Lesson 04 Demo 01

Creating and Cloning a GitHub Repository

Objective: To create and clone a GitHub repository for testing and debugging

Tools required: GitHub

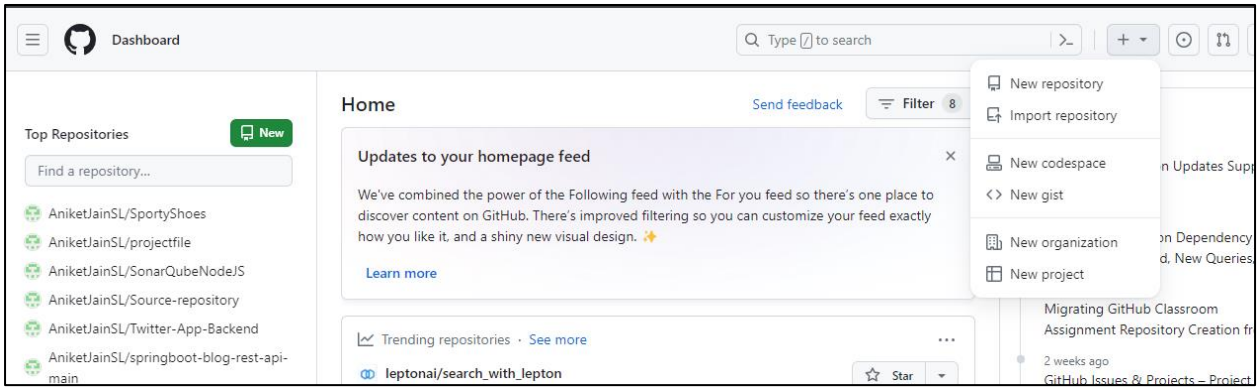
Prerequisite: Make sure you have a GitHub Account available. If not, please create one using the given link: **https://github.com/join?ref_cta=Sign+up&ref_loc=header+logged+out&ref_page=%2F&source=header-home**

Steps to be followed:

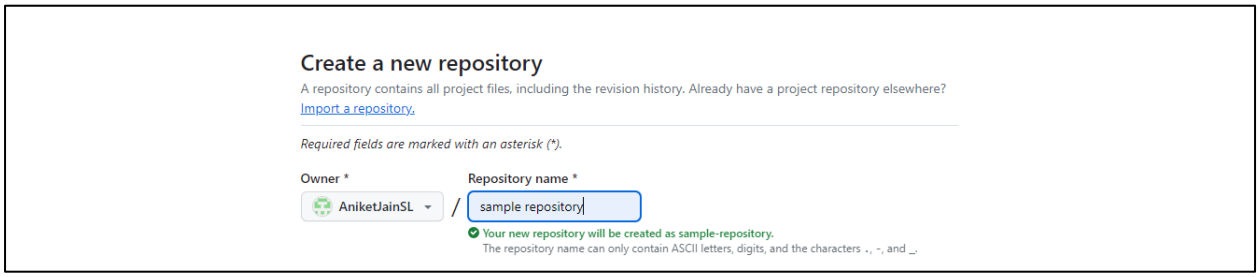
1. Create a new GitHub repository
2. Edit the README file
3. Upload a file to the repository
4. Clone the GitHub repository

Step 1: Create a new GitHub repository

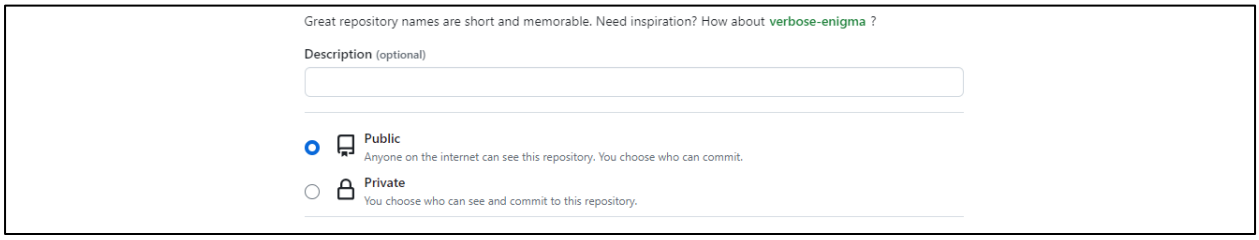
1.1 Open a browser in your lab, go to **github.com,** log in to your account, then click on the **+** icon from the upper-right corner of the page, and select **New repository** from the drop-down menu



