

Lesson 02 Demo 04

Creating a Branch in Git

Objective: To create a branch in a Git repository to facilitate a collaborative and organized approach to software development

Tools required: Git and GitHub

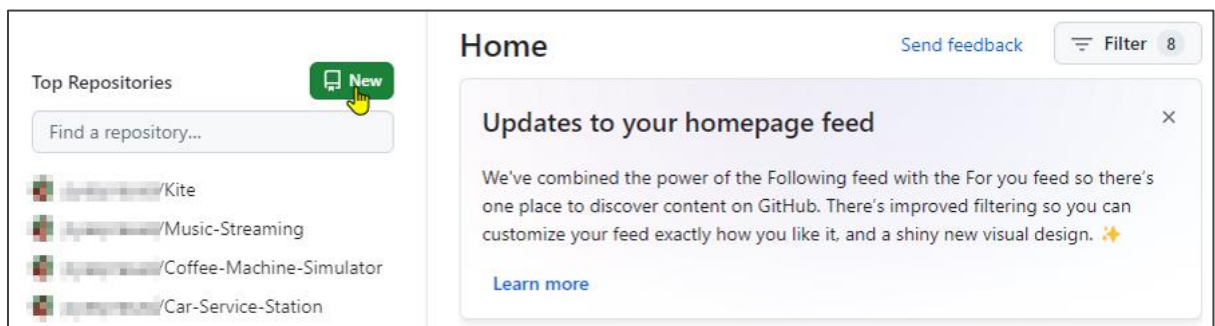
Prerequisites: You need to have Git installed to proceed with this demo.

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
5. Delete the branch

Step 1: Create a new GitHub repository

- 1.1 Click on the **New** button to create a new repository




1.2 Enter the repository name and description, then click on the **Create repository** button

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 *


✔ Your new repository will be created as lesson-end-project.
The repository name can only contain ASCII letters, digits, and the characters ., -, and _.


Great repository names are short and memorable. Need inspiration? How about **fuzzy-giggle** ?

Description (optional)

License: None ▾

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

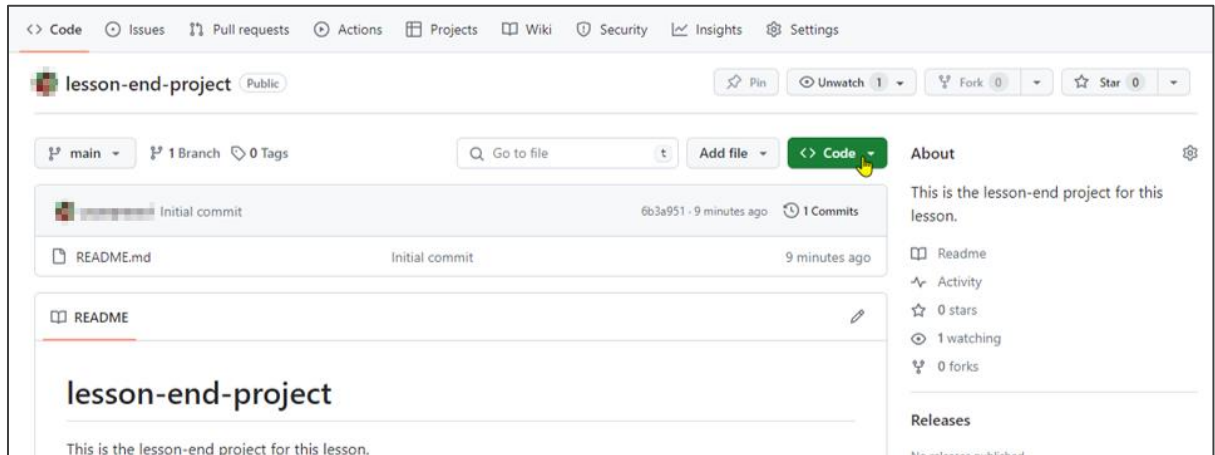
This will set  main as the default branch. Change the default name in your [settings](#).

 You are creating a public repository in your personal account.

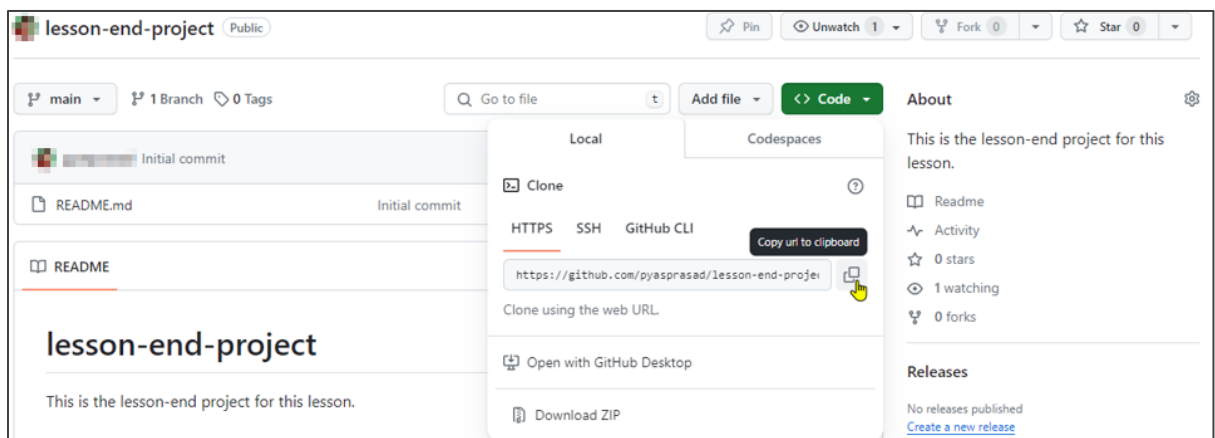
Create repository

Step 2: Clone the GitHub repository

2.1 Open the created GitHub repository and click on the **Code** button



2.2 Click on the copy icon to copy the **HTTPS URL** as shown below:



2.3 Open the terminal tab on your lab and use the following command to clone the repository:

git clone <URL>

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu$ git clone https://github.com/pyasprasad/lesson-end-project.git
Cloning into 'lesson-end-project'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 0), reused 3 (delta 0), pack-reused 0
Receiving objects: 100% (6/6), done.
priyanshurajsim@ip-172-31-28-201:~/Priyanshu$
```

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

Step

3: List all the branches in your repository

- 3.1 Navigate to the cloned repository using the following command:
cd lesson-end-project

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu$ cd lesson-end-project
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$
```

- 3.2 Run the following command to display all repository branches:
git branch

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$ git branch
* main
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$
```

Step 4: Create a new branch

- 4.1 Run the following command to create a new branch named **dev** in your repository:
git branch dev

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$ git branch dev
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$
```

- 4.2 Execute the following command to verify the branch creation:
git branch

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$ git branch
dev
* main
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$
```

Step 5: Delete the branch

5.1 Run the given command to delete the recently created branch:

git branch -d dev

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$ git branch -d dev
Deleted branch dev (was 1e3e4e7).
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$
```

5.2 Execute the following command to verify the deletion of the branch:

git branch

```
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$ git branch
* main
priyanshurajsim@ip-172-31-28-201:~/Priyanshu/lesson-end-project$
```

By following these steps, you have successfully created a branch in a Git repository to facilitate a collaborative and organized approach to software development.