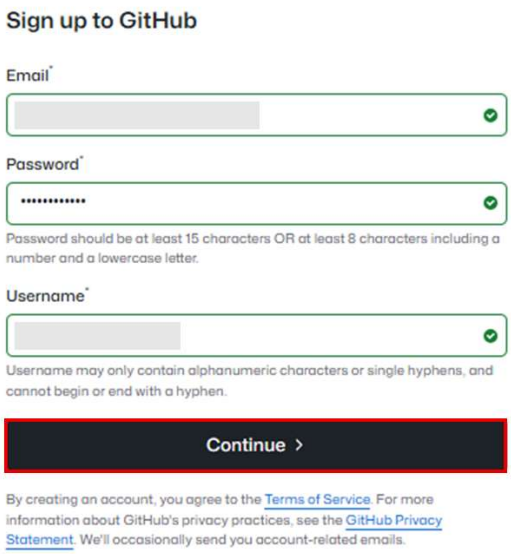
Please use the following steps to create an account on GitHub:

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



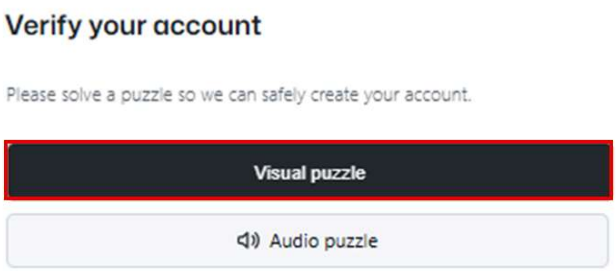
NOTE: If you already have a GitHub account, you can skip this step and simply log in to your account.

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

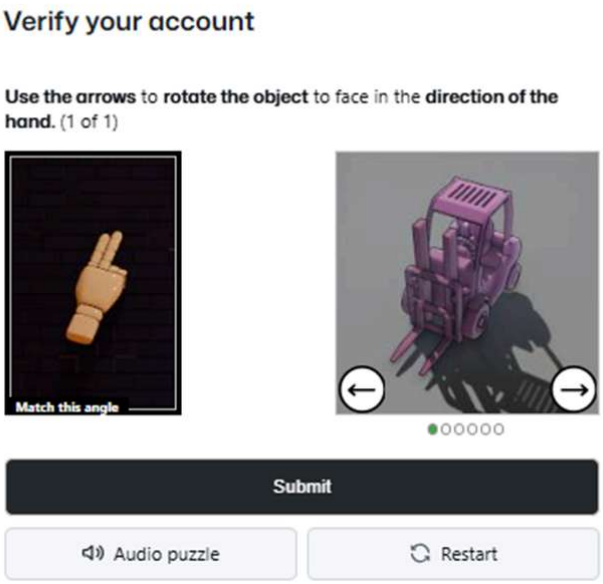


Click `Continue`.

Step 3: Click `Visual puzzle` to verify the account.

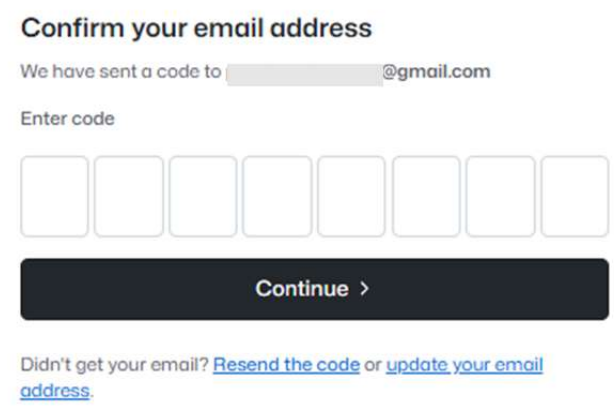


Step 4: Solve the puzzle and `Submit`.



