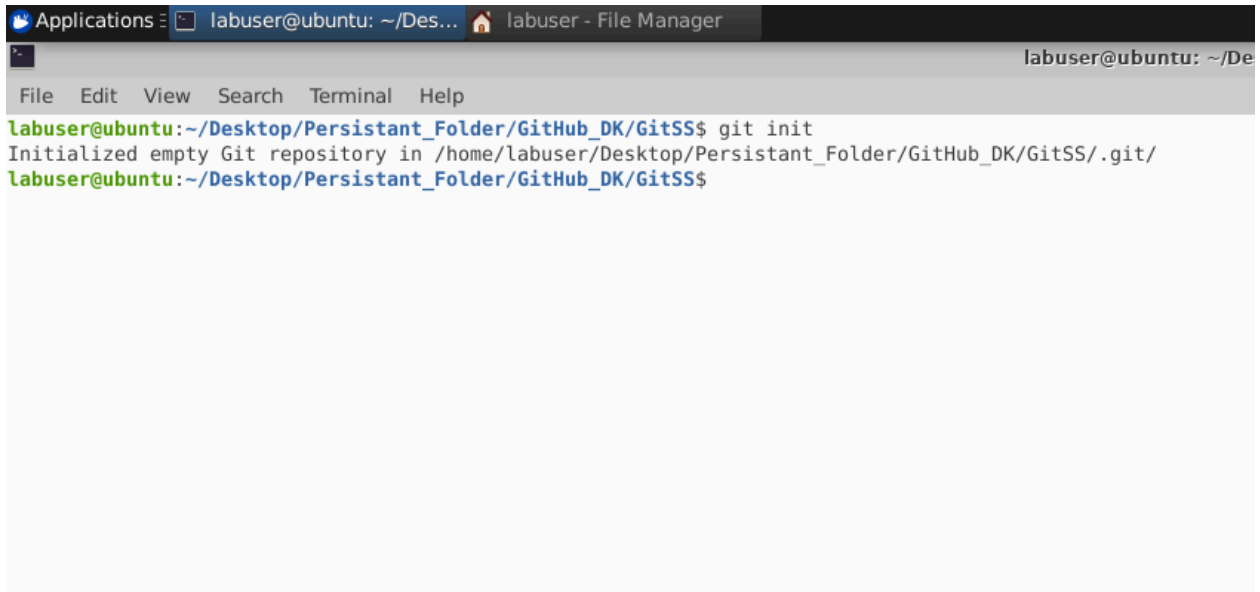


GitHub Documentation

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1. Initiating the local git:

\$ git init

A screenshot of a terminal window on an Ubuntu system. The window title bar shows 'Applications', 'labuser@ubuntu: ~/Des...', and 'labuser - File Manager'. The terminal has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The prompt is 'labuser@ubuntu: ~/Desktop/Persistent_Folder/GitHub_DK/GitSS\$'. The command 'git init' has been entered and executed, resulting in the output: 'Initialized empty Git repository in /home/labuser/Desktop/Persistent_Folder/GitHub_DK/GitSS/.git/'. The prompt now shows the directory path: 'labuser@ubuntu: ~/Desktop/Persistent_Folder/GitHub_DK/GitSS\$'.

2. Generating SSH Key Pair

\$ ssh-keygen -t rsa -b 4096 -C "kthanmughil@gmail.com"

\$ ssh-add id_rsa

=> Add SSH key to GitHub account in web interface.

3. Setting the configurations

\$ git config --global user.name "thanmughil"

\$ git config --global user.email "kthanmughil@gmail.com"

4. Staging and committing changes

\$ git add *

\$ git commit -m "Initial Commit"

```
Applications: labuser@ubuntu: ~/Des... labuser - File Manager
labuser@ubuntu: ~/Desktop/Pers...
File Edit View Search Terminal Help
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git init
Initialized empty Git repository in /home/labuser/Desktop/Persistent_Folder/GitHub_DK/GitSS/.git/
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ cp ~/.ssh/i* ./
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ ls
id_rsa id_rsa.pub
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git add *
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "Initial Commit"

*** Please tell me who you are.

Run

    git config --global user.email "you@example.com"
    git config --global user.name "Your Name"

to set your account's default identity.
Omit --global to set the identity only in this repository.

fatal: unable to auto-detect email address (got 'labuser@ubuntu.(none)')
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git config --global user.email kthanmughil@gmail.com
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git config --global user.name thanmughil
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "Initial Commit"
[master (root-commit) 4956c8b] Initial Commit
 2 files changed, 50 insertions(+)
 create mode 100644 id_rsa
 create mode 100644 id_rsa.pub
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$
```

