

## Lesson 01 Demo 01

### Creating and Cloning a GitHub Repository

**Objective:** To create and clone a GitHub repository for managing, tracking, and collaborating on code efficiently

**Prerequisite:** GitHub Account

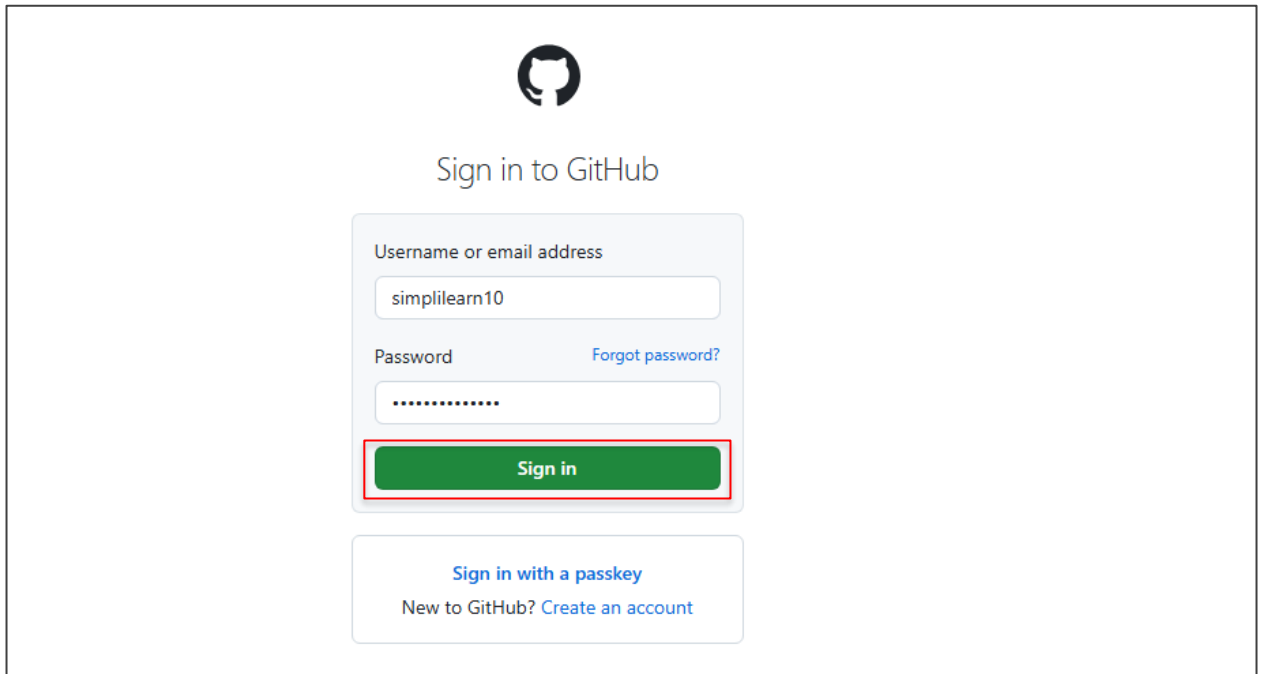
**Tools required:** Git

Steps to be followed:

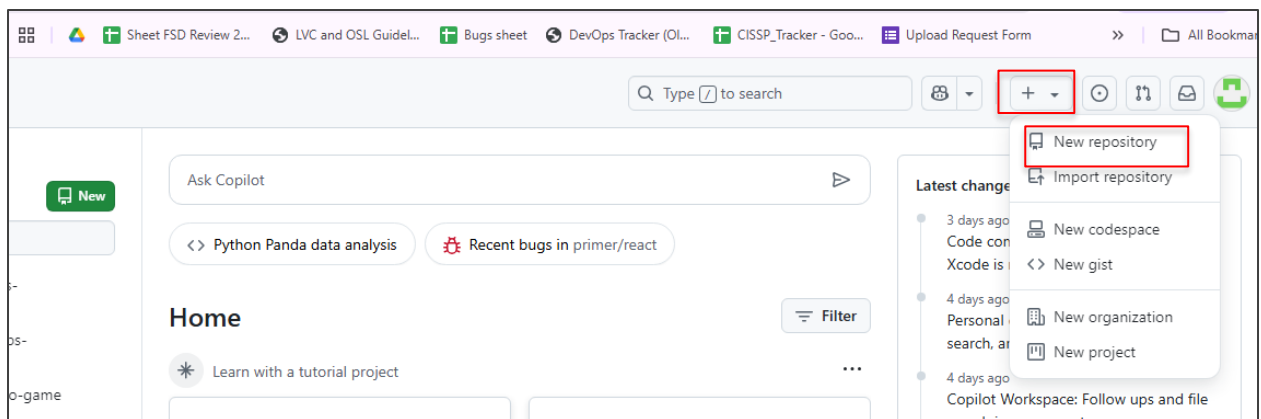
1. Create a new GitHub repository
2. Edit the README file
3. Create a file in the repository
4. Clone the GitHub repository

