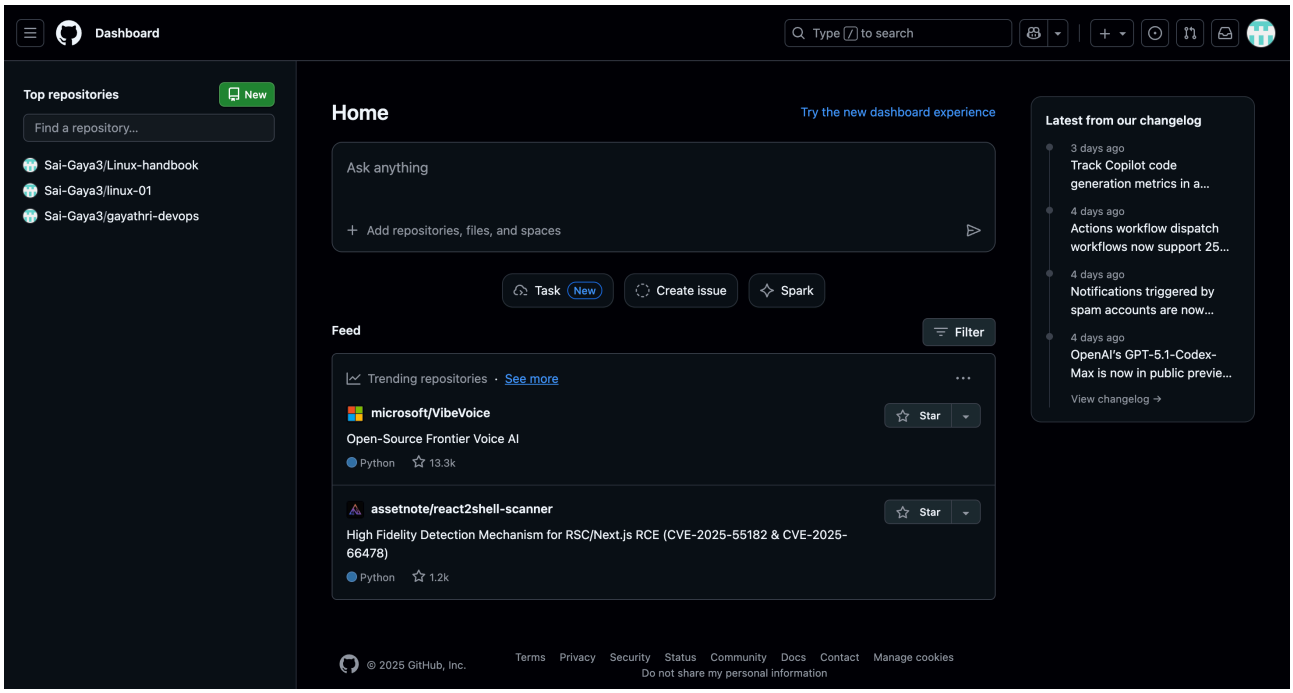
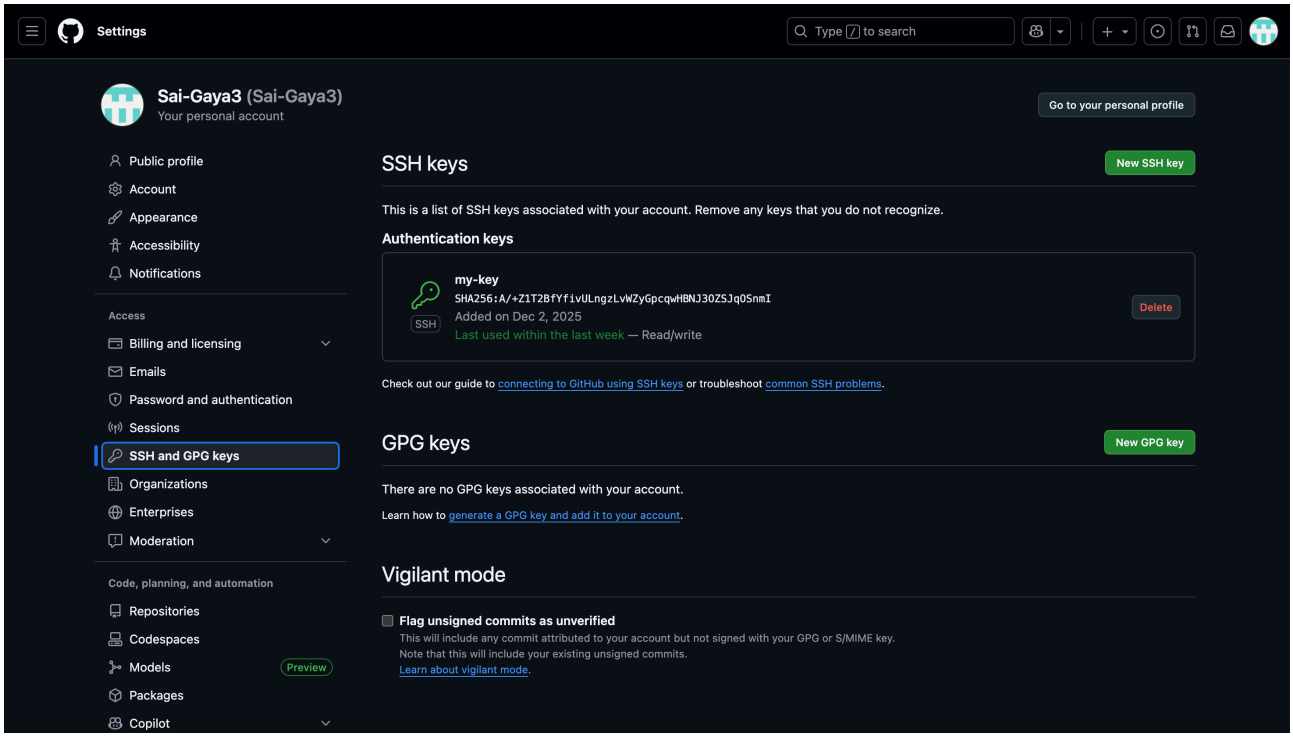
GIT & GITHUB - 1