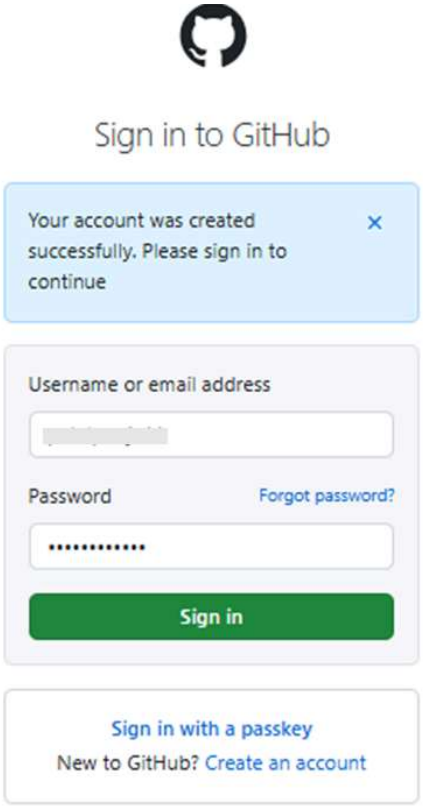
Step 5: Open your email, find the GitHub verification email, copy the verification code, and return to the GitHub Signup page to enter it.

Step 6: Confirm youe eamil address using the verification code and `Continue`.

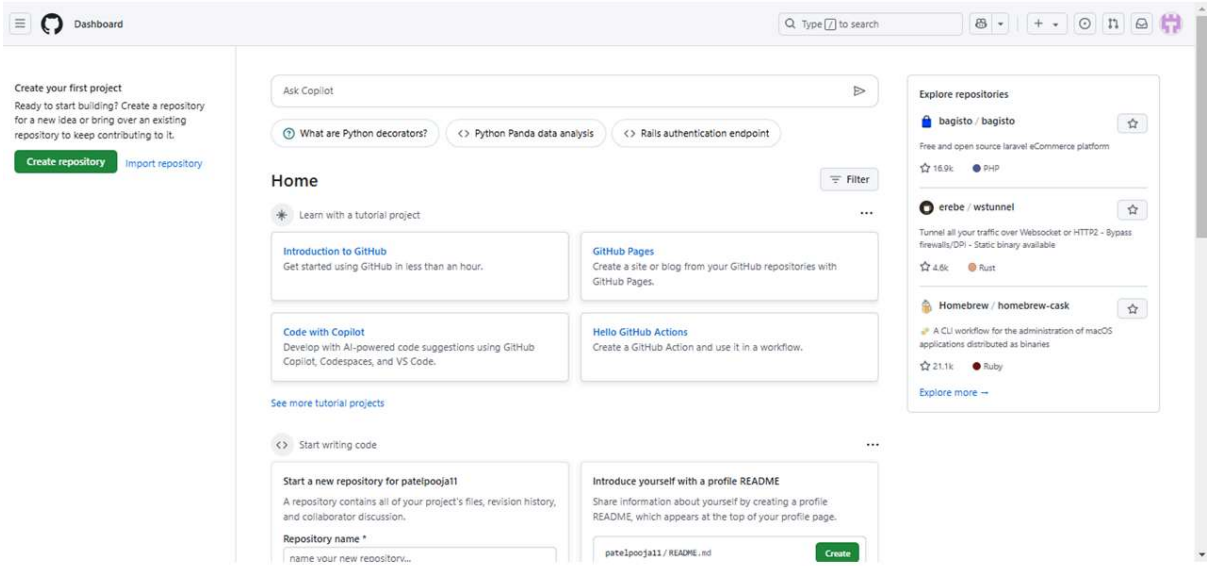


NOTE: If you do not receive the verification email, click `Resend the code`.