## 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




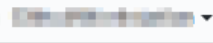
- 1.3 Enter the **Repository name**, choose **Public**, select **Initialize this repository with a README**, and click on the **Create repository** button

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

---

Owner \*

/

Repository name \*

sample repository


✓

Great repository names are short and [easy to remember](#). Your new repository will be created as `sample-repository`. [s-doodle?](#)


Description (optional)

This is a sample 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:

Skip this step if you're importing an existing repository.

☒ **Add a README file**


This is where you can write a long description for your project. [Learn more.](#)

☐ **Add .gitignore**

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

☐ **Choose a license**

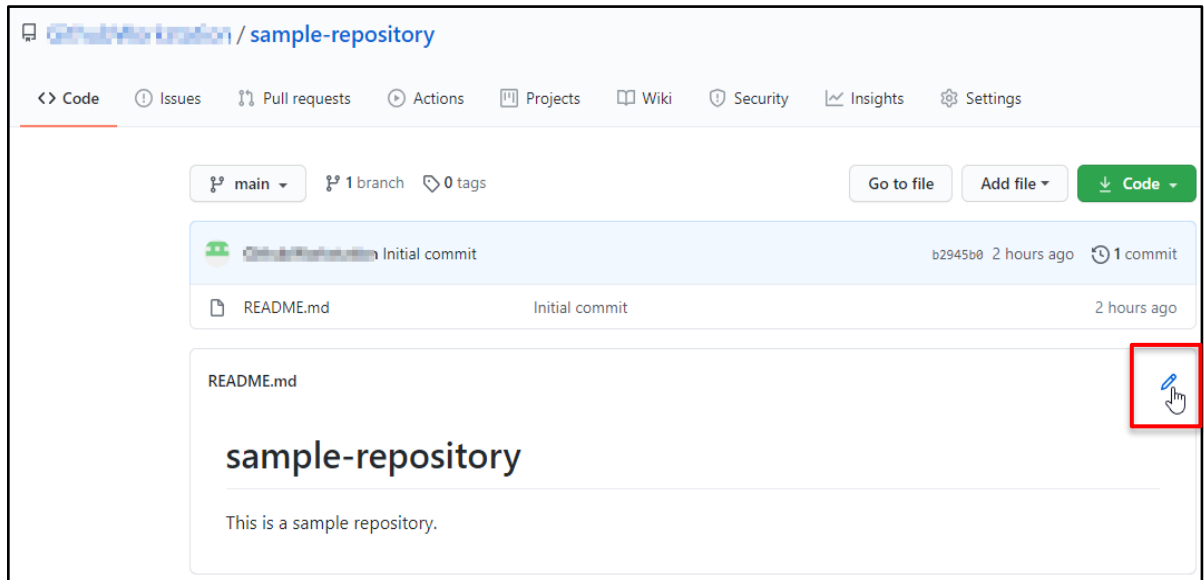
A license tells others what they can and can't do with your code. [Learn more.](#)

