

Introduction to Git and GitHub

Intro to Git

Git is a version control system. The full form of Git is

Global Information Tracker

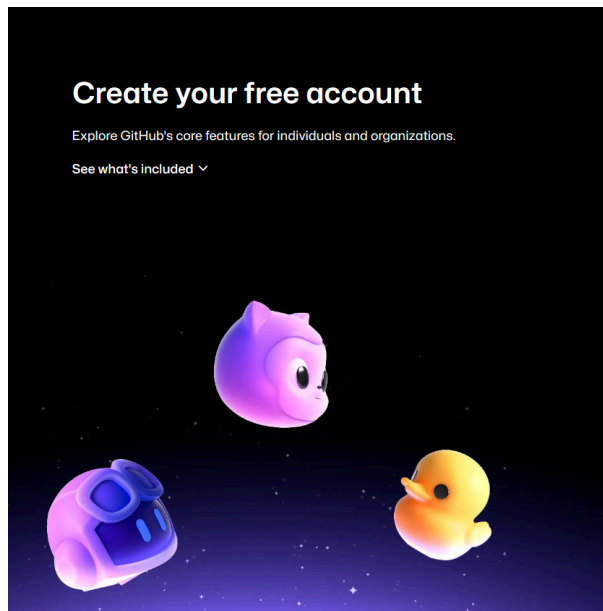
Git is mostly used to organize and control various project versions with ease. Git is also quite useful for rapidly moving the project from one state to another. In the event that a file is inadvertently erased, it can be recovered using Git! Additionally, Git makes it possible to track any modifications made to the project files.

Using Web Interface

1. Setting Up GitHub

1.1 Creating a GitHub Account

1. Visit GitHub and click Sign Up.
2. Enter your username, email, and password.
3. Complete the verification process and click Create Account.



Already have an account? [Sign in](#)

Sign up to GitHub

Email*

Password*

Password should be at least 15 characters OR at least 8 characters including a number and a lowercase letter.

Username*

Username may only contain alphanumeric characters or single hyphens, and cannot begin or end with a hyphen.

[Continue](#) >

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.

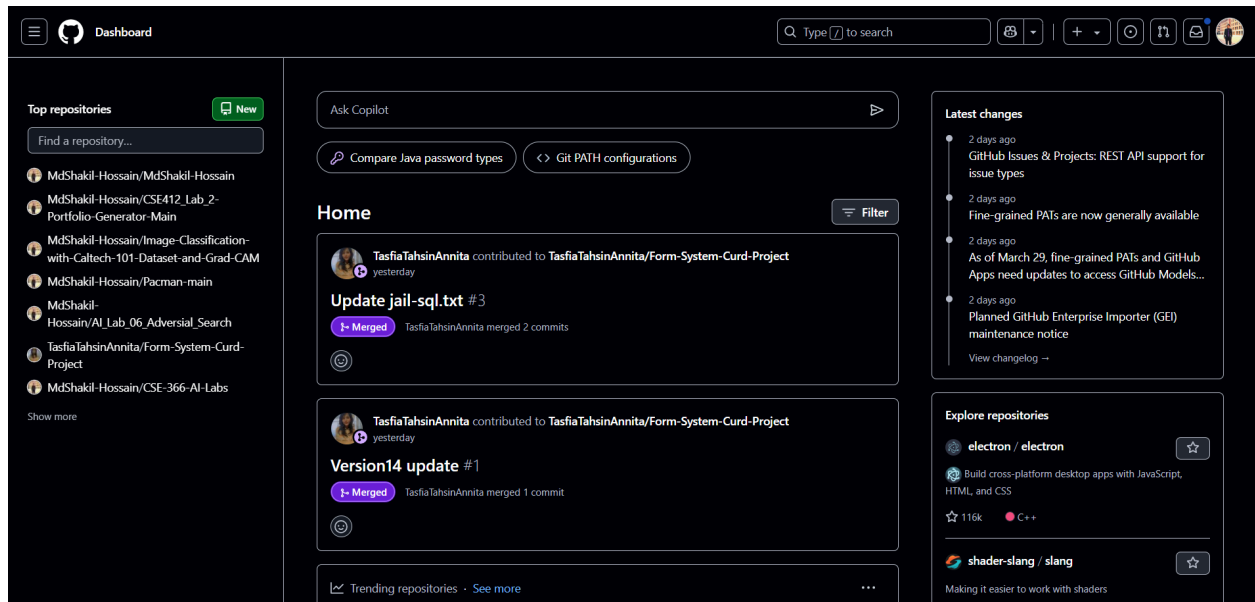
1.2 Exploring the Dashboard

After signing in, you'll see the GitHub Dashboard, where you can:

View repositories

See recent activities

Access settings



2. Creating and Managing Repositories

2.1 Creating a New Repository


1. Click on the + icon at the top right and select New Repository.

Create a new repository


A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk ().*

Owner *


 MdShakil-Hossain

 /


 New repository name must not be blank

Great repository names are short and memorable. Need inspiration? How about **didactic-adventure** ?

