

1. Establish a remote "repository" with a meaningful project name. Generate DEV/QA/UAT/PROD branches within the remote repository. Clone the repository locally. Create a local branch named after you, add files, commit them locally, and then push that branch to the remote repository. Initiate a Pull Request (PR) and subsequently merge your branch into the Dev branch.

```
root@DESKTOP-PDOJQQA:project_repo# git clone
git@github.com:vivekmore2001/Project_repo_pull.git
Cloning into 'Project_repo_pull'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
root@DESKTOP-PDOJQQA:project_repo# ll
total 12
drwxr-xr-x 3 root root 4096 Jan  4 17:56 ./
drwxr-x--- 6 vivek vivek 4096 Jan  4 13:45 ../
drwxr-xr-x 3 root root 4096 Jan  4 17:56 Project_repo_pull/
root@DESKTOP-PDOJQQA:project_repo# cd Project_repo_pull/
root@DESKTOP-PDOJQQA:Project_repo_pull# ll
total 16
drwxr-xr-x 3 root root 4096 Jan  4 17:56 ./
drwxr-xr-x 3 root root 4096 Jan  4 17:56 ../
drwxr-xr-x 8 root root 4096 Jan  4 17:56 .git/
-rw-r--r-- 1 root root  38 Jan  4 17:56 README.md
root@DESKTOP-PDOJQQA:Project_repo_pull# git branch -l
* main
root@DESKTOP-PDOJQQA:Project_repo_pull# git branch -a
* main
remotes/origin/DEV
remotes/origin/HEAD -> origin/main
remotes/origin/PROD
remotes/origin/QA
remotes/origin/UAT
remotes/origin/main
root@DESKTOP-PDOJQQA:Project_repo_pull# echo "i love linux" >linux.txt
root@DESKTOP-PDOJQQA:Project_repo_pull# echo "i love devops" >devