

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

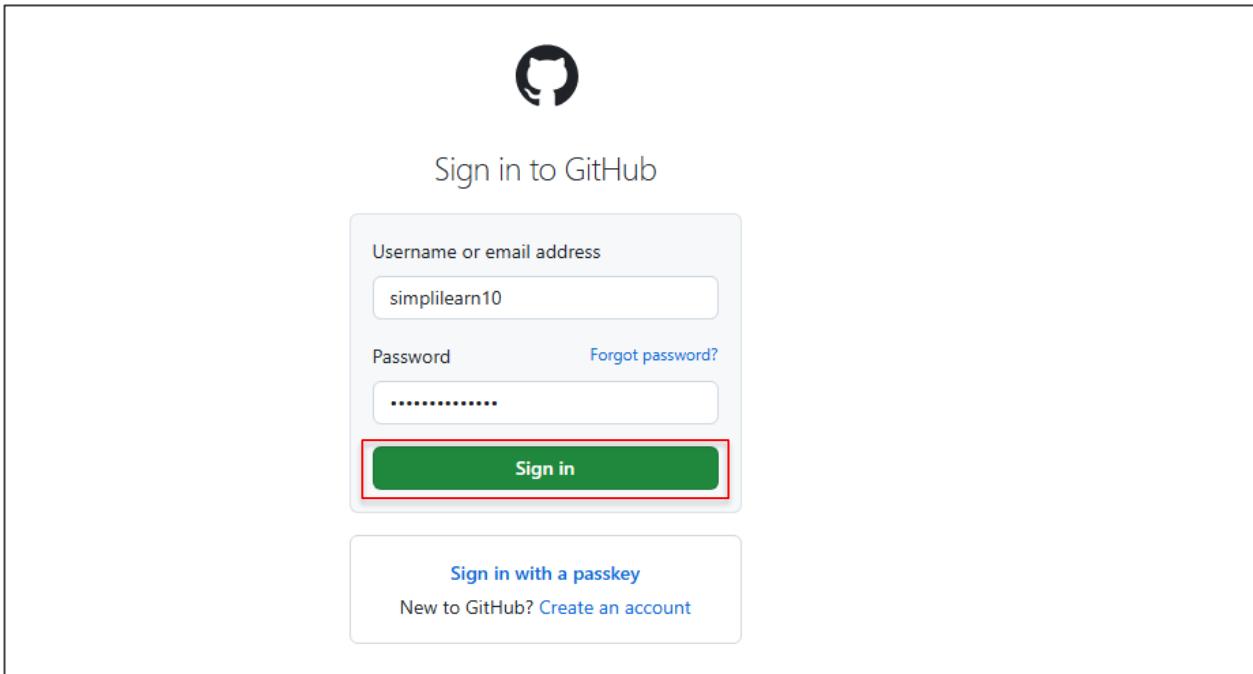
Tools required: Git

Steps to be followed:

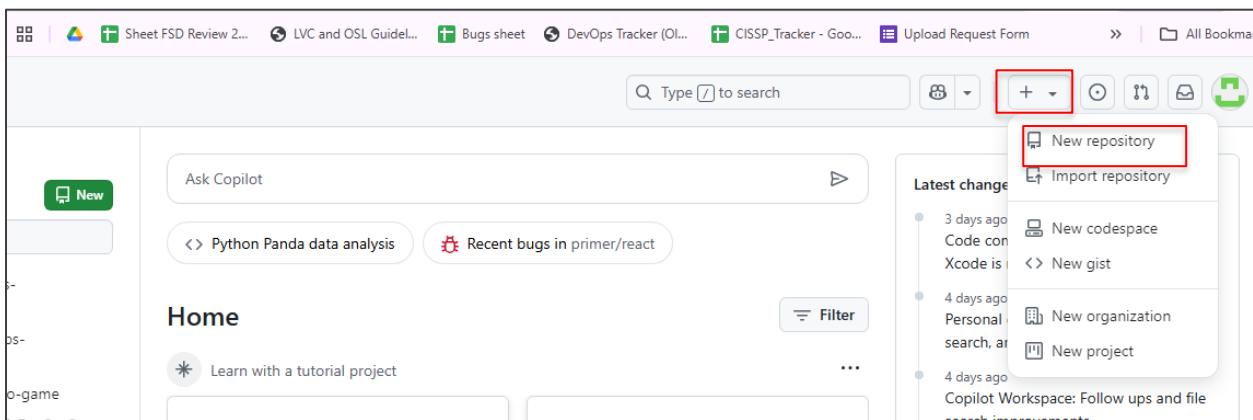
1. Create a new GitHub repository
2. Clone the GitHub repository
3. List all the branches in your repository
4. Create a new branch and verify it
5. Rename an existing branch
6. Delete the branch and verify it

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 * Repository name *

 simplilearn10 / projectfile

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](#)

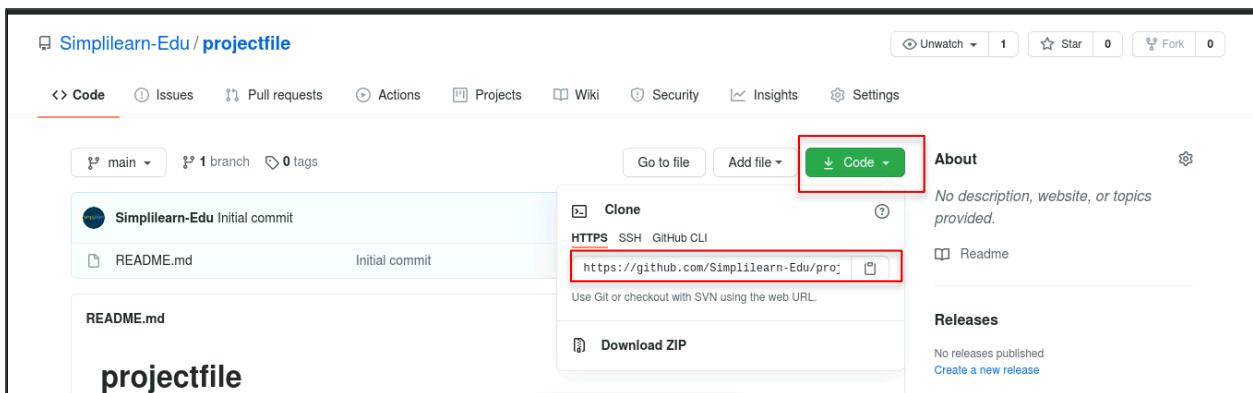
A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

 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

```
[user@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.
[user@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
```

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

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

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

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

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

```
git branch
```

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