Step 7: Sign in to GitHub, enter Id and Password and `Sign in`

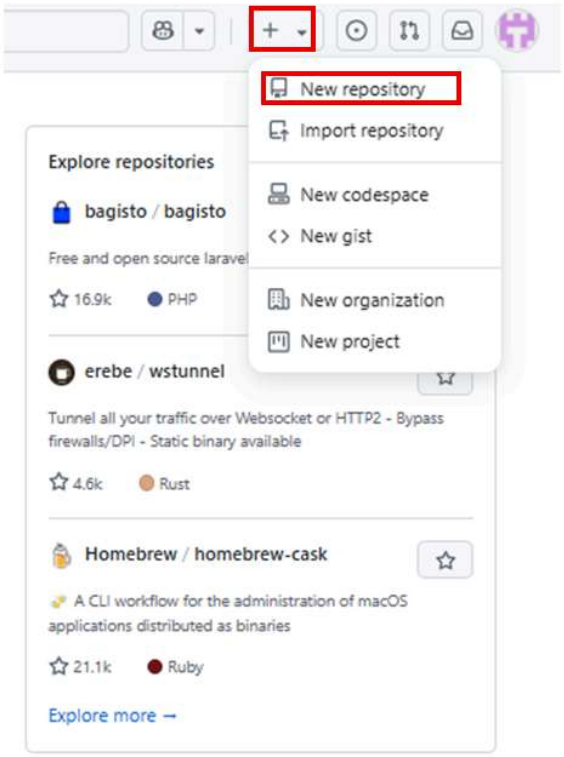


You will see the home page.

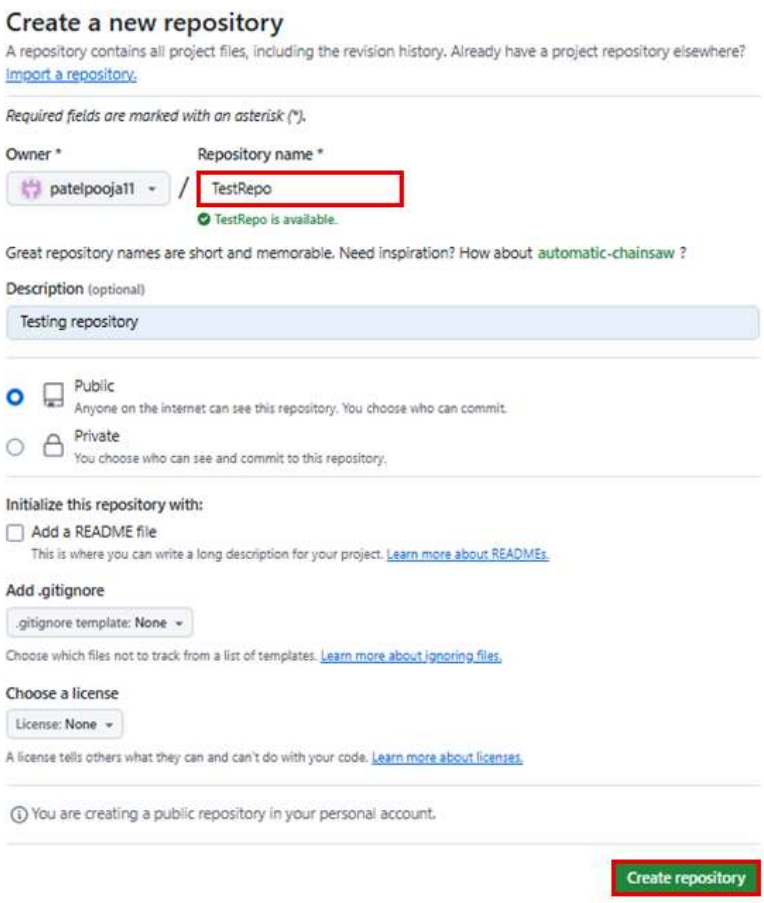


Exercise 2: Adding a project and repo

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.



Click `Create repository`.

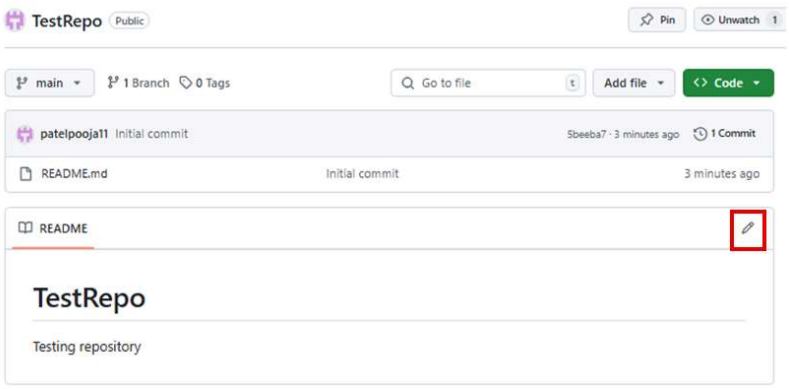
Now, you will be redirected to the repository you have created.

Let us start editing the repository.

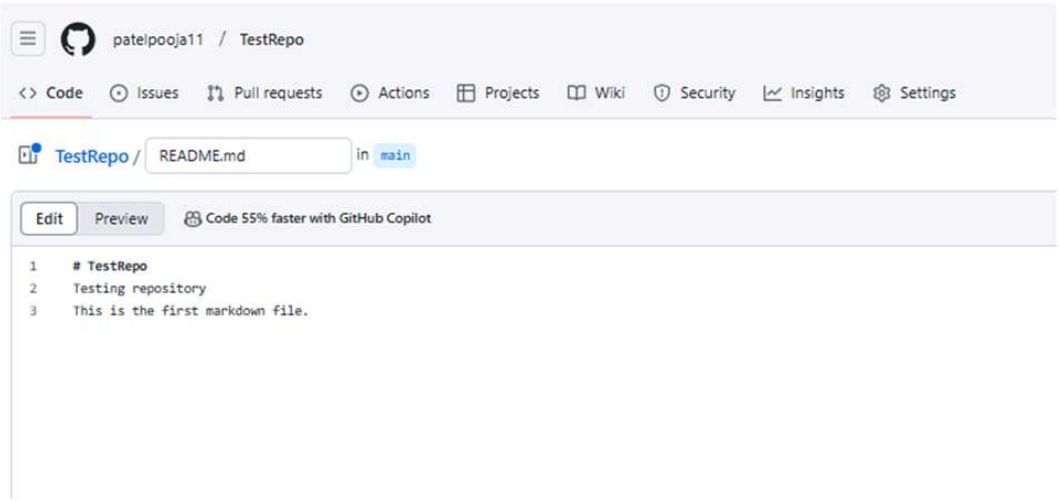
Exercise 3: Create and edit a file

Exercise 3a: Edit a file

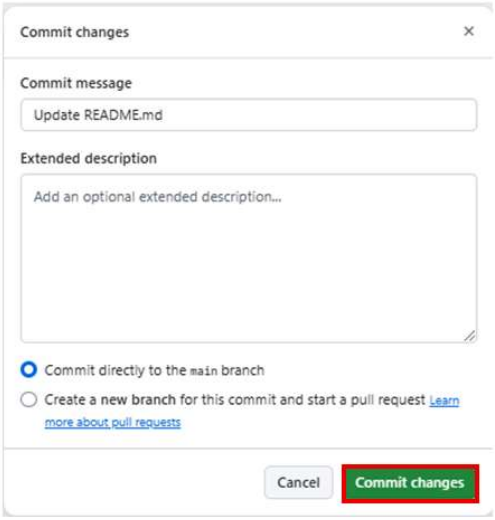
Step 1: Once the repository is created, the root folder of your repository is listed by default, and has just one file, `ReadMe.md`. Click the pencil icon to edit the file.



Step 2: Add some text to the file.



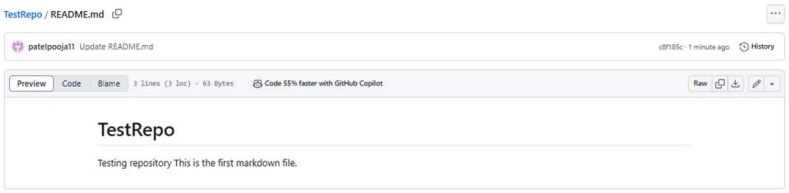
Step 3: After adding the text and click `Commit Changes`.