1. Create a GitHub account.

>> created Github account



2. Key generated using ssh-keygen for ssh



3. Executing all the commands from video

```
sainiharikagundu@192 ~ % mkdir gaya3
sainiharikagundu@192 ~ % cd gaya3
sainiharikagundu@192 gaya3 % git status
warning: could not open directory 'Music/Music/': Operation not permitted
warning: could not open directory '.Trash/': Operation not permitted
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        ../.CFUserTextEncoding
        ../.DS_Store
        ../.bash_history
        ../.config/
        ../.ipython/
        ../.mysql_history
        ../.ssh/
        ../.viminfo
        ../.vscode/
        ../.zprofile
        ../.zsh_history
        ../.zsh_sessions/
        ../Applications/
        ../Desktop/
        ../Documents/
        ../Downloads/
        ../Library/
        ../Linux-handbook/
        ../Movies/
        ../Music/
        ../Pictures/
        ../Public/
        ../PyCharmMiscProject/
        ../PycharmProjects/
        ../gaya3_file
        ../jcef_1893.log
        ../jcef_7615.log
        ../marks.txt
        ../peopele.file
        ../peopele.txt
        ../people.file
        ../people.txt
        ../techie.f
        ../test.file


It took 16.52 seconds to enumerate untracked files.
See 'git help status' for information on how to improve this.

nothing added to commit but untracked files present (use "git add" to track)
```

>> Here, “git init” command is used to create a new Git repository in our current directory

```
sainiharikagundu@192 gaya3 % git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: will change to "main" in Git 3.0. To configure the initial branch name
hint: to use in all of your new repositories, which will suppress this warning,
hint: call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
hint:
hint: Disable this message with "git config set advice.defaultBranchName false"
Initialized empty Git repository in /Users/sainiharikagundu/gaya3/.git/
sainiharikagundu@192 gaya3 %
```

>> Here, ls -a to check the repository exist or not because it is hidden

```
[sainiharikagundu@192 gaya3 %
[sainiharikagundu@192 gaya3 % ls -a
.       ..      .git
[sainiharikagundu@192 gaya3 % ls -alF
total 0
drwxr-xr-x   3 sainiharikagundu  staff    96  8 Dec 18:55 ./
drwxr-x---+ 40 sainiharikagundu  staff  1280  8 Dec 18:53 ../
drwxr-xr-x   9 sainiharikagundu  staff   288  8 Dec 18:55 .git/
sainiharikagundu@192 gaya3 %
```

>> Here, we have created a file “Dockerfile” by using “touch” command in our new repository and checked whether the file got added by using “git status” it is not added so, the command “git add <filename>” will help you to add the file. To add multiple files we need to use “git add .”

git add <filename> = will add the single file
git add . = will add the multiple files
git status = will show you the status

```
[sainiharikagundu@192 gaya3 % touch dockerfile
[sainiharikagundu@192 gaya3 % git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        dockerfile

nothing added to commit but untracked files present (use "git add" to track)
[sainiharikagundu@192 gaya3 % git add dockerfile
[sainiharikagundu@192 gaya3 % git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   dockerfile

sainiharikagundu@192 gaya3 %
```

```
[sainiharikagundu@192 gaya3 % git status
 On branch master

 No commits yet

 Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
         new file:   dockerfile

[sainiharikagundu@192 gaya3 % touch a b c d
[sainiharikagundu@192 gaya3 % git status
 On branch master

 No commits yet

 Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
         new file:   dockerfile

 Untracked files:
   (use "git add <file>..." to include in what will be committed)
         a
         b
         c
         d

[sainiharikagundu@192 gaya3 % git add .
[sainiharikagundu@192 gaya3 % git status
 On branch master

 No commits yet

 Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
         new file:   a
         new file:   b
         new file:   c
         new file:   d
         new file:   dockerfile

 sainiharikagundu@192 gaya3 %
```

```
[sainiharikagundu@192 gaya3 % git commit -m "added some files"
 On branch main
 Your branch is up to date with 'origin/main'.

 nothing to commit, working tree clean
 sainiharikagundu@192 gaya3 %
```

List of git commands

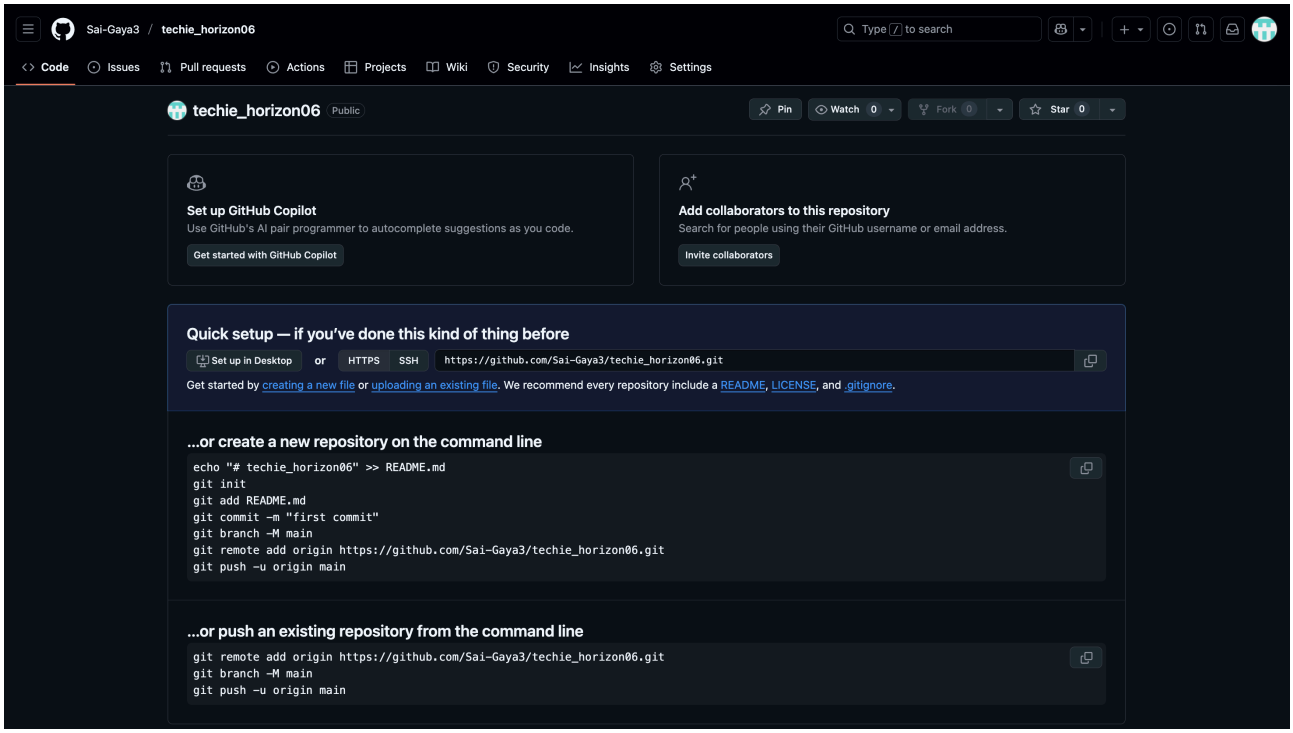
...or create a new repository on the command line

```
echo "# techie_horizon06" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/Sai-Gaya3/techie_horizon06.git
git push -u origin main
```

...or push an existing repository from the command line

```
git remote add origin https://github.com/Sai-Gaya3/techie_horizon06.git
git branch -M main
git push -u origin main
```

>> Here, We have created a repository in our GitHub account and copied the ssh key remote



>> The command “git remote -v” will show the remote repositories linked to your local Git project.

>> git remote add origin (ssh url paste here) / git remote set-url origin

>> The command git remote add origin will to link your local Git repository to a remote repository.

>> we have linked to our repository

```
[sainiharikagundu@192 gaya3 % git remote -v
 origin  git@github.com:Sai-Gaya3/gayathri-devops.git (fetch)
 origin  git@github.com:Sai-Gaya3/gayathri-devops.git (push)
[sainiharikagundu@192 gaya3 % git remote add origin git@github.com:Sai-Gaya3/techie_horizon06.git
 error: remote origin already exists.
[sainiharikagundu@192 gaya3 % git remote -v
 origin  git@github.com:Sai-Gaya3/gayathri-devops.git (fetch)
 origin  git@github.com:Sai-Gaya3/gayathri-devops.git (push)
[sainiharikagundu@192 gaya3 % git remote set-url origin git@github.com:Sai-Gaya3/techie_horizon06.git
[sainiharikagundu@192 gaya3 % git remote -v
 origin  git@github.com:Sai-Gaya3/techie_horizon06.git (fetch)
 origin  git@github.com:Sai-Gaya3/techie_horizon06.git (push)
 sainiharikagundu@192 gaya3 %
```

