

Lesson 02 Demo 01

Creating and Cloning a GitHub Repository

Objective: To create and clone a GitHub repository for understanding the fundamentals of repository management and version control using Git and GitHub

Tools required: Git and GitHub

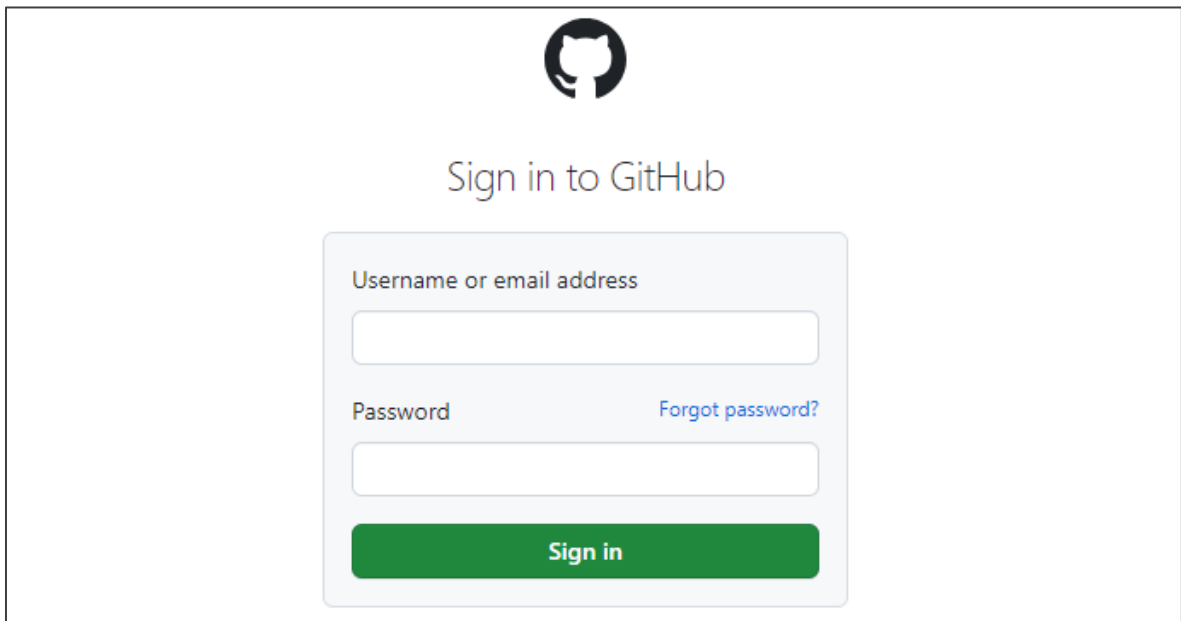
Prerequisites: You need to have Git installed and a GitHub account to proceed with this demo.

Steps to be followed:

1. Create a new GitHub repository
2. Clone the GitHub repository

Step 1: Create a new GitHub repository

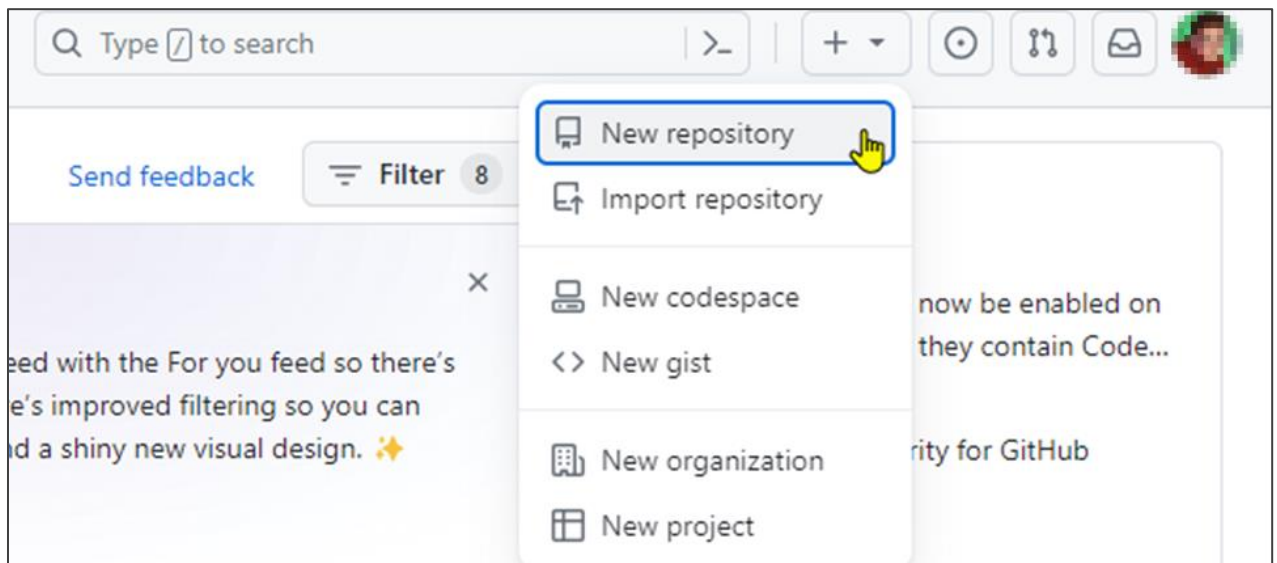
1.1 Open the browser in your lab, go to **github.com**, and log in to your account