5. Adding new file and committing the changes

\$ nano simple.txt // Or use any existing data to write into this file

\$ git add simple.txt

\$ git commit -m "New File Added"

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ less ../GitHubSolo/Commands.txt > simple.txt
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ ls
id_rsa id_rsa.pub simple.txt
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    simple.txt

nothing added to commit but untracked files present (use "git add" to track)
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git add simple.txt
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "New File Added"
[master 0abe6e6] New File Added
 1 file changed, 68 insertions(+)
 create mode 100644 simple.txt
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$
```

6. Create a remote to push or pull files

```
$ git remote add gitDoc git@github.com:thanmughil/WMGitDoc.git
```

```
$ git remote -v
```

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git remote add gitDoc git@github.com:thanmughil/WMGitDoc.git
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git branch -v
* master 0abe6e6 New File Added
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push -u gitDoc master
Warning: Permanently added 'github.com,20.207.73.82' (ECDSA) to the list of known hosts.
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 2 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 3.57 KiB | 1.78 MiB/s, done.
Total 7 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
To github.com:thanmughil/WMGitDoc.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'gitDoc'.
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git branch -v
* master 0abe6e6 New File Added
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ █
```

7. Removing private key

```
$ git rm id_rsa
```

```
$ git commit -m "Remove Private Key"
```

```
$ git push
```

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git rm id_rsa
rm 'id_rsa'
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "Remove Private Key"
[master 51aa488] Remove Private Key
 1 file changed, 49 deletions(-)
 delete mode 100644 id_rsa
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 273 bytes | 273.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0)
To github.com:thanmughil/WMGitDoc.git
 0abe6e6..51aa488 master -> master
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ █
```

8. Create New Branch and push it to cloud

```
$ git checkout -b dev
$ git add *
$ git commit -m "New Branch"
$ git push gitDoc HEAD:dev
```

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git checkout -b dev
Switched to a new branch 'dev'
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git cp ../ScreenShot/* ./
git: 'cp' is not a git command. See 'git --help'.
```

The most similar commands are

```
am
fsck
gc
grep
help
mv
rm
```

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ cp ../ScreenShot/* ./
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git status
```

On branch dev

Untracked files:

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

```
config&commit.png
deleteFile.png
init.png
newFile.png
remote&push.png
```

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

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git add *
```

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "New Branch"
```

[dev b7b030b] New Branch

5 files changed, 0 insertions(+), 0 deletions(-)

create mode 100644 config&commit.png

create mode 100644 deleteFile.png

create mode 100644 init.png

create mode 100644 newFile.png

create mode 100644 remote&push.png

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push gitDoc HEAD:dev
```

Enumerating objects: 8, done.

Counting objects: 100% (8/8), done.

Delta compression using up to 2 threads

Compressing objects: 100% (7/7), done.

Writing objects: 100% (7/7), 734.14 KiB | 3.37 MiB/s, done.

Total 7 (delta 0), reused 0 (delta 0)

remote:

remote: Create a pull request for 'dev' on GitHub by visiting:

remote: <https://github.com/thanmughil/WMGitDoc/pull/new/dev>

remote:

To github.com:thanmughil/WMGitDoc.git

* [new branch] HEAD -> dev

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$
```

9. Merge Branches and push to cloud

```
$ git checkout master
```

```
$ git merge dev
```

```
$ git push
```

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'gitDoc/master'.
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git merge dev
Updating 51aa488..b7b030b
Fast-forward
 config&commit.png | Bin 0 -> 133824 bytes
 deleteFile.png    | Bin 0 -> 223717 bytes
 init.png           | Bin 0 -> 42482 bytes
 newFile.png        | Bin 0 -> 197360 bytes
 remote&push.png    | Bin 0 -> 229910 bytes
5 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 config&commit.png
create mode 100644 deleteFile.png
create mode 100644 init.png
create mode 100644 newFile.png
create mode 100644 remote&push.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push
Total 0 (delta 0), reused 0 (delta 0)
To github.com:thanmughil/WMGitDoc.git
 51aa488..b7b030b  master -> master
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git status
On branch master
Your branch is up to date with 'gitDoc/master'.

nothing to commit, working tree clean
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$
```