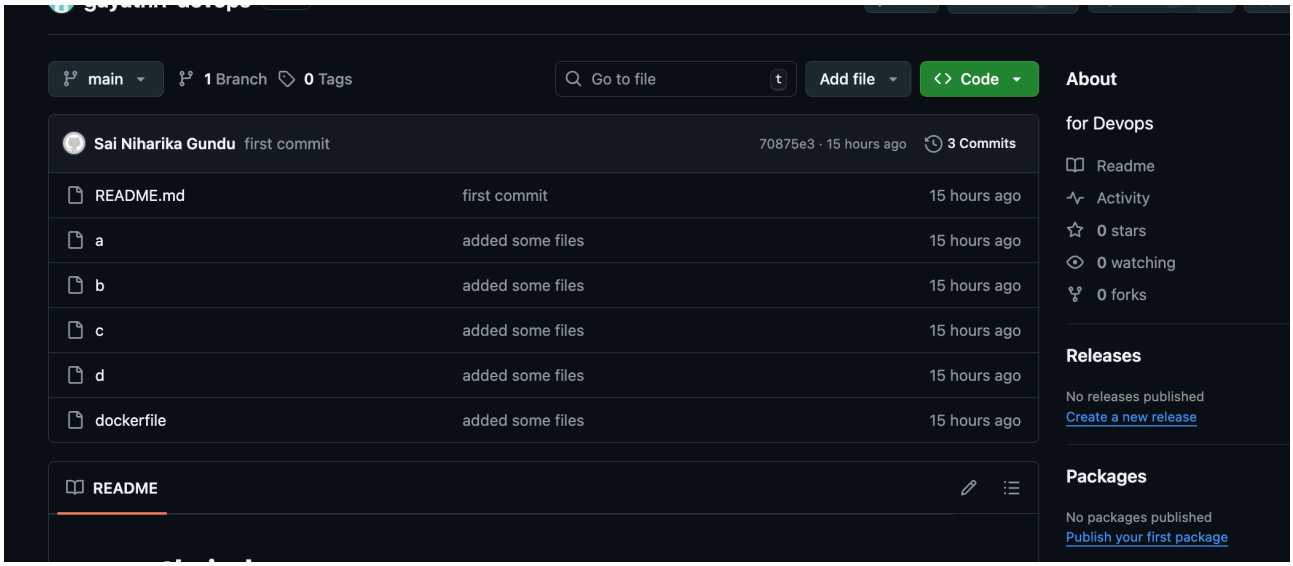
>> “git push -u origin main”

>> We have pushed the files from local repository to remote repository The command git push origin master will upload (push) our local commits to the remote repository specifically to the main/ master branch.

```
[sainiharikagundu@192 gaya3 % git push -u origin main
 Enumerating objects: 9, done.
 Counting objects: 100% (9/9), done.
 Delta compression using up to 10 threads
 Compressing objects: 100% (6/6), done.
 Writing objects: 100% (9/9), 741 bytes | 741.00 KiB/s, done.
 Total 9 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
 remote: Resolving deltas: 100% (2/2), done.
 To github.com:Sai-Gaya3/techie_horizon06.git
  * [new branch]      main -> main
 branch 'main' set up to track 'origin/main'.
 sainiharikagundu@192 gaya3 %
```

>> Now check the github account repository

>> we can see all the files from our local repo in the main/master branch



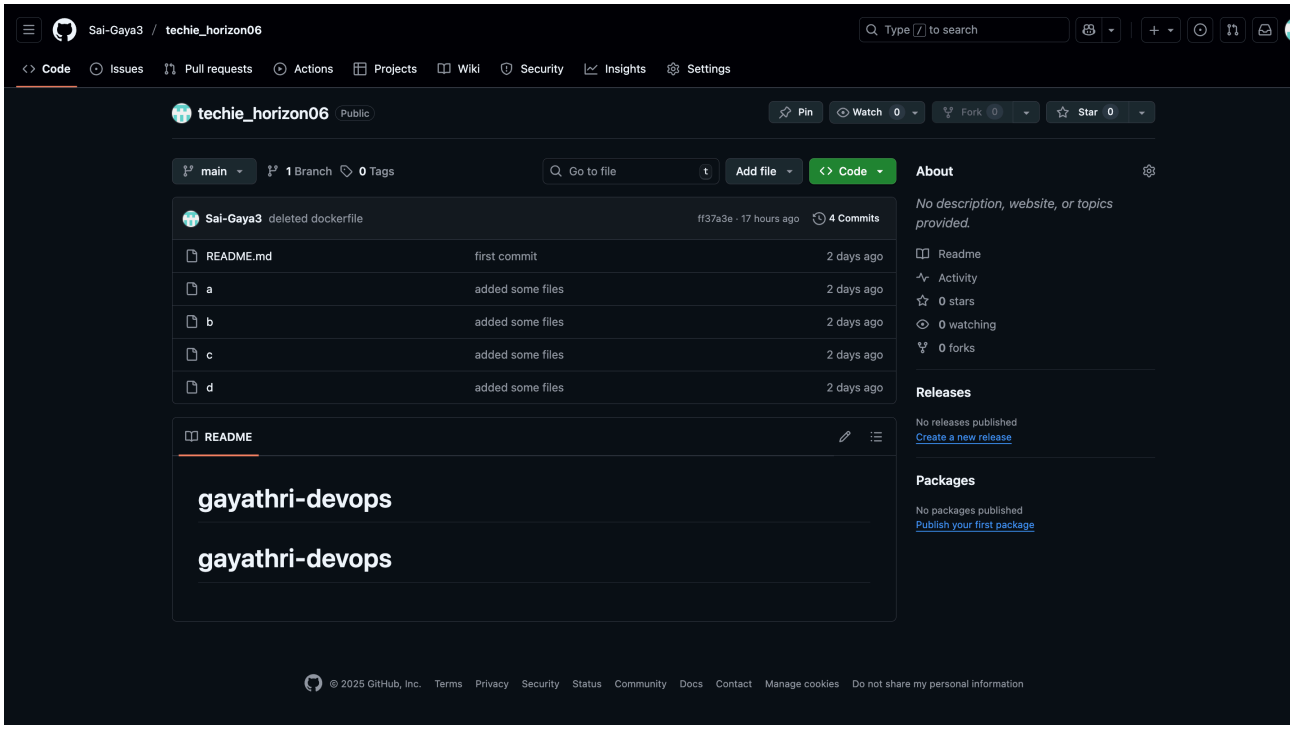
>> Here, we have removed one file

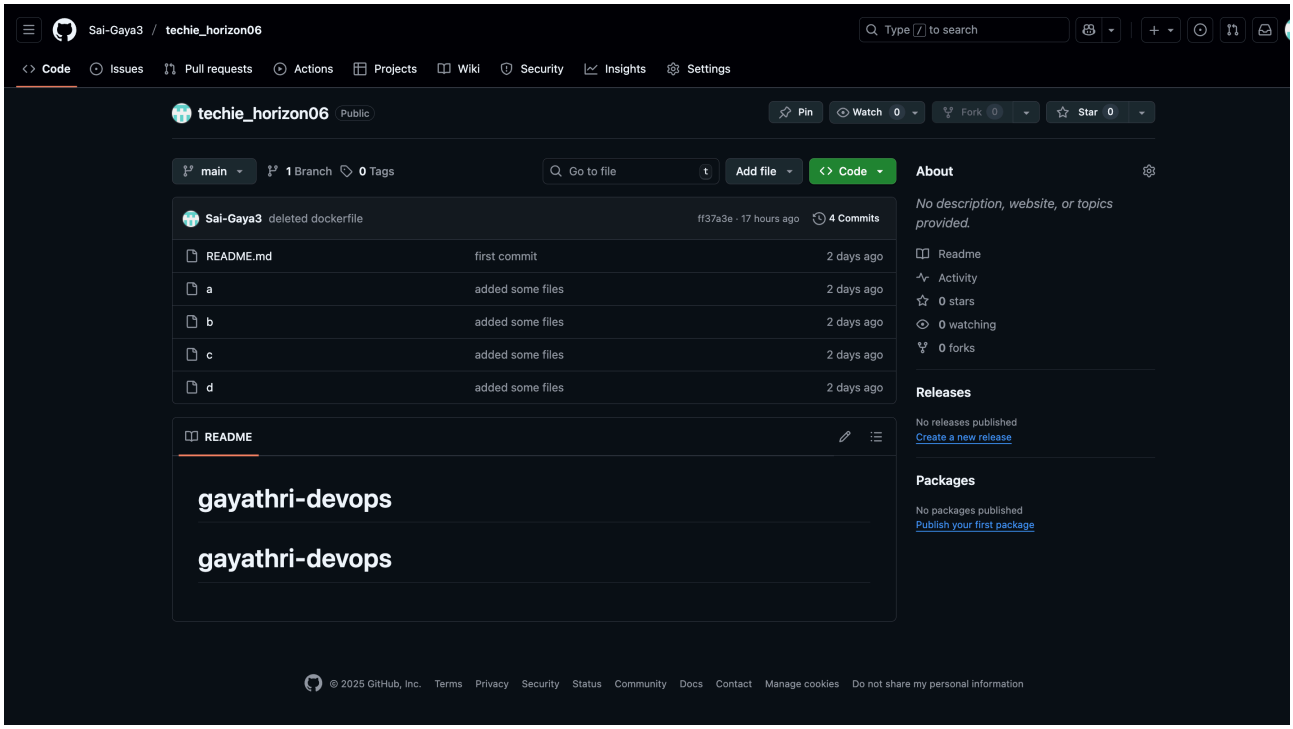
```
[sainiharikagundu@192 gaya3 % rm dockerfile
[sainiharikagundu@192 gaya3 % ls
 a               b               c               d               README.md
[sainiharikagundu@192 gaya3 % git status
 On branch main
 Your branch is up to date with 'origin/main'.

 Changes not staged for commit:
   (use "git add/rm <file>..." to update what will be committed)
   (use "git restore <file>..." to discard changes in working directory)
         deleted:    dockerfile

 no changes added to commit (use "git add" and/or "git commit -a")
 sainiharikagundu@192 gaya3 %
```