The image shows the GitHub sign-in page. At the top center is the GitHub logo (Octocat). Below it, the text "Sign in to GitHub" is displayed. Underneath is a light gray rounded rectangle containing the login form. The form has two input fields: the first is labeled "Username or email address" and the second is labeled "Password". To the right of the password field is a blue link that says "Forgot password?". At the bottom of the form is a green button with the text "Sign in" in white.

Note: If you do not have a GitHub account, visit the official website at <https://github.com/signup> and create a new account

1.2 C

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

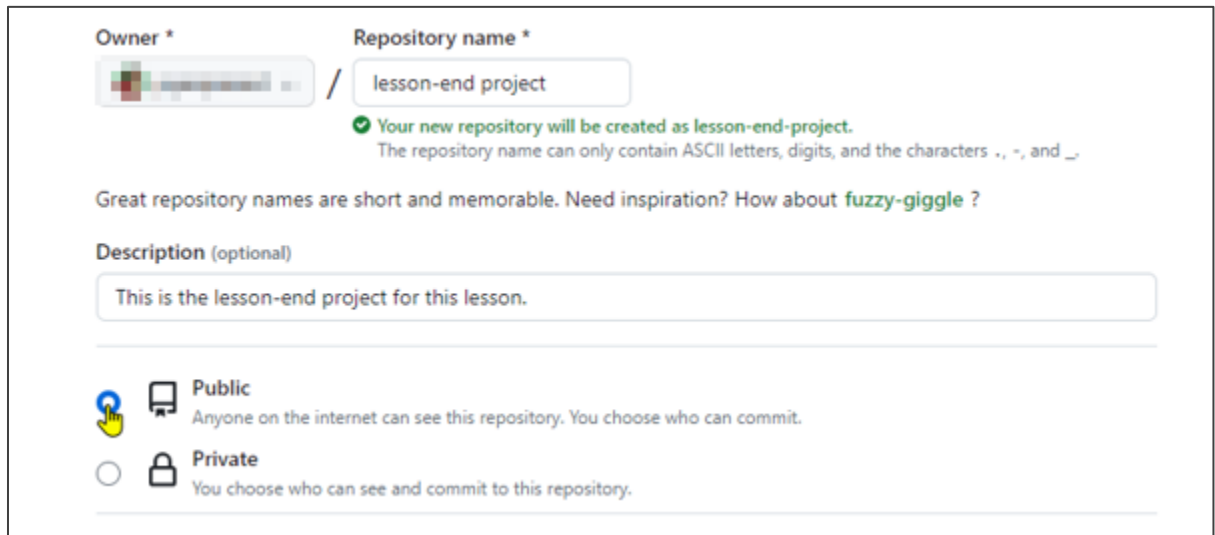


1.3 Enter the **Repository name** and **Description** as shown below:

A screenshot of the 'Create a new repository' form on GitHub. The title is 'Create a new repository'. Below it is a subtitle: 'A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)'. A note says 'Required fields are marked with an asterisk (*)'. There are two main fields: 'Owner *' with a dropdown menu showing a user profile, and 'Repository name *' with a text input containing 'lesson-end project'. Below the repository name field, there is a green checkmark icon and text: 'Your new repository will be created as lesson-end-project. The repository name can only contain ASCII letters, digits, and the characters ., -, and _.' Below this is a suggestion: 'Great repository names are short and memorable. Need inspiration? How about fuzzy-giggle?'. At the bottom, there is a 'Description (optional)' field with a text input containing 'This is the lesson-end project for this lesson.'.

Note: The repository name and description may differ from those shown in the screenshot.

