# 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

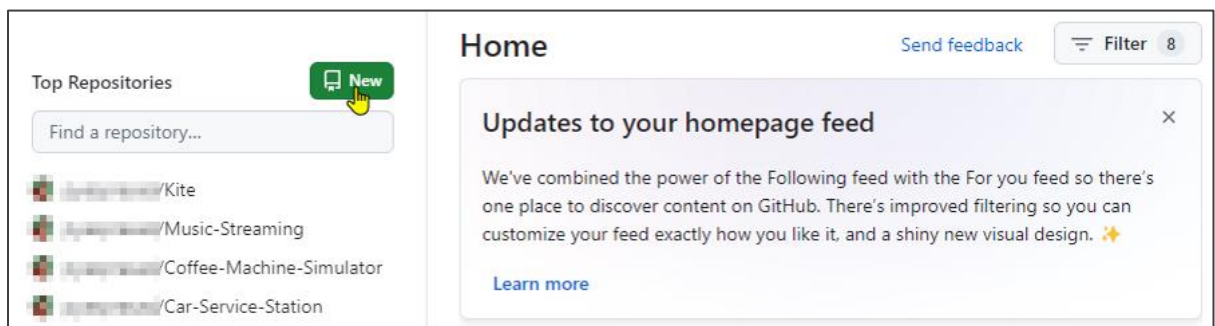**Tools required:** Git and GitHub

**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

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

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## Step 2: Clone the GitHub repository

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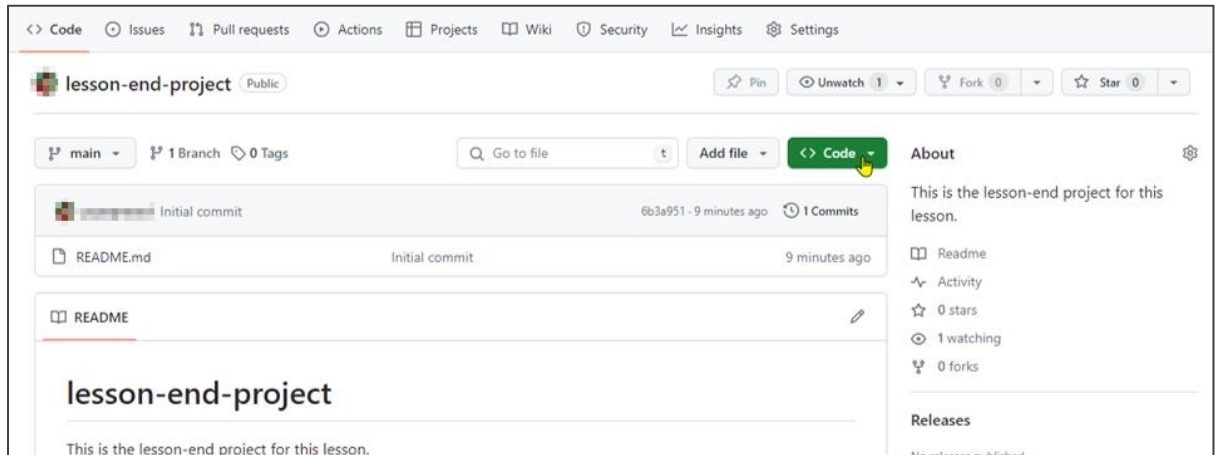


2.2 Click on the copy icon to copy the **HTTPS URL** as shown below:
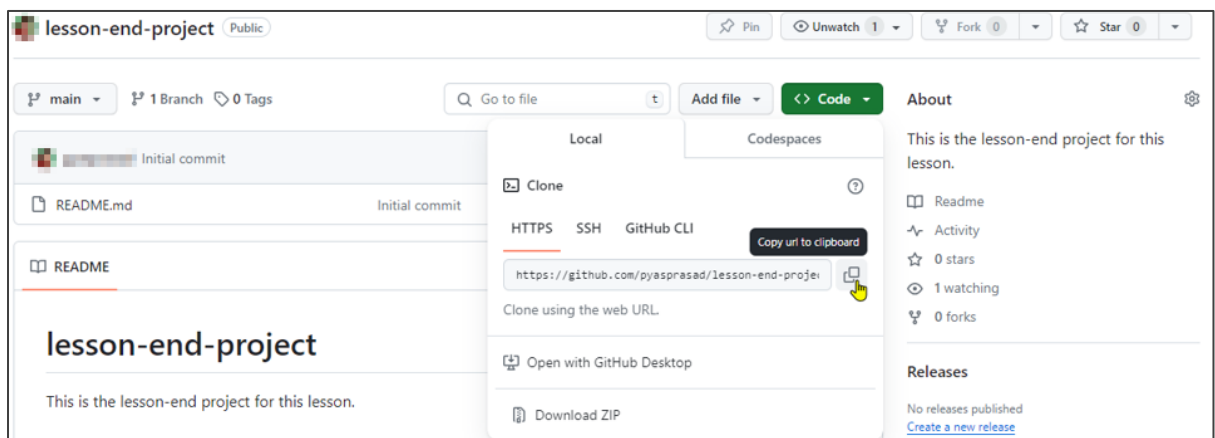


2.3 Open the terminal tab on your lab and use the following command to clone the repository:
**git clone <URL>**

```
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$
```

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## 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.