>> In git status we can see the status that one file is deleted

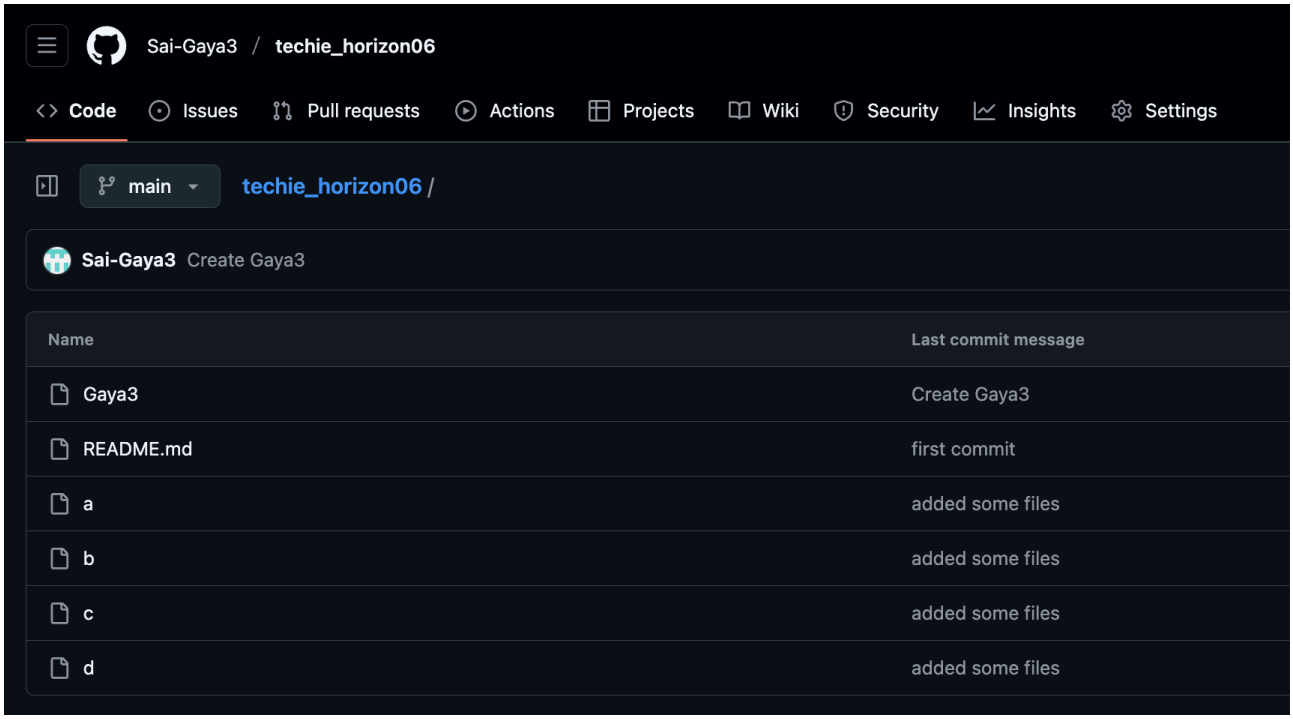
>> git add. And We have to use git commit -m for that changes we have done