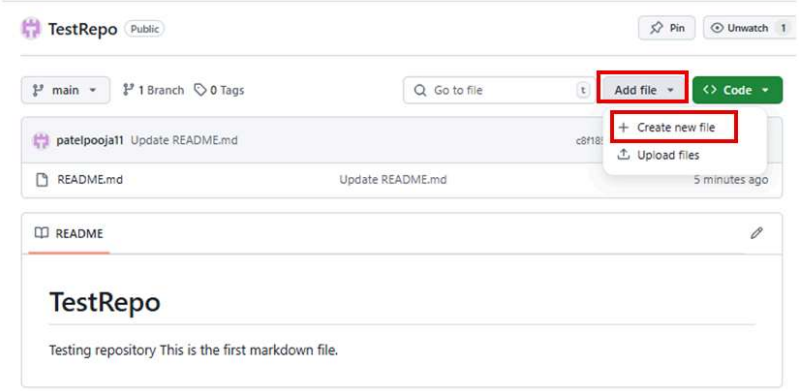
Now, check that your file is edited with the new text.

Exercise 3b: Create a new file

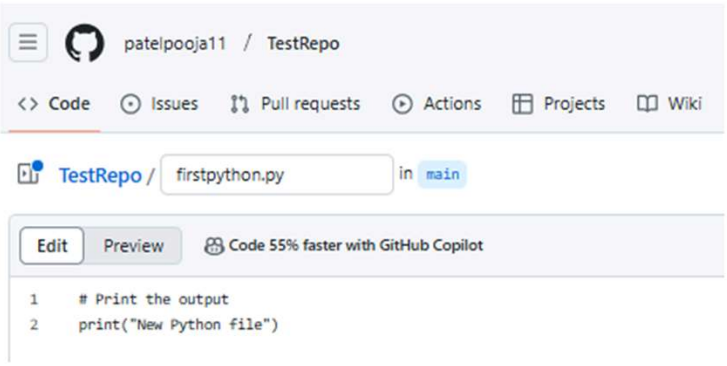
Step 1: Click the repository name to return to the master branch, like in this testrepo.



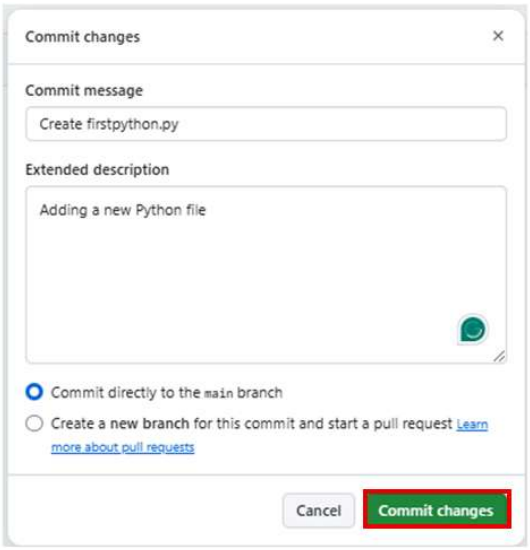
Step 2: Click `Add file` and select `Create New file` to create a file in the repository.



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



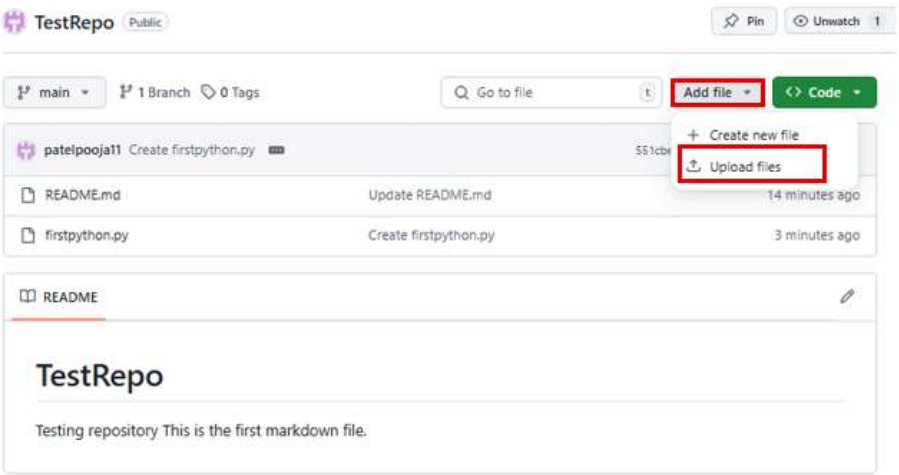
Step 4: Commit changes after adding the text. `Add description` of the file (optional) and click `Commit changes`.