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.

Initialize this repository with:

☐ **Add a README file**

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add additional files


1. Enter a repository name.
2. Choose Public (visible to everyone) or Private (only you and collaborators can see it).
3. (Optional) Check Add a README file.
4. Click Create Repository.

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk ().*


Owner *

 MdShakil-Hossain

 /


Repository name *


GitHub Tutorial

 Your new repository will be created as **GitHub-Tutorial**.
The repository name can only contain ASCII letters, digits, and the characters `.`, `-`, and `_`.

Great repository names are short and memorable. Need inspiration? How about **didactic-adventure** ?

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.

Initialize this repository with:

☐ Add a README file
This is where you can write a long description for your project. [Learn more about READMEs.](#)

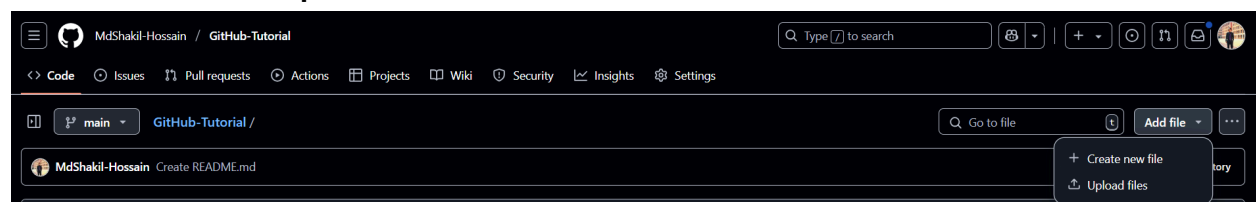
Add .gitignore

.gitignore template: None

3. Adding and Managing Files

3.1 Uploading a File

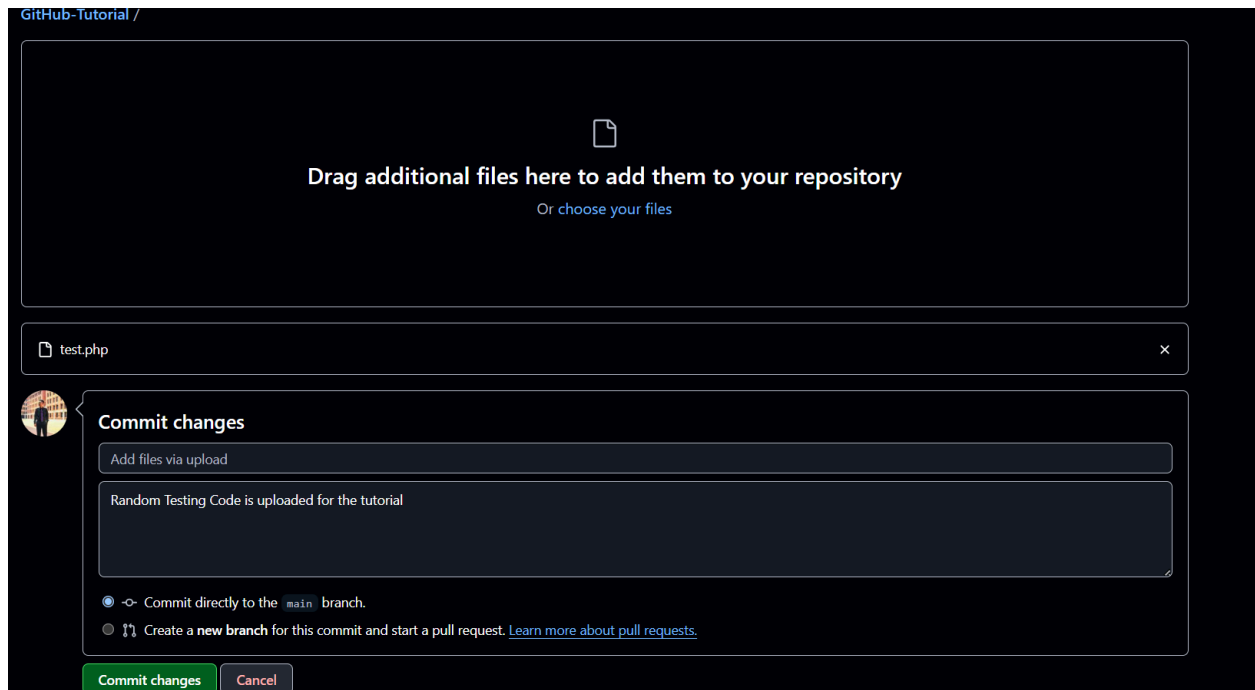
1. Navigate to your repository.
2. Click Add File → Upload Files.



3. Drag and drop files or select them manually.
4. Click **Commit changes** to save them.

3.2 Creating a New File

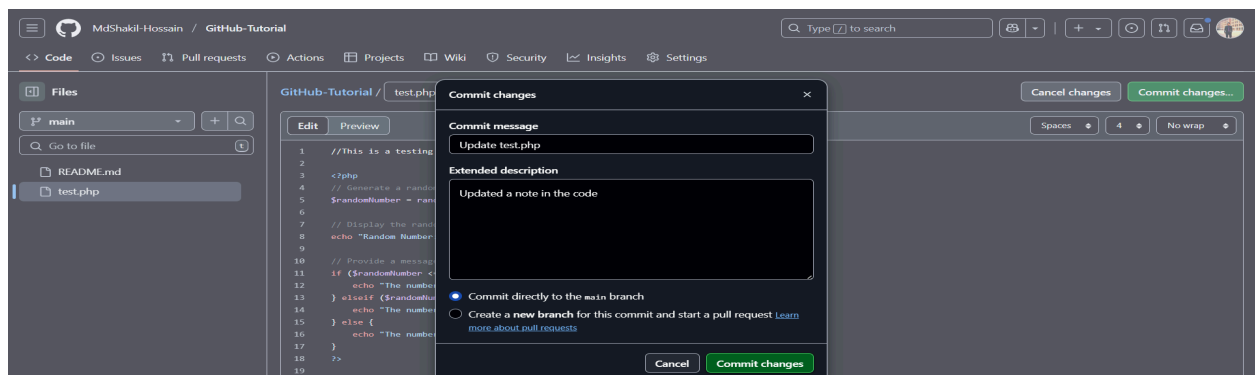
1. Go to your repository and click Add File → Create New File.
2. Enter a filename and add content.



3. Click **Commit changes**.

3.3 Editing an Existing File

1. Open the file inside the repository.
2. Click the **Edit** (pencil) icon.

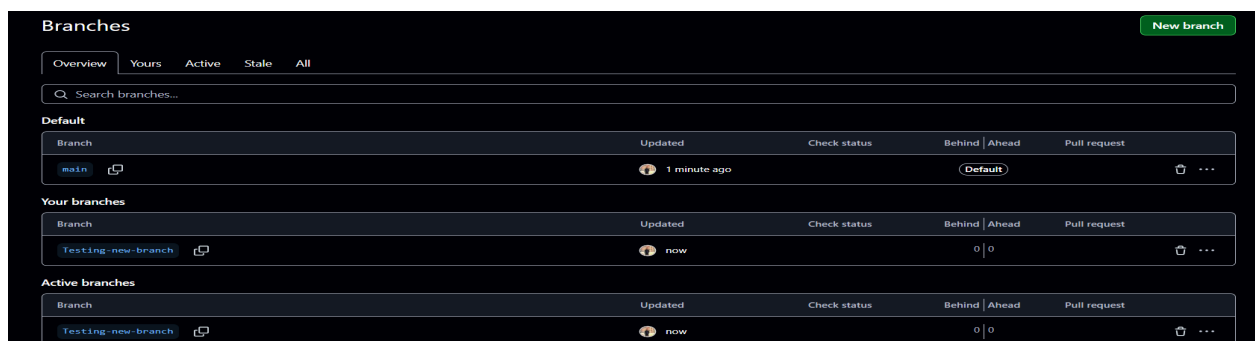
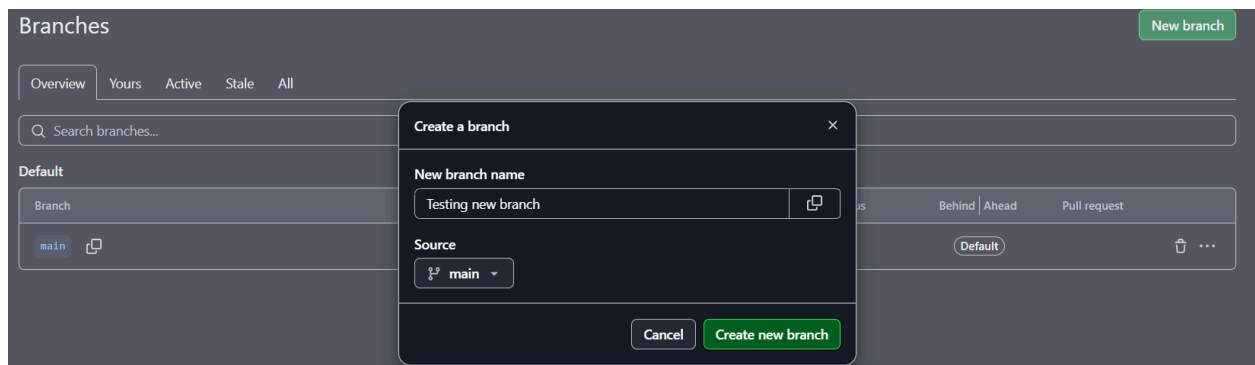
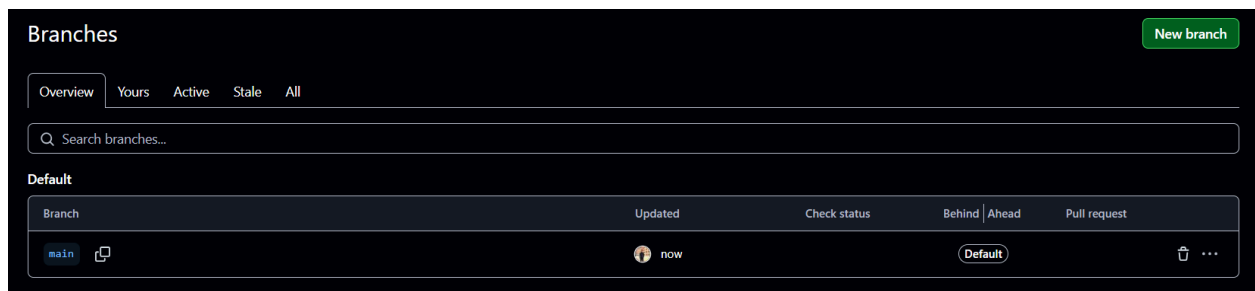
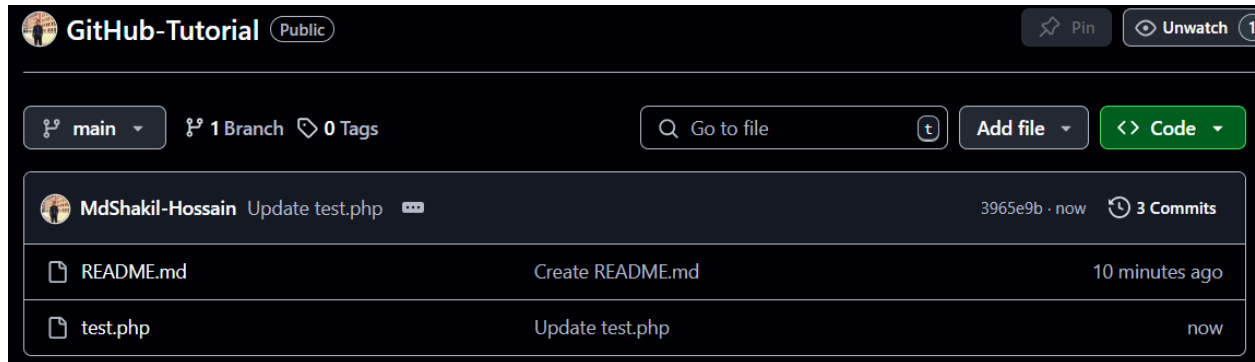


3. Make changes and click Commit changes.

4. Branching in GitHub

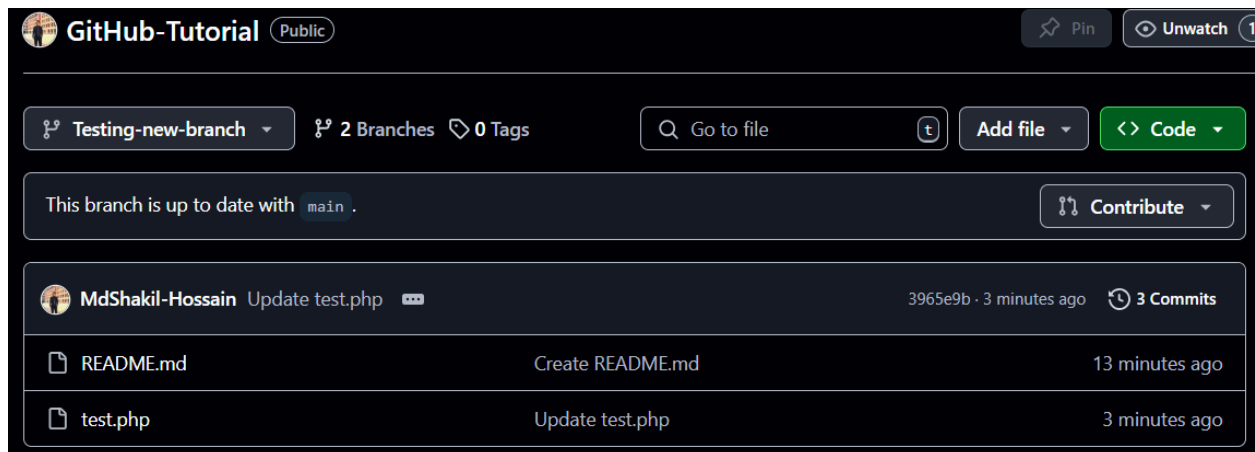
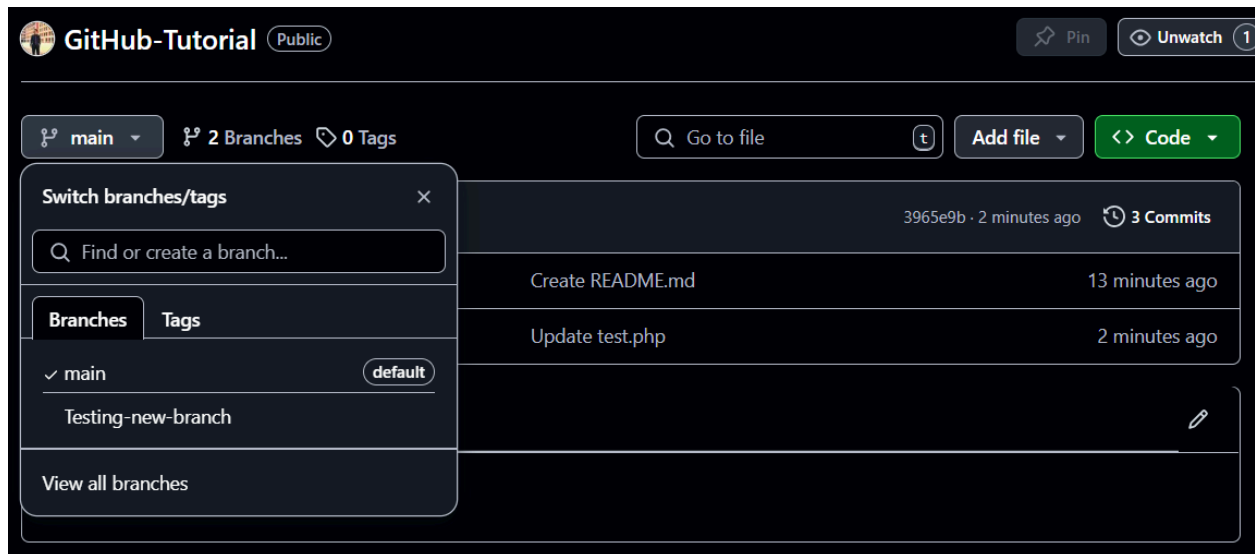
4.1 Creating a New Branch

1. Open your repository.
2. Click the New Branch
3. Type a new branch name and press Enter.



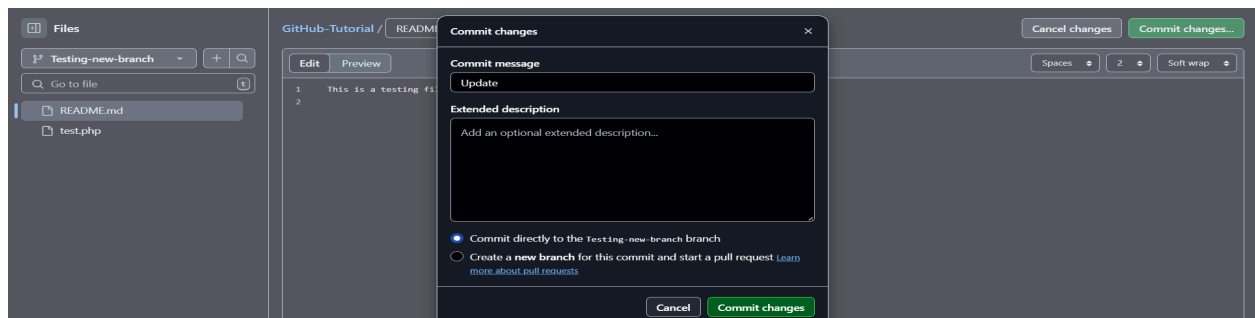
4.2 Switching Branches

1. Click the Branch dropdown.
2. Select the branch you want to switch to.



4.3 Merging a Branch (Using Pull Requests)

1. Switch to the branch you want to merge.
2. Click **Pull Requests** → **New Pull Request**.



The screenshot shows the GitHub interface for a repository named 'GitHub-Tutorial' which is public. At the top, there's a notification bar indicating that the 'Testing-new-branch' has recent pushes 5 seconds ago, with a 'Compare & pull request' button. Below this, the repository navigation bar shows the 'main' branch selected, with 2 branches and 0 tags. There are buttons for 'Go to file', 'Add file', and 'Code'. The commit history section shows a commit by 'MdShakil-Hossain' titled 'Update test.php' from 5 minutes ago (commit hash 3965e9b). Below the commit, a table lists the files changed: 'README.md' (Create README.md, 15 minutes ago) and 'test.php' (Update test.php, 5 minutes ago).

1. Select branches to compare.

The screenshot shows the 'Open a pull request' page. The title is 'Open a pull request' with a subtitle explaining how to create a new pull request by comparing changes across two branches. The interface shows 'base: main' and 'compare: Testing-new-branch' selected, with a green checkmark indicating 'Able to merge'. Below this, there's a section to 'Add a title' with a text input field containing the word 'Update'. Underneath is the 'Add a description' section, which has a 'Write' tab and a 'Preview' tab. The 'Write' tab is active, showing a rich text editor with a toolbar and a large text area for the description. At the bottom right, there is a 'Create pull request' button.

1. Click Create Pull Request → Merge Pull Request.

The screenshot shows the 'Merge pull request' confirmation page. It features a green checkmark icon and the text 'No conflicts with base branch' and 'Merging can be performed automatically.' Below this, there is a 'Merge pull request' button and a link to 'View command line instructions'.

Congratulations first PR Request has been created now the team leader will review this PR and if there is no conflict than he will merge this PR

4.4 Deleting a Branch

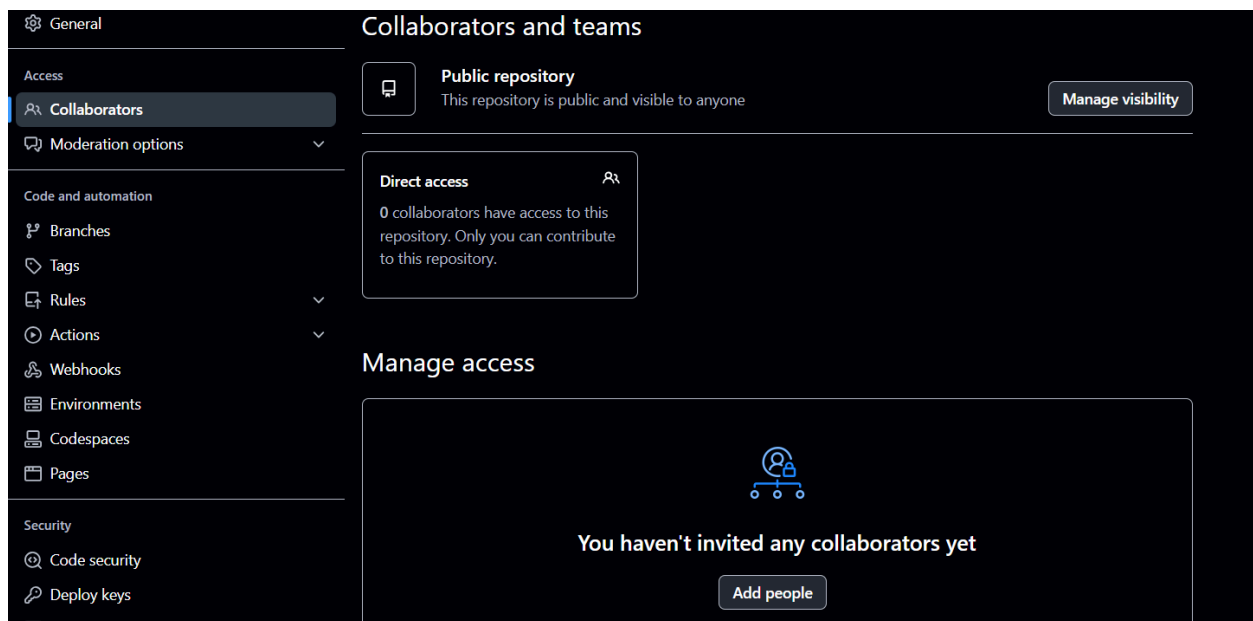
1. Go to Branches.
2. Click the Delete button next to the branch.

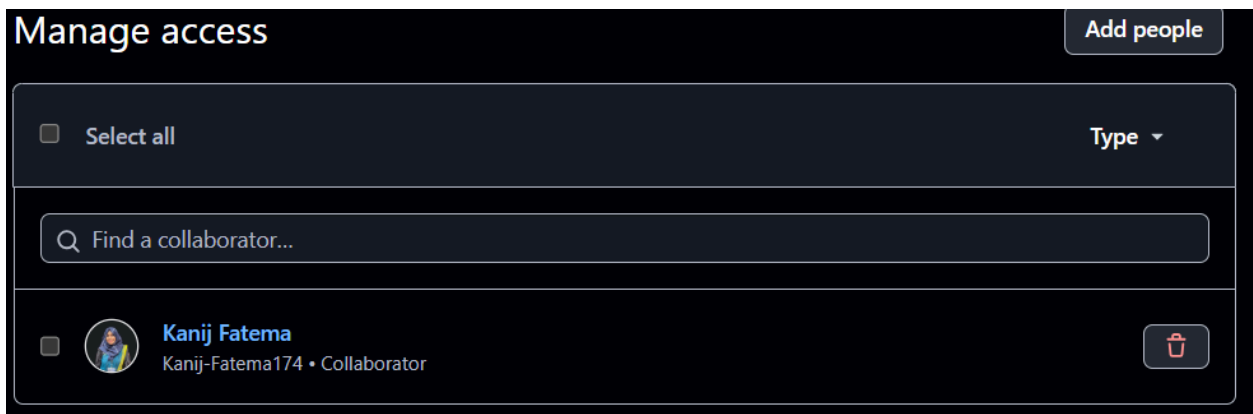
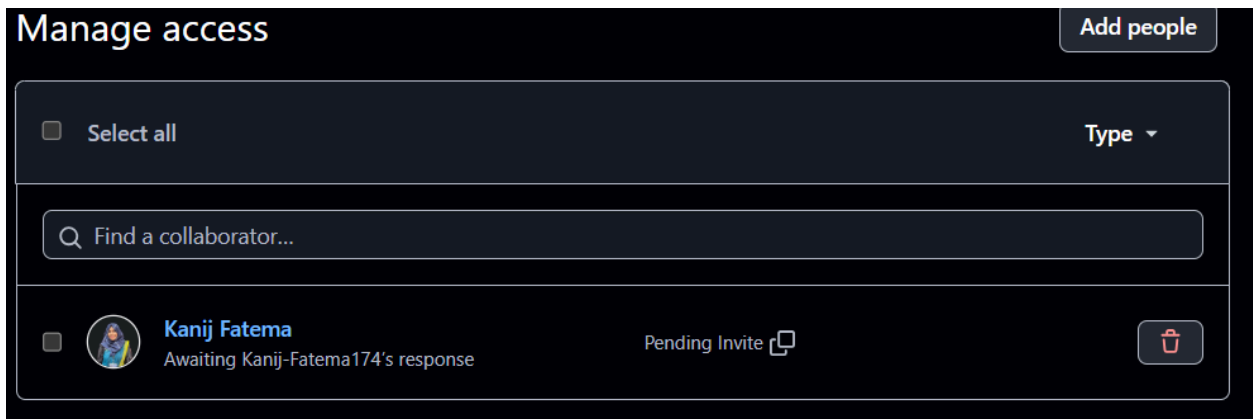
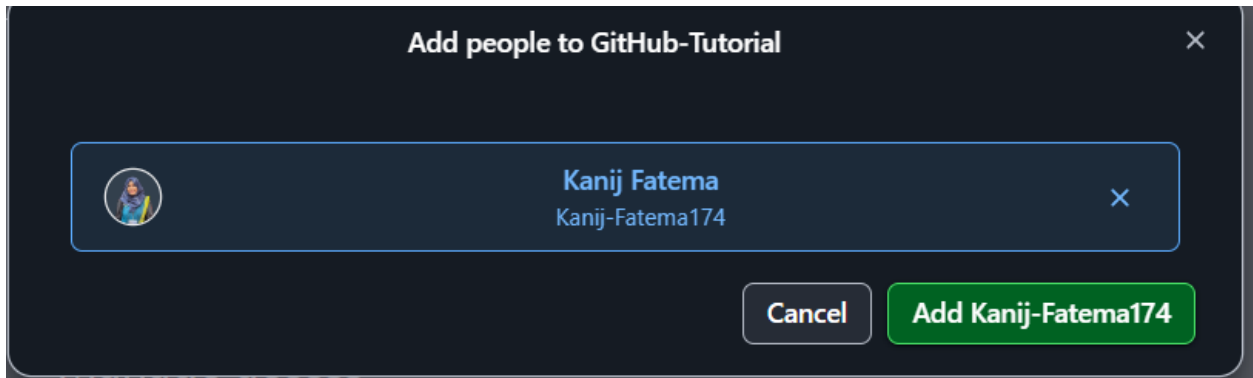


5. Working with GitHub Features

5.1 Adding Collaborators

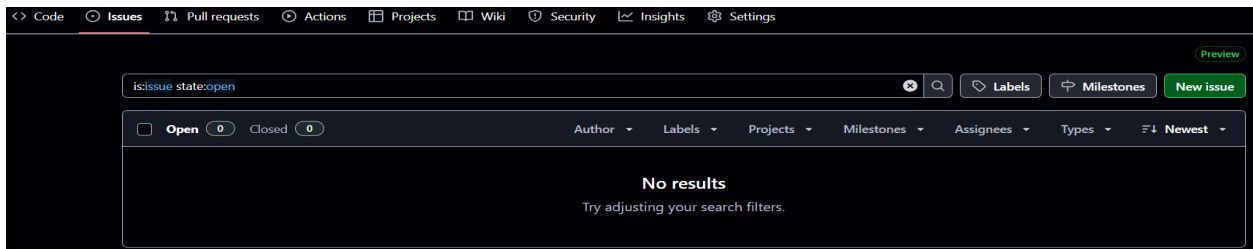
1. Open your repository and click Settings.
2. Go to the Manage Access section.
3. Click Invite a collaborator.
4. Enter the GitHub username or email of the person you want to invite.
5. Click Add Collaborator.
6. The collaborator will receive an email invitation. Once accepted, they can contribute to your repository.



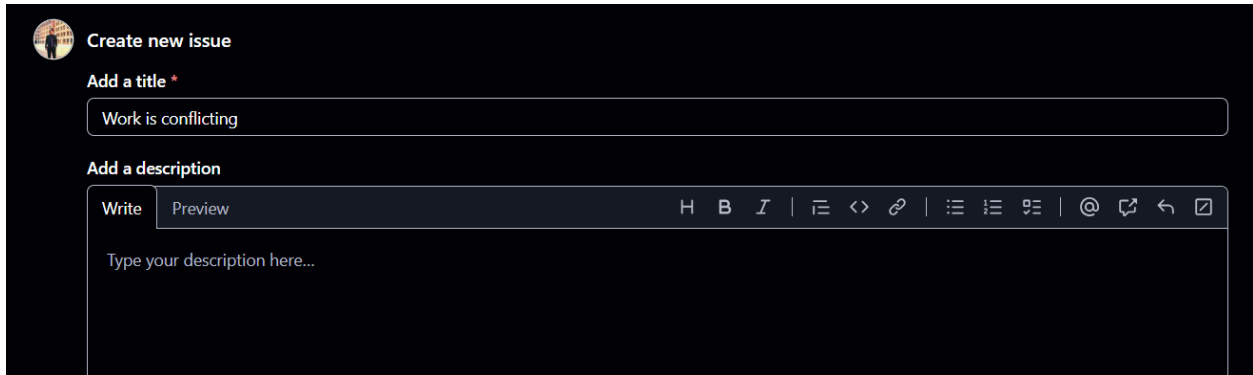


5.2 Creating an Issue

1. Open your repository and go to the **Issues** tab.

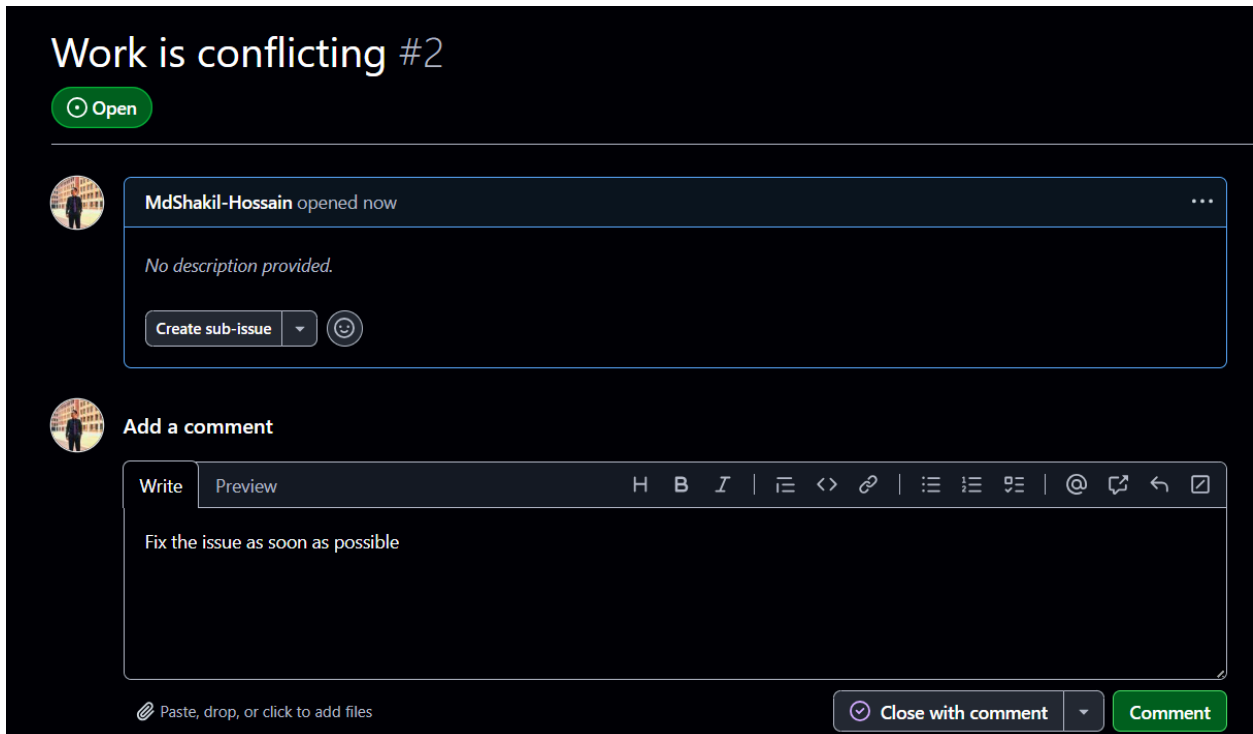


1. Click **New Issue**.
2. Enter a title and detailed description of the issue.



The screenshot shows the 'Create new issue' form. At the top left is a user profile icon. The title 'Create new issue' is followed by a red asterisk. Below is a text input field containing 'Work is conflicting'. Underneath is the 'Add a description' section, which has 'Write' and 'Preview' tabs. A rich text editor toolbar is visible with icons for bold, italic, link, list, and other formatting options. The description area contains the placeholder text 'Type your description here...'.

1. (Optional) Assign the issue to a collaborator or add labels.
2. Click **Submit New Issue**.



The screenshot shows the details of an issue titled 'Work is conflicting #2'. A green 'Open' status button is at the top. The issue was opened by 'MdShakil-Hossain' 'now'. The description field is empty, showing 'No description provided.' Below this is a 'Create sub-issue' button with a dropdown arrow and an emoji icon. The 'Add a comment' section has 'Write' and 'Preview' tabs and a rich text editor toolbar. The comment text is 'Fix the issue as soon as possible'. At the bottom, there is a file upload area with the text 'Paste, drop, or click to add files', a 'Close with comment' button with a dropdown arrow, and a green 'Comment' button.

Work is conflicting #2

🔒 Closed



MdShakil-Hossain opened 1 minute ago

...

No description provided.

Create sub-issue



MdShakil-Hossain now

Owner

Author

...

Fix the issue as soon as possible



MdShakil-Hossain closed this as completed now