>> Now we can see that file named dockerfile deleted from repository





>> Here, we have created a file named Gaya3 in GitHub repository and we should make that available in our local git



>> Here, we used command “git pull” to pull the file from central repo to our local repository

```
sainiharikagundu@192 gaya3 % git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 929 bytes | 232.00 KiB/s, done.
From github.com:Sai-Gaya3/techie_horizon06
   ff37a3e..d29533f  main       -> origin/main
Updating ff37a3e..d29533f
Fast-forward
 Gaya3 | 3 +++
 1 file changed, 3 insertions(+)
 create mode 100644 Gaya3
sainiharikagundu@192 gaya3 % ls
a               b               c               d               dockerfile      Gaya3           README.md
sainiharikagundu@192 gaya3 %
```

>> git clone The command `git clone` is used to download (copy) a remote Git repository — like one from GitHub — to your local computer.

```
sainiharikagundu@192 gaya3 % git clone git@github.com:Sai-Gaya3/techie_horizon06.git
Cloning into 'techie_horizon06'...
remote: Enumerating objects: 14, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (7/7), done.
Receiving objects: 100% (14/14), done.
Resolving deltas: 100% (4/4), done.
remote: Total 14 (delta 4), reused 11 (delta 3), pack-reused 0 (from 0)
sainiharikagundu@192 gaya3 % ls
a               b               c               d               dockerfile      Gaya3           README.md       techie_horizon06
sainiharikagundu@192 gaya3 %
```

>> git log - git log is used to view the commit history of your git repository

```
sainiharikagundu@192 gaya3 % git log
commit d29533f0306df574ec040b91c9648e4886f69a46 (HEAD -> main, origin/main, origin/HEAD)
Author: Sai-Gaya3 <saigayathriprasad305@gmail.com>
Date:   Wed Dec 10 12:06:25 2025 +0530

    Create Gaya3

commit ff37a3ef83860c46296d262108fc2c7586bede82
Author: sai gayathri <saigayathriprasad305@gmail.com>
Date:   Tue Dec 9 19:00:56 2025 +0530

    deleted dockerfile

commit 70875e3e0a85bea8cd6e8c5f07ab5bec3591f5bf
Author: Sai Niharika Gundu <sainiharikagundu@192.168.0.137>
Date:   Mon Dec 8 20:02:57 2025 +0530

    first commit

commit a94bd59ac3cc0510b89df931b7c23edd909bdc32
Author: Sai Niharika Gundu <sainiharikagundu@192.168.0.137>
Date:   Mon Dec 8 20:01:31 2025 +0530

    first commit

commit c5b08841080b284e7c1e2b9c082e64953832290a
Author: Sai Niharika Gundu <sainiharikagundu@192.168.0.137>
Date:   Mon Dec 8 19:55:27 2025 +0530

    added some files
sainiharikagundu@192 gaya3 %
```

>> git reset - the command `git reset` is used to undo changes in Git — you can use it to move backwards to a previous commit, unstage files, or even erase commits.

```
sainiharikagundu@192 gaya3 % git add .
sainiharikagundu@192 gaya3 % git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   alphabet
        new file:   dockerfile
        new file:   techie_horizon06

sainiharikagundu@192 gaya3 % git reset
sainiharikagundu@192 gaya3 % git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        alphabet
        dockerfile
        techie_horizon06/

nothing added to commit but untracked files present (use "git add" to track)
sainiharikagundu@192 gaya3 %
```