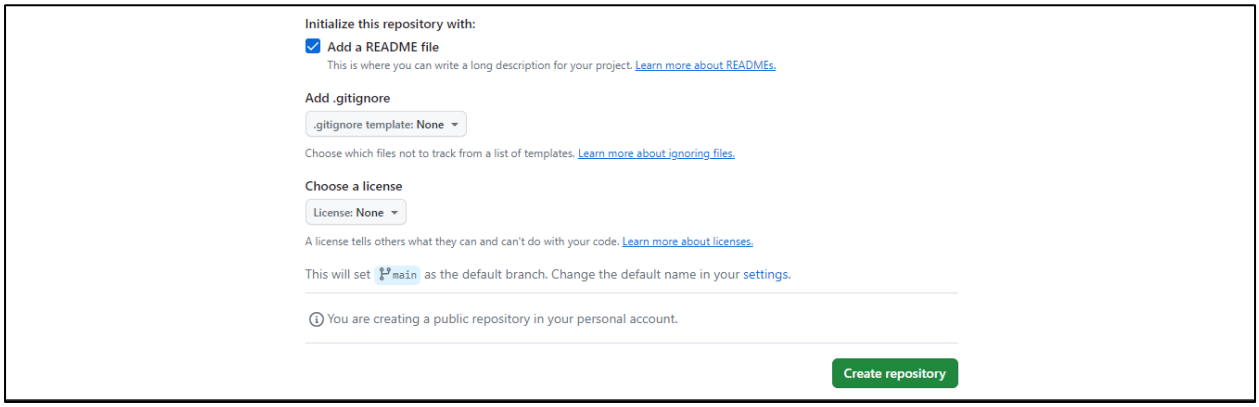
1.2 Enter **sample repository** as repository name inside field **Repository name.** Entering a **Description** is optional.



1.3 Choose **Public** for the repository type

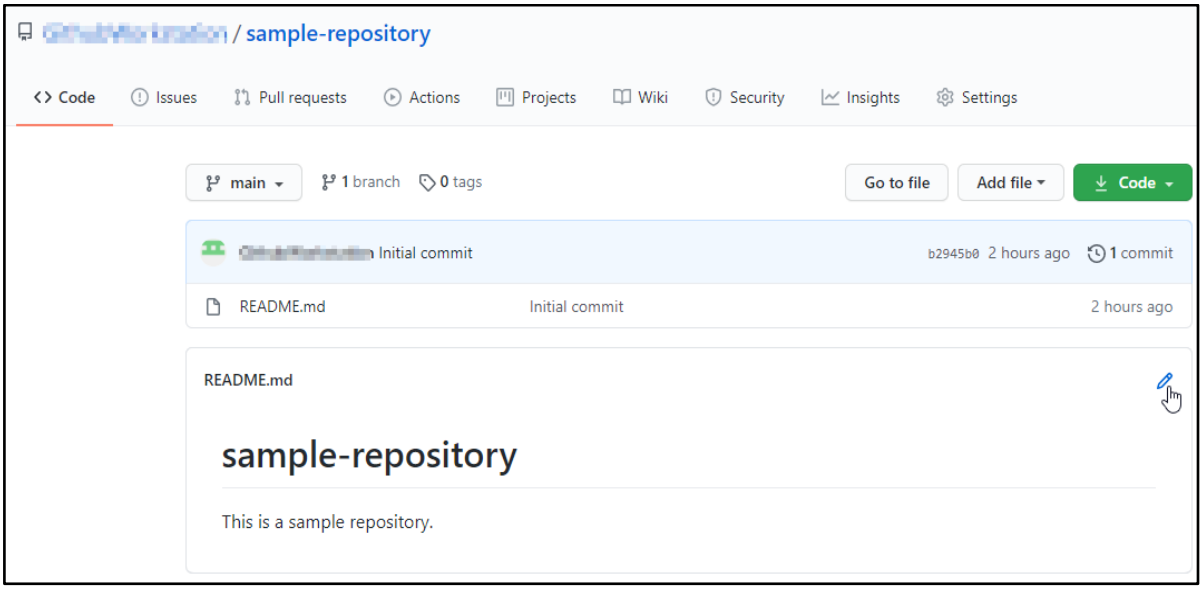


1.4 Select **Initialize this repository with a README** to include a README file for the repository and click on the **Create repository** button