10. Pull Request in Web Interface

```
// Make changes in dev first
```

```
$ git checkout dev
```

```
$ cp ../ScreenShot/* ./
```

```
$ git add *
```

```
$ git commit -m "New Image Push"
```

```
$ git push -u gitDoc HEAD:dev
```

```

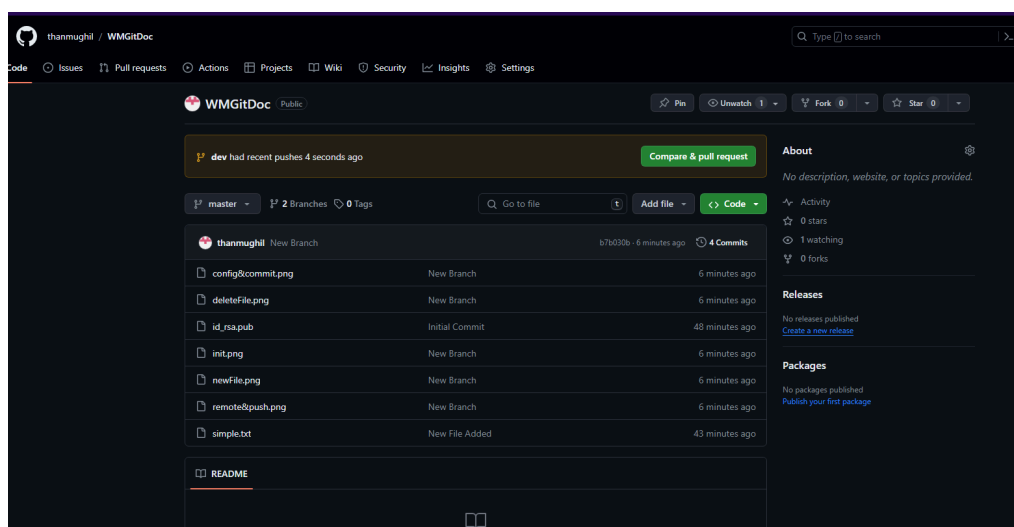
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git checkout dev
Switched to branch 'dev'
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ cp ../ScreenShot/* ./