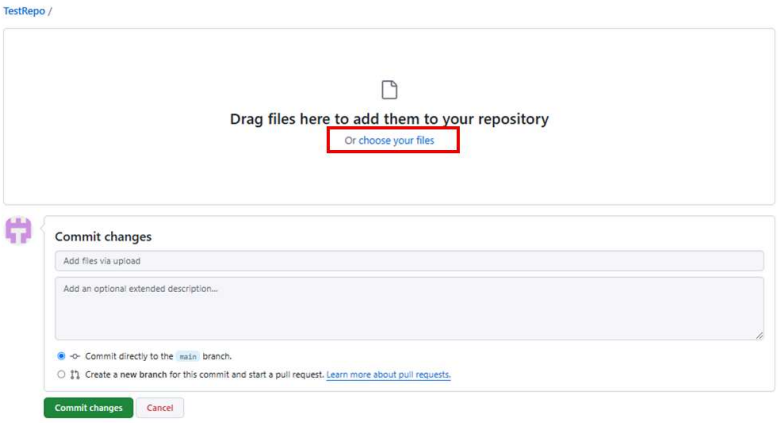
Step 5: Your file is now added to your repository, and the repository listing shows when the file was added and changed.

Exercise 4: Upload a file & Commit

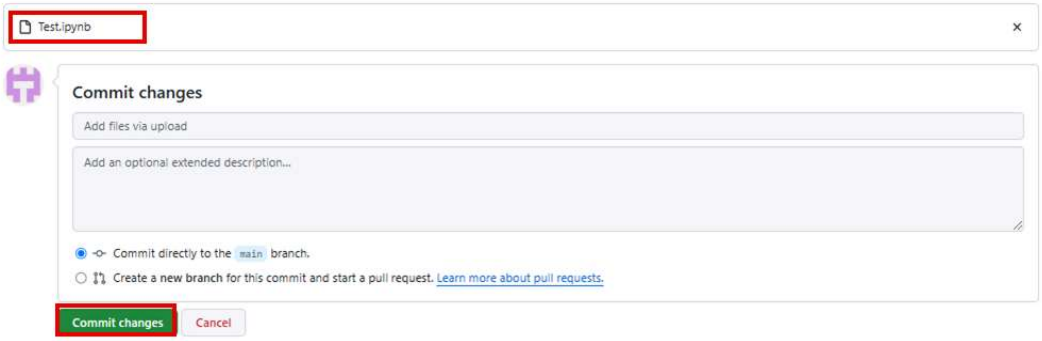
Step 1: Click `Add file` and select `Upload files` to upload a file (any .txt, .ipynb, .png file) in the repository from the local computer.



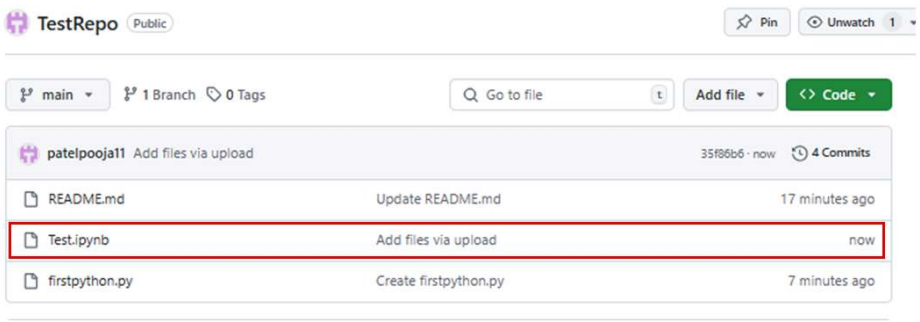
Step 2: Click `choose your files` and select any files from your computer.



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



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



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.

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