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

Create repository

## Step 2: Edit the README file

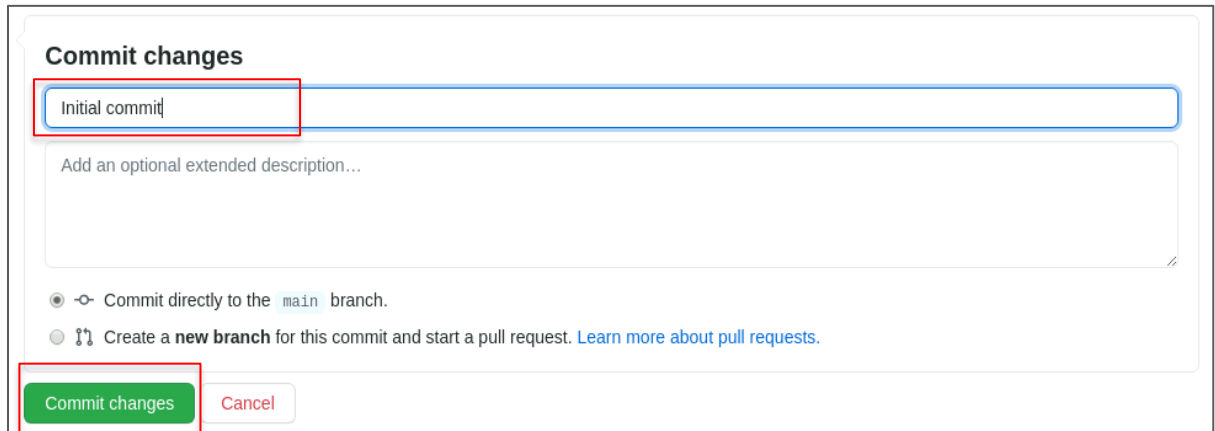
### 1.1 Click on the Edit icon to edit the README.md file



### 1.1 Add some text in the README file (Example: **We have edited the README file.**)



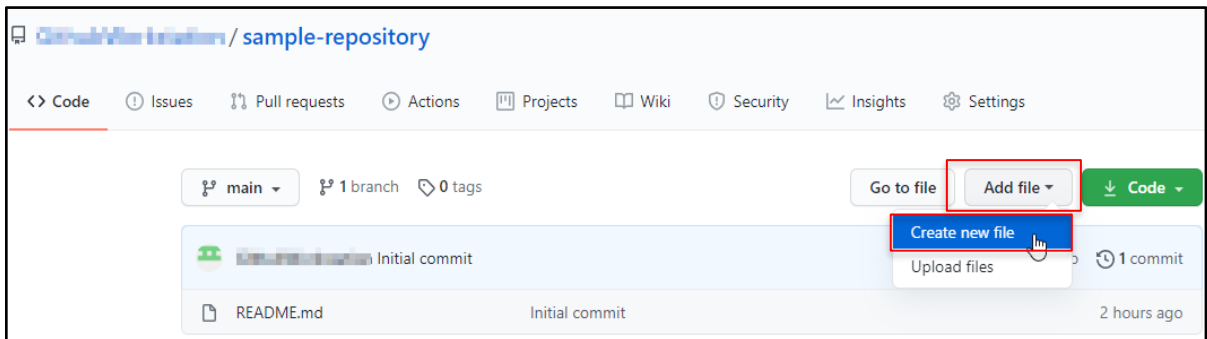
## 2.3 Type a commit message to describe the changes made in the file, and then click on **Commit changes**



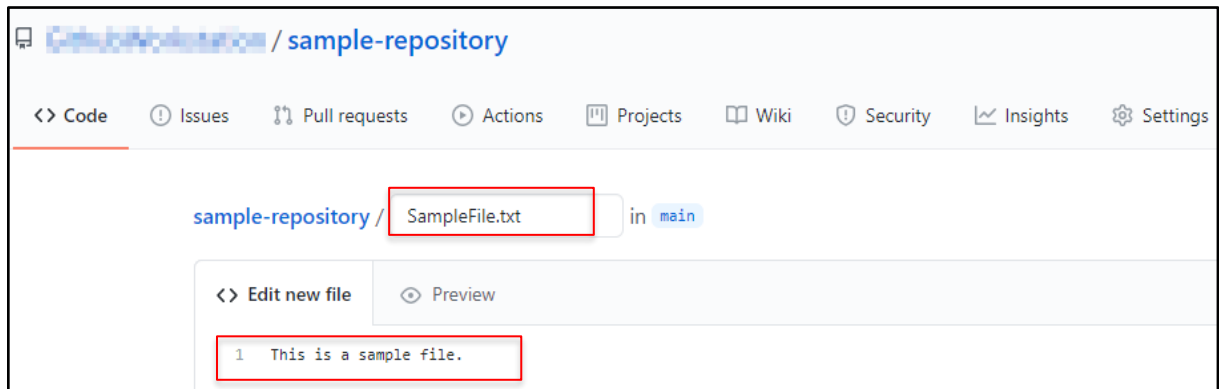
The screenshot shows the 'Commit changes' dialog box in GitHub. At the top, the title 'Commit changes' is displayed. Below it is a text input field containing 'Initial commit', which is highlighted with a red rectangle. Underneath the input field is a larger text area for an optional extended description. Below the description area are two radio button options: 'Commit directly to the main branch.' (selected) and 'Create a new branch for this commit and start a pull request. Learn more about pull requests.' At the bottom of the dialog, there are two buttons: a green 'Commit changes' button and a grey 'Cancel' button, both highlighted with red rectangles.