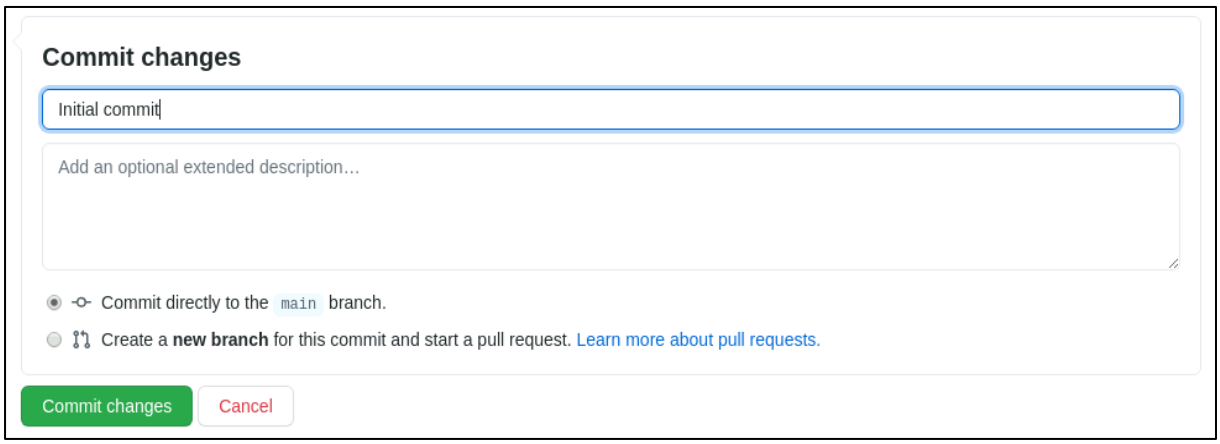
Step 2: Edit the README file

2.1 Click on the **Edit** button to edit the README file



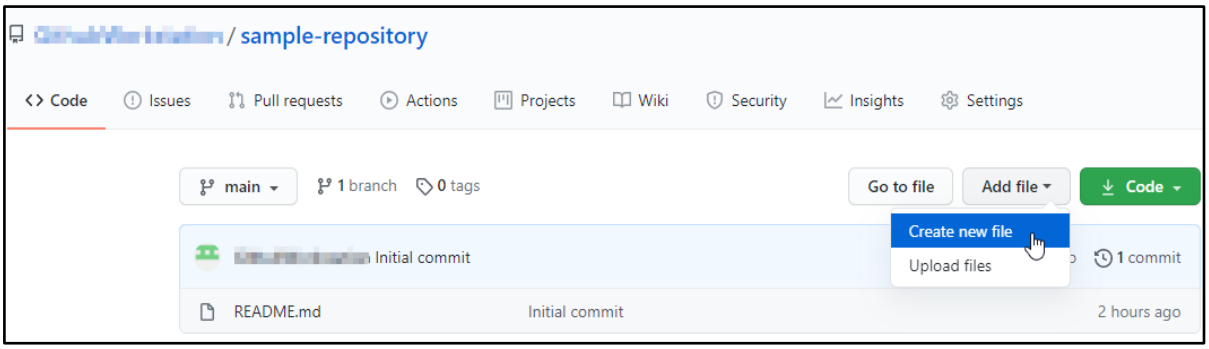
2.2 Add some text in the README file (Example: We have edited the README file.)