1.4 Choose **Public** for the repository type





Owner * / Repository name * lesson-end project

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

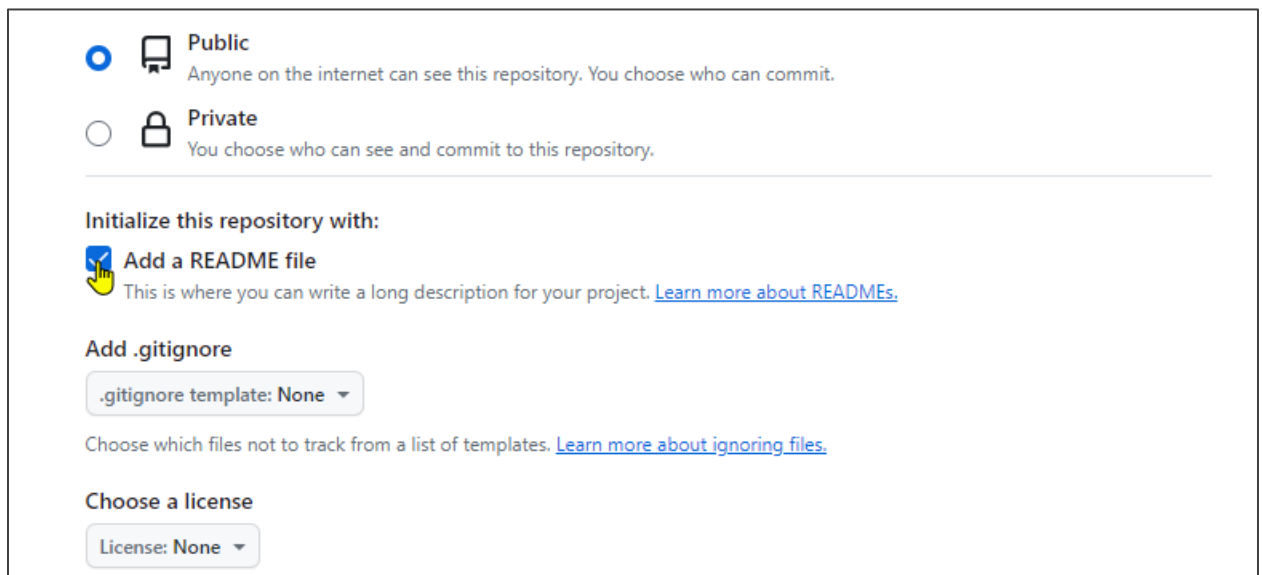
Great repository names are short and memorable. Need inspiration? How about [fuzzy-giggle](#) ?


Description (optional)
This is the lesson-end project for this lesson.


☒  **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.


1.5 Select **Add a README file** option to include a README file for the repository



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

Choose a license
License: None ▾

1.6 Click on the **Create repository** button


Initialize this repository with:

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

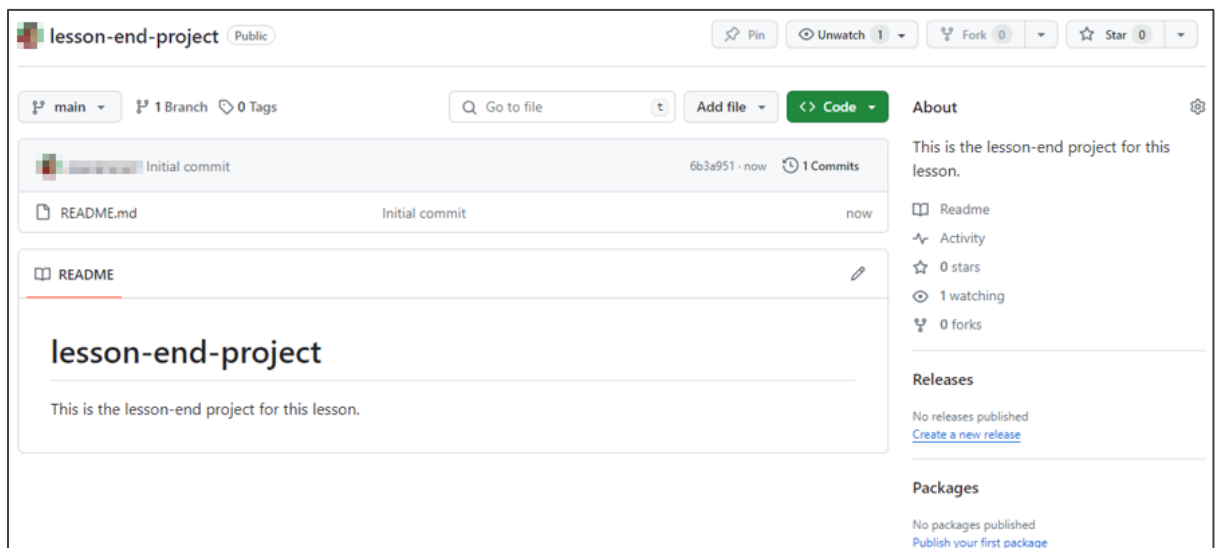
Add .gitignore
.gitignore template: **None** ▾
Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license
License: **None** ▾
A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

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.