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git status
On branch dev
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        mergeBranches.png
        newBranch.png

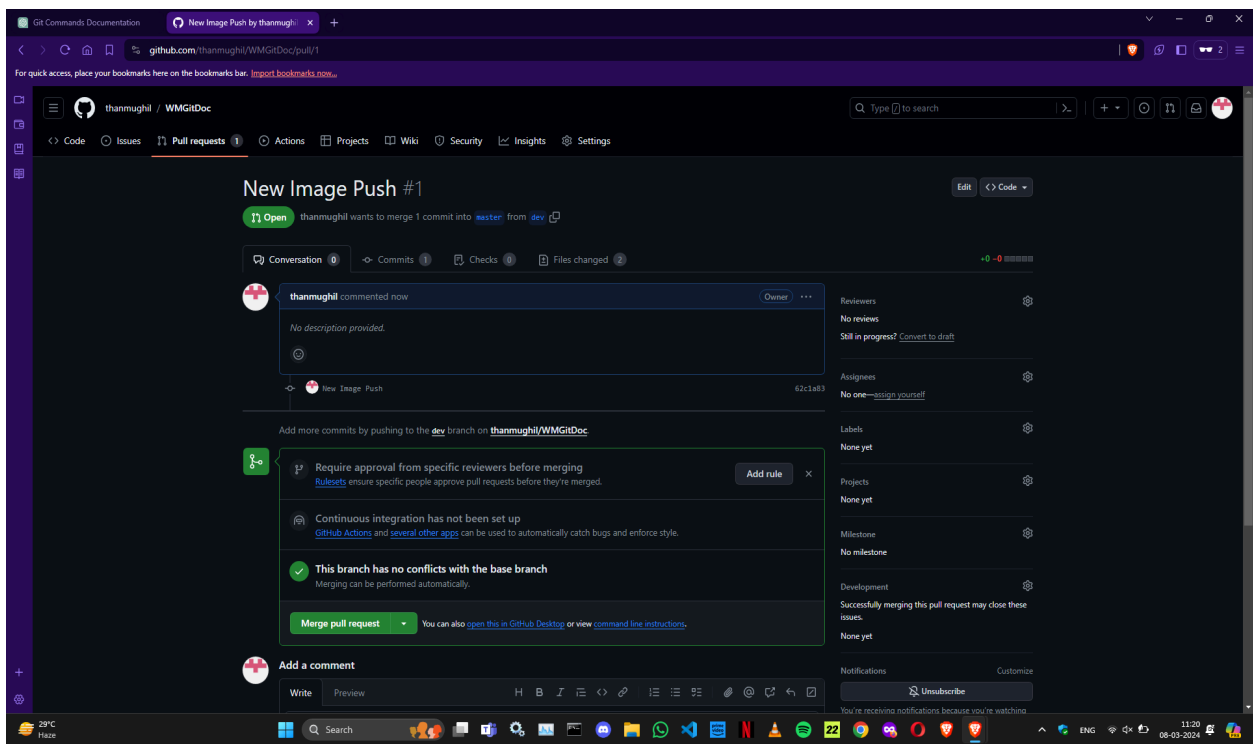
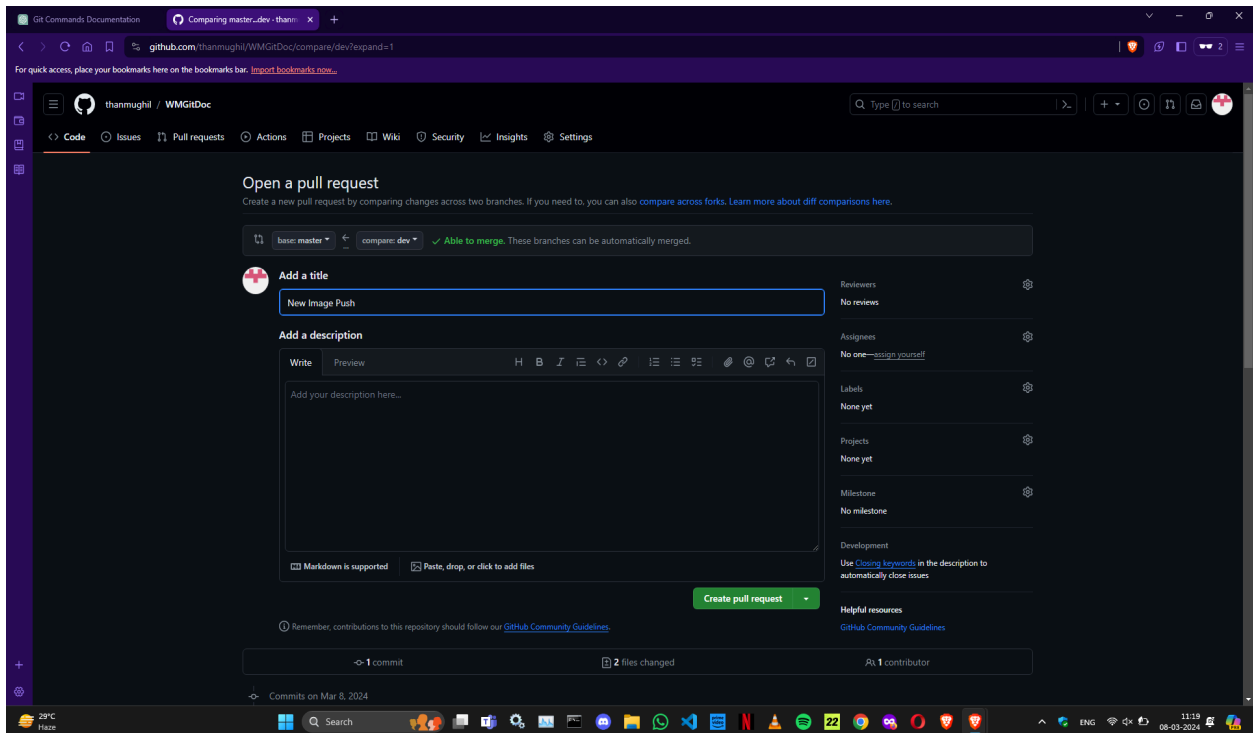
nothing added to commit but untracked files present (use "git add" to track)
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git add *.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "New Image Push"
