

Lesson 01 Demo 04

Creating a Branch in Git

Objective: To create branches in Git and work on new features or fixes independently without affecting the main codebase

Prerequisite: GitHub Account

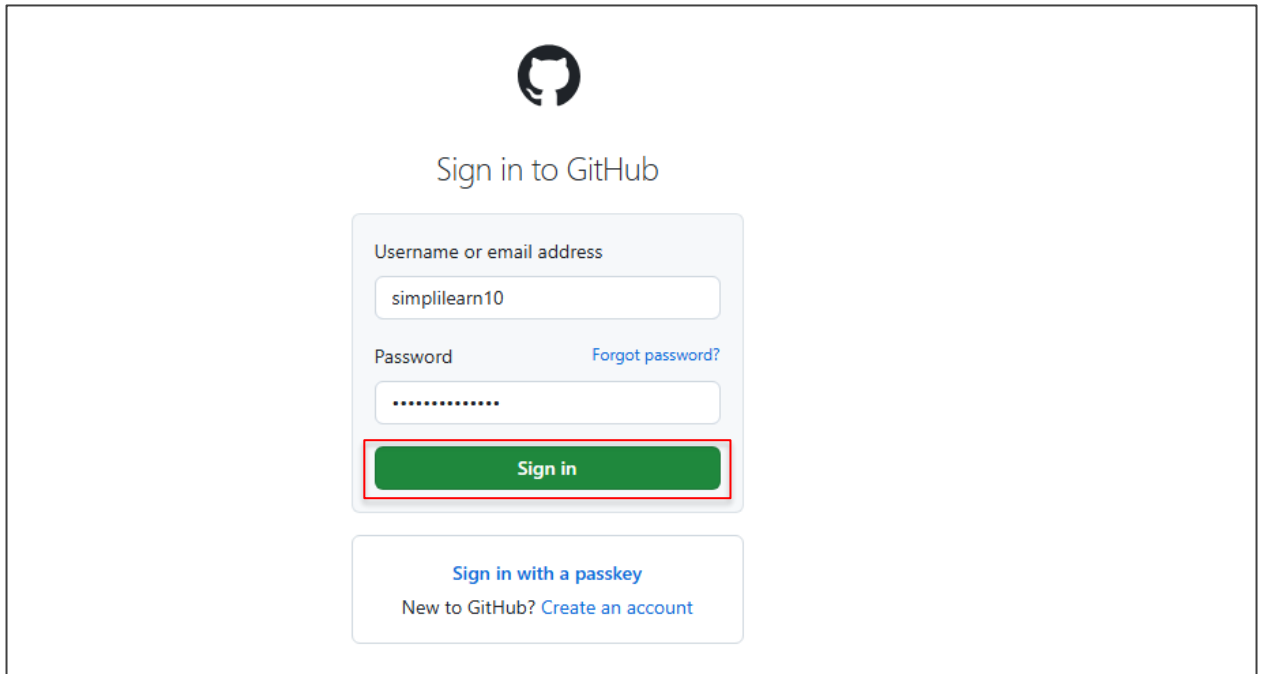
Tools required: Git

Steps to be followed:

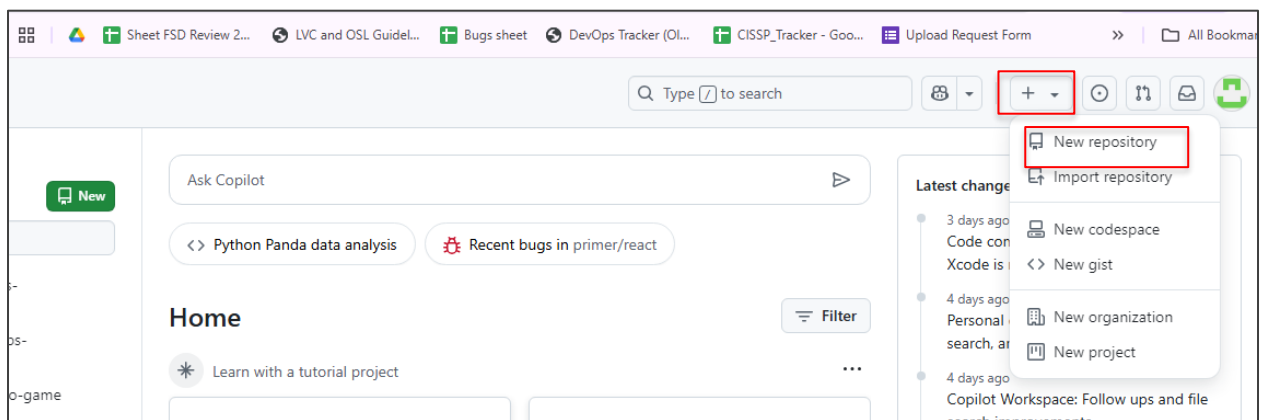
1. Create a new GitHub repository
2. Clone the GitHub repository
3. List all the branches in your repository
4. Create a new branch and verify it
5. Rename an existing branch
6. Delete the branch and verify it

Step 1: Create a new GitHub repository

1.1 Open a browser in your lab, go to **github.com**, and log in to your account



1.2 Click on the + icon from the upper-right corner of the page and select **New repository** from the drop-down menu




1.3 Enter the **Repository name**, choose **Public**, and click on the **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 *

 simplilearn10 ▾


/

Repository name *


✔ projectfile is available.

Great repository names are short and memorable. Need inspiration? How about **probable-carnival** ?

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.

Add .gitignore


.gitignore template: None ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: None ▾

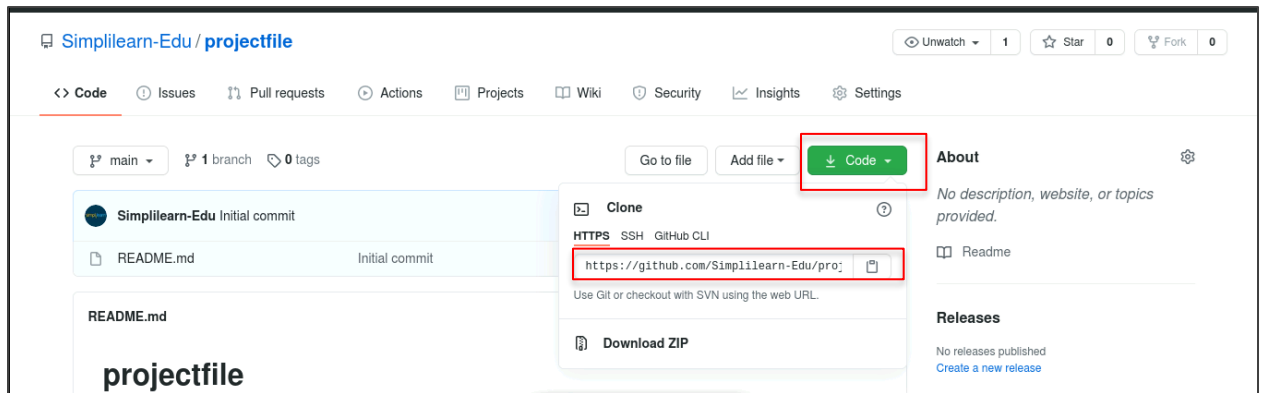
A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

 You are creating a public repository in your personal account.

Create repository

Step 2: Clone the GitHub repository

2.1 Open the **projectfile** repository, click on the **Code**, and copy the **HTTPS** URL



2.2 Open the terminal and run the following command to clone the repository:

git clone URL

```
root@ip-172-31-71-23:~$ git clone https://github.com/Simplilearn-Edu/projectfile.git
Cloning into 'projectfile'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
root@ip-172-31-71-23:~$
```

Note: Replace the URL with the copied URL from the repository

Step 3: List all the branches in your repository

2.1 Execute the below command to navigate to the **projectfile** folder and list all the branches in your repository:

cd projectfile

git branch

```
root@ip-172-31-71-23:~$ cd projectfile
root@ip-172-31-71-23:~/projectfile$ git branch
* main
root@ip-172-31-71-23:~/projectfile$
```

Step 4: Create a new branch and verify it

4.1 Run the following command to create a new branch in your repository and verify:

```
git branch new_branch
```

```
git branch
```

```
root@ip-172-31-71-23:~/projectfile$ git branch new_branch
root@ip-172-31-71-23:~/projectfile$ git branch
* main
  new_branch
root@ip-172-31-71-23:~/projectfile$
```

Step 5: Rename an existing branch

5.1 Use the following command to rename the new_branch and list the branches to verify the new name of the branch:

```
git branch -m new_branch1
```

```
git branch
```

```
root@ip-172-31-71-23:~/projectfile$ git branch -m new_branch1
root@ip-172-31-71-23:~/projectfile$ git branch
  new_branch
* new_branch1
root@ip-172-31-71-23:~/projectfile$
```

Step 6: Delete the branch and verify it

6.1 Use the following command to delete the newly created branch:

git branch -d new_branch

```
root@ip-172-31-71-23:~/projectfile$ git branch -d new_branch
Deleted branch new_branch (was d77a2b5).
root@ip-172-31-71-23:~/projectfile$
```

6.2 Use the following command to delete the newly created branch and verify:

git branch

```
root@ip-172-31-71-23:~/projectfile$ git branch
* new_branch1
root@ip-172-31-71-23:~/projectfile$
```

By following these steps, you have successfully created branches in Git to work on new features or fixes independently without affecting the main codebase.