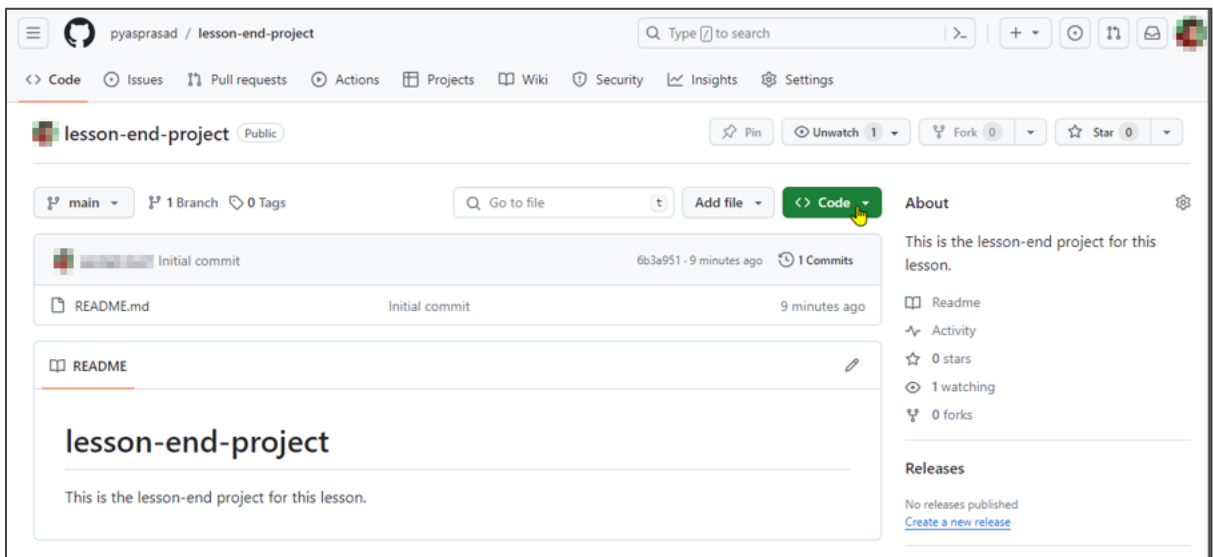
Create repository



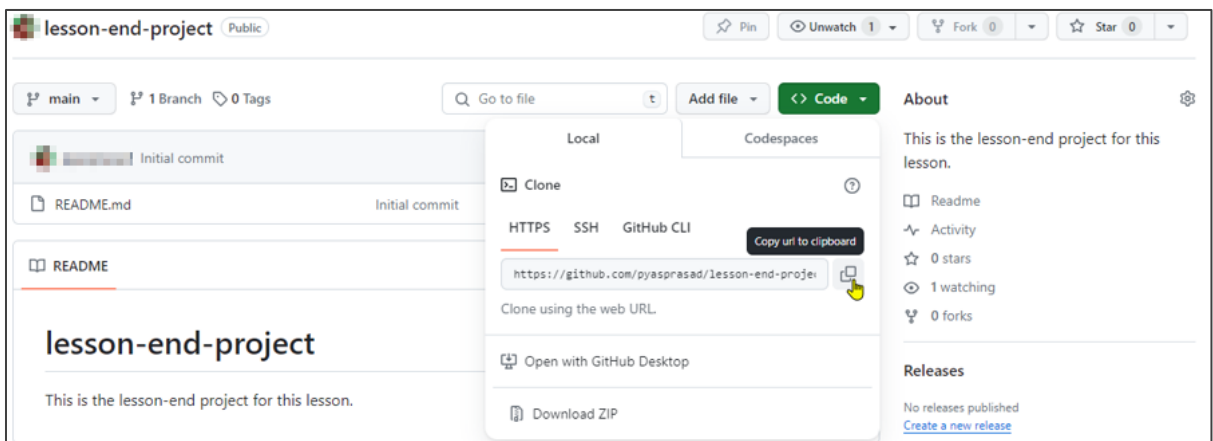
The remote GitHub repository is created.

Step 2: Clone the GitHub repository

2.1 Open the created 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:~/Pyas$ git clone https://github.com/pyasprasad/lesson-end-project.git
Cloning into 'lesson-end-project'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
priyanshurajsim@ip-172-31-28-201:~/Pyas$
```

Note: Replace the URL in the command with the copied **HTTPS URL** from the GitHub repository

By following these steps, you have successfully created and cloned a GitHub repository for understanding the fundamentals of repository management and version control using Git and GitHub.