[dev 62cla83] New Image Push
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 mergeBranches.png
 create mode 100644 newBranch.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push -u gitDoc HEAD:dev
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 2 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 337.21 KiB | 1.64 MiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:thanmughil/WMGitDoc.git
   b7b030b..62cla83  HEAD -> dev
Branch 'dev' set up to track remote branch 'dev' from 'gitDoc'.
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git status
On branch dev
Your branch is up to date with 'gitDoc/dev'.

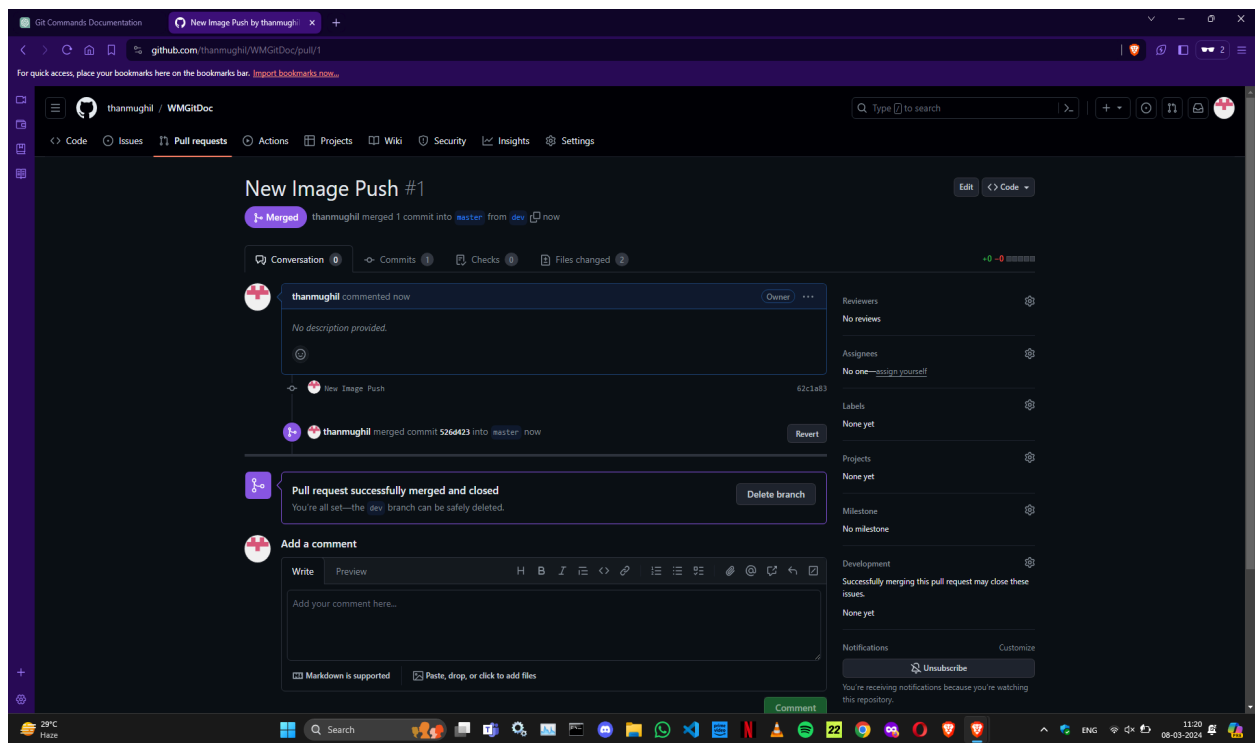
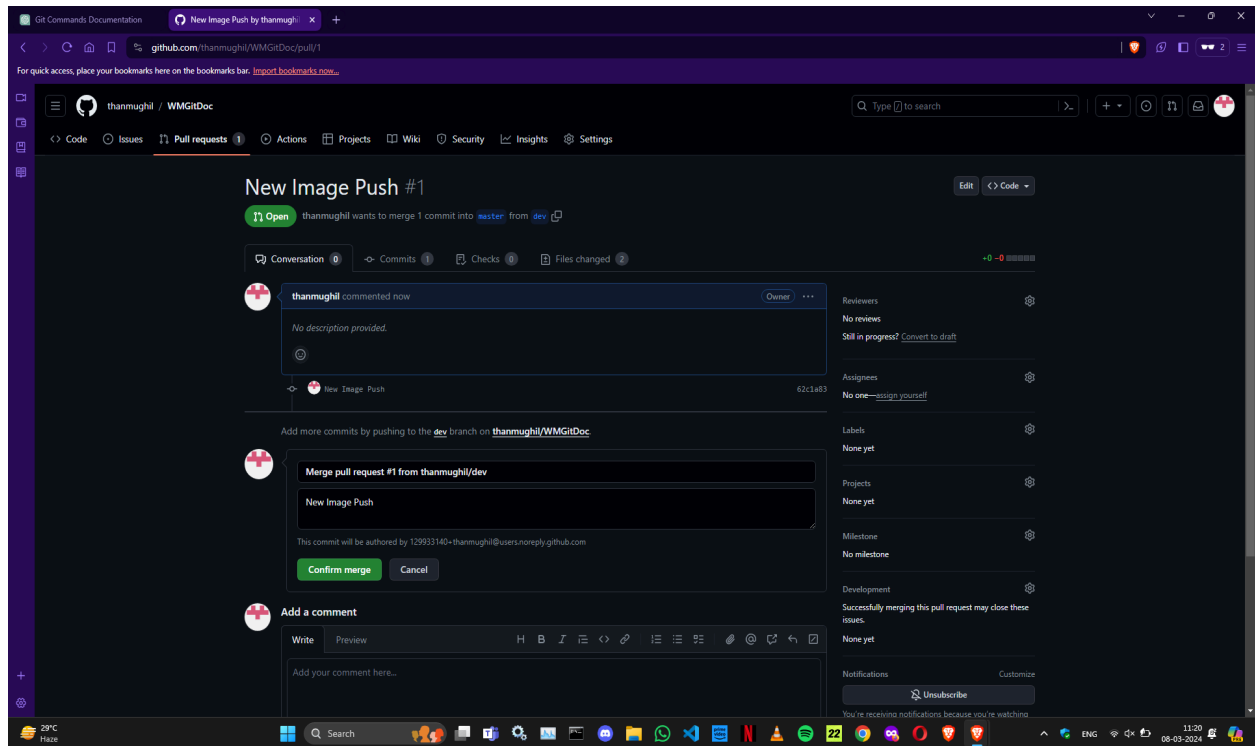
nothing to commit, working tree clean
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$

```

// Changes have been done to the dev branch, now go online to the web interface to
 // create a pull request and merge it to master branch

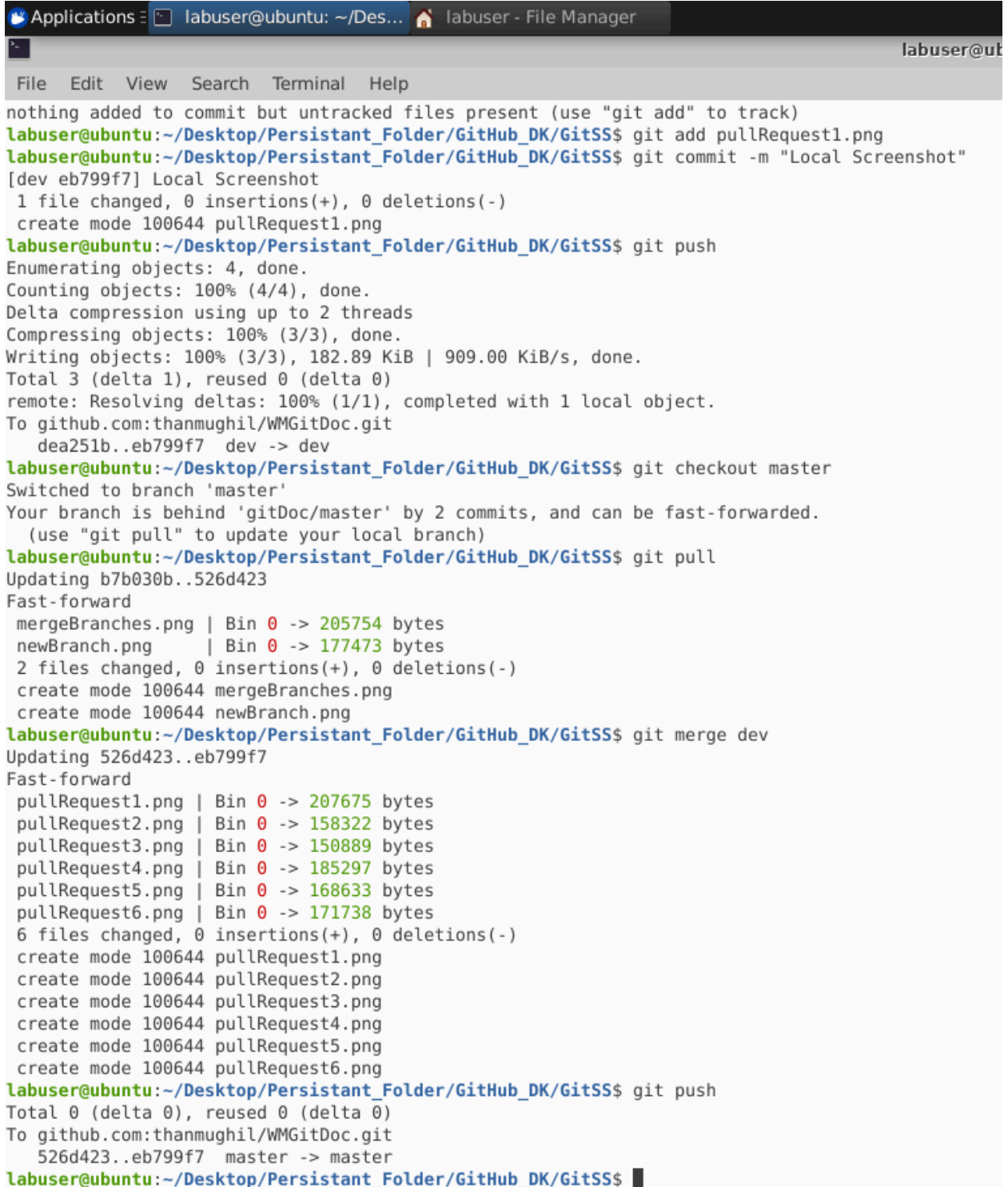






11. Pull Updated master from Cloud after merge via Web Interface

// Also local merge and pushes have been done to simulate pull request via Web UI



```
Applications ▢ labuser@ubuntu: ~/Des... labuser - File Manager
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git add pullRequest1.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git commit -m "Local Screenshot"
[dev eb799f7] Local Screenshot
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 pullRequest1.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 2 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 182.89 KiB | 909.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:thanmughil/WMGitDoc.git
dea251b..eb799f7 dev -> dev
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git checkout master
Switched to branch 'master'
Your branch is behind 'gitDoc/master' by 2 commits, and can be fast-forwarded.
(use "git pull" to update your local branch)
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git pull
Updating b7b030b..526d423
Fast-forward
 mergeBranches.png | Bin 0 -> 205754 bytes
 newBranch.png      | Bin 0 -> 177473 bytes
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 mergeBranches.png
create mode 100644 newBranch.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git merge dev
Updating 526d423..eb799f7
Fast-forward
 pullRequest1.png | Bin 0 -> 207675 bytes
 pullRequest2.png | Bin 0 -> 158322 bytes
 pullRequest3.png | Bin 0 -> 150889 bytes
 pullRequest4.png | Bin 0 -> 185297 bytes
 pullRequest5.png | Bin 0 -> 168633 bytes
 pullRequest6.png | Bin 0 -> 171738 bytes
6 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 pullRequest1.png
create mode 100644 pullRequest2.png
create mode 100644 pullRequest3.png
create mode 100644 pullRequest4.png
create mode 100644 pullRequest5.png
create mode 100644 pullRequest6.png
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$ git push
Total 0 (delta 0), reused 0 (delta 0)
To github.com:thanmughil/WMGitDoc.git
526d423..eb799f7 master -> master
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitSS$
```