## Step 3: Create a file in the repository

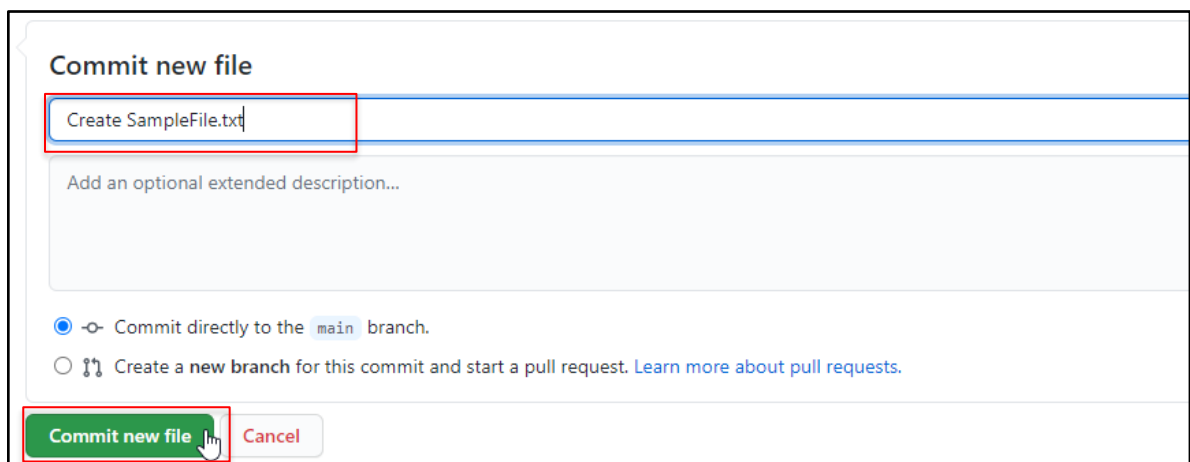
### 3.1 Navigate to your GitHub repository, click on **Add file**, and then select **Create new file**



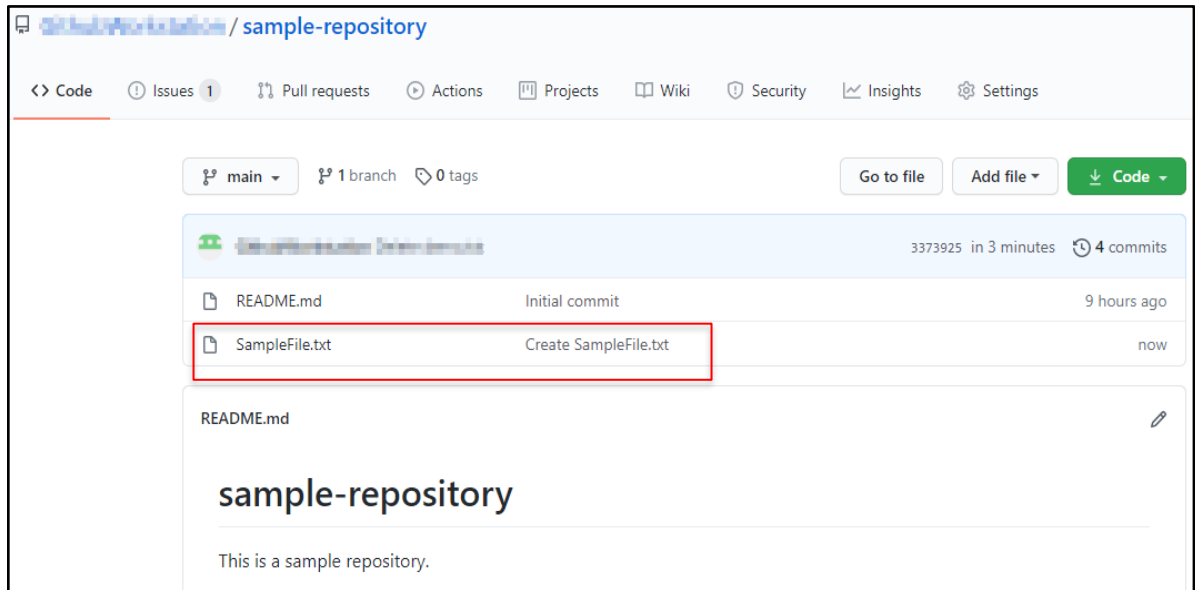
3.2 Enter the filename as **SampleFile.txt** and add the following text in the **Edit new file** tab.  
This is a sample file.



3.3 Next, scroll down to the **Commit new file** section. Write a commit message as **Create SampleFile.txt** and click on the **Commit new file**.

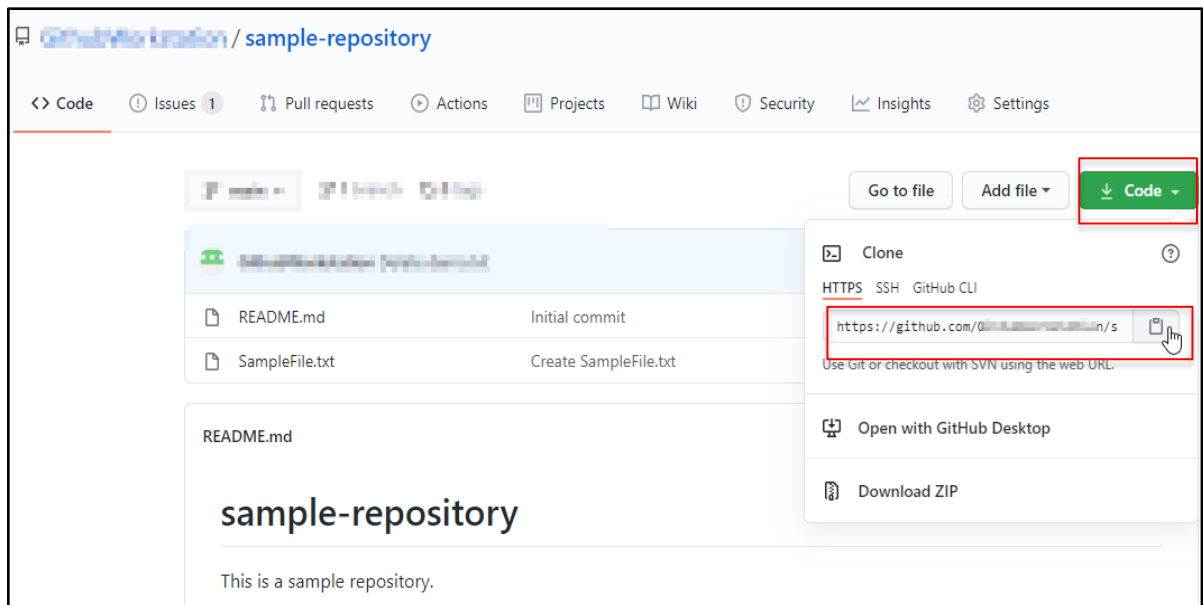


### 3.4 Check the newly added file with the commit message



## Step 4: Clone the GitHub repository

### 4.1 Open the **sample-repository** repo, click on the **Code**, and copy the HTTPS URL



4.2 Open the **Terminal** tab on your lab and use the following command to clone the repository:

**git clone URL**

```
manikumarsimpli@ip-172-31-71-23:~$ git clone https://github.com/GithubWorkstation/sample-repository.git
Cloning into 'sample-repository'...
remote: Enumerating objects: 15, done.
remote: Counting objects: 100% (15/15), done.
remote: Compressing objects: 100% (11/11), done.
remote: Total 15 (delta 1), reused 15 (delta 1), pack-reused 0
Receiving objects: 100% (15/15), done.
Resolving deltas: 100% (1/1), done.
manikumarsimpli@ip-172-31-71-23:~$
```

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

4.3 Use the following command to check the cloned repository:

**ls**

```
manikumarsimpli@ip-172-31-71-23:~$ ls
Desktop  Downloads  New_Folder  Public      Videos      nagiosxi      test.txt      xampp-cli-master
Documents Music      Pictures    Templates   master.zip   sample-repository  thinclient_drives  xi-5.8.4.tar.gz
manikumarsimpli@ip-172-31-71-23:~$
```

4.4 Execute the below commands to navigate to the sample-repository and check the files inside the repository:

**cd sample-repository**

**ls**

```
manikumarsimpli@ip-172-31-71-23:~$ cd sample-repository
manikumarsimpli@ip-172-31-71-23:~/sample-repository$ ls
Merging  README.md  demo.txt
manikumarsimpli@ip-172-31-71-23:~/sample-repository$
```

By following these steps, you have successfully created and cloned a GitHub repository to manage, track, and collaborate on code efficiently.