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

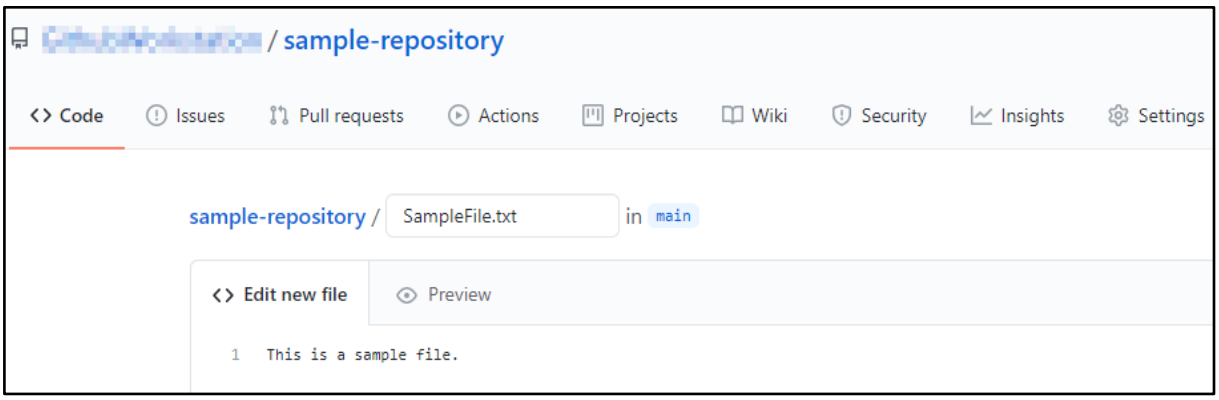


Step 3: Upload a file to the repository

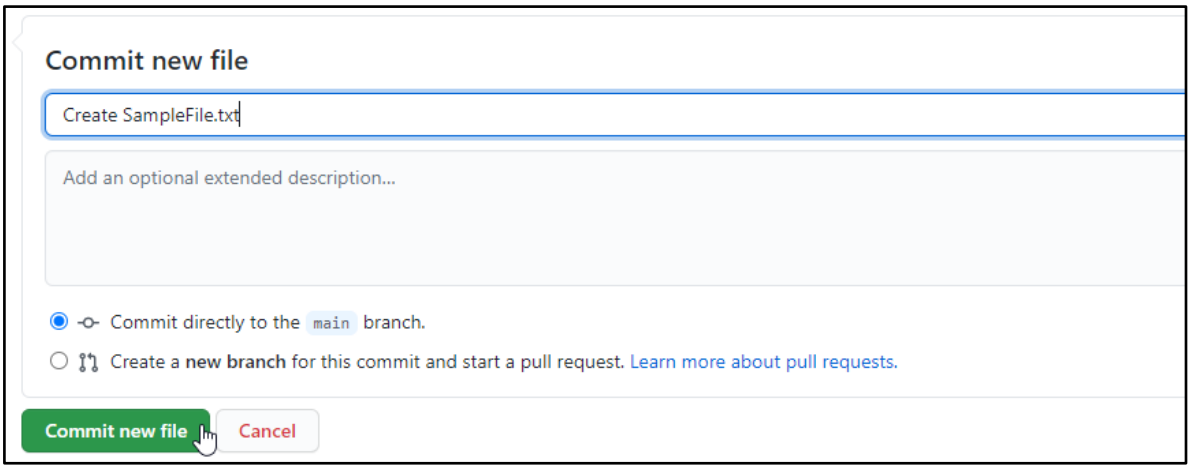
3.1 Go to your GitHub repository; click on **Add file** and select **Create new file** to add new file to repository



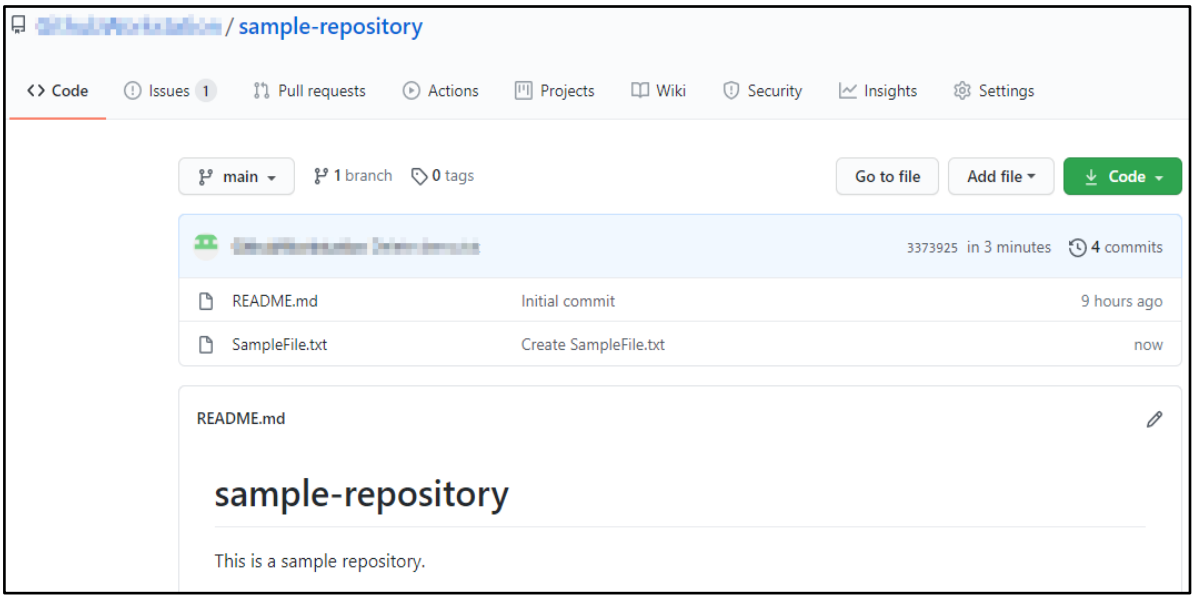
3.2 Enter the filename as **SampleFile.txt** and add the following text in the **Edit new file** tab:
This is a sample file.



3.3 Next, scroll down to the **Commit new File** section, type a commit message (**Example:** Create SampleFile.txt), and click on the **Commit new file** button

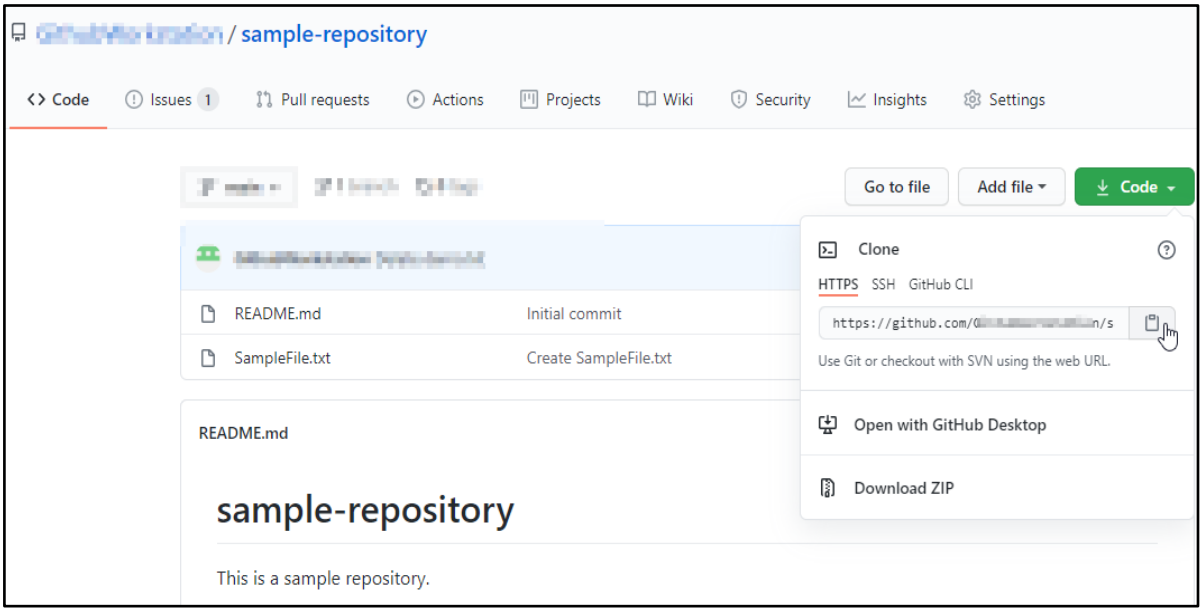


3.4 Check the newly added file with the commit message



Step 4: Clone the GitHub repository

4.1 Open the **sample-repository** repo, and click on the **Code** button to copy the URL provided under **HTTPS**



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

git clone URL

```
[redacted]@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.
[redacted]@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 Navigate to the **sample-repository** and check the files inside the repository by using the following commands:

cd sample-repository

ls

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

By following these steps, you have successfully created and cloned a GitHub repository allowing you to make changes, contribute, and collaborate with other projects.