12. Collaborate with others (access enabled)

```
$ git checkout -b dk_test
```

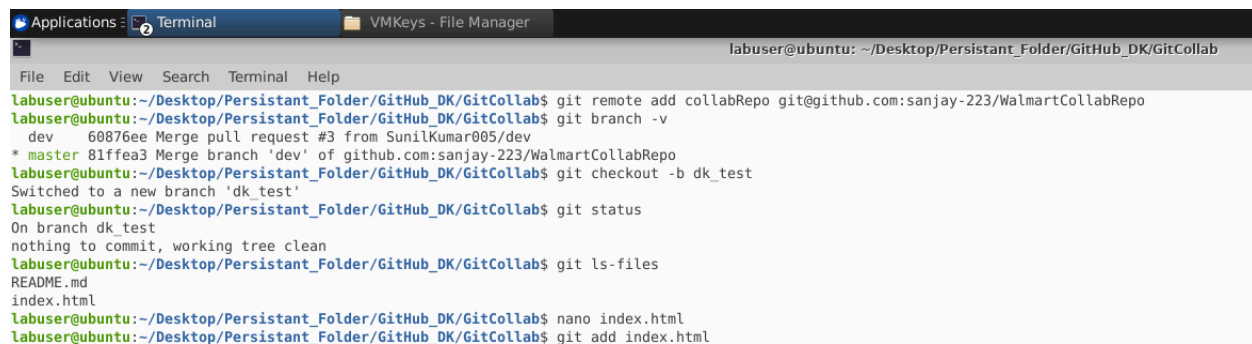
```
$ git remote add repoFork git@github.com:sanjay-223/WalmartCollabRepo.git
```

```
$ git pull repoFork
```

// Switched to a new branch to perform changes

```
$ nano index.html
```

```
$ git add index.html
```



```
Applications  Terminal  VMKeys - File Manager
labuser@ubuntu: ~/Desktop/Persistent_Folder/GitHub_DK/GitCollab
File Edit View Search Terminal Help
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git remote add collabRepo git@github.com:sanjay-223/WalmartCollabRepo
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git branch -v
  dev    60876ee Merge pull request #3 from SunilKumar005/dev
* master 81ffea3 Merge branch 'dev' of github.com:sanjay-223/WalmartCollabRepo
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git checkout -b dk_test
Switched to a new branch 'dk_test'
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git status
On branch dk_test
nothing to commit, working tree clean
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git ls-files
README.md
index.html
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ nano index.html
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git add index.html
```

// Push to Collab Repo

```
$ git commit -m "File Modification"
```

```
$ git push -u collabRepo HEAD:dk_test
```



```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git config --global user.name "thanmughil"
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git config --global user.email "kthanmughil@gmail.com"
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git commit -m "File Modification"
[dk_test 8c54dd0] File Modification

labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git push -u collabRepo HEAD:dk_test
Enumerating objects: 32, done.
Counting objects: 100% (32/32), done.
Delta compression using up to 2 threads
Compressing objects: 100% (31/31), done.
Writing objects: 100% (32/32), 5.61 KiB | 574.00 KiB/s, done.
Total 32 (delta 8), reused 0 (delta 0)
remote: Resolving deltas: 100% (8/8), done.
remote:
remote: Create a pull request for 'dk_test' on GitHub by visiting:
remote:   https://github.com/sanjay-223/WalmartCollabRepo/pull/new/dk_test
remote:
To github.com:sanjay-223/WalmartCollabRepo
 * [new branch]      HEAD -> dk_test
Branch 'dk_test' set up to track remote branch 'dk_test' from 'collabRepo'.
```

/* Above code pushes changes to the new branch which can be used to create Pull Requests and then merge into master (Done via Web UI) */

// Merge to local branch and push to remote

git checkout master

git merge dk_test // Resolve merge conflicts, if any.

git push repoFork HEAD:master

```
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git merge dk_test
Updating 81ffea3..8c54dd0
Fast-forward
 index.html | 2 +
 1 file changed, 1 insertion(+), 1 deletion(-)

labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git push -u collabRepo HEAD:master
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 2 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 380 bytes | 380.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:sanjay-223/WalmartCollabRepo
 02acfff..79b0da5 HEAD -> master
Branch 'master' set up to track remote branch 'master' from 'collabRepo'.
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$ git ls-files
README.md
index.html
labuser@ubuntu:~/Desktop/Persistent_Folder/GitHub_DK/GitCollab$
```

/* If no access is given, fork the repo (web interface), clone it to local (same procedure as above), make changes and push to forked repo, then create pull request (Web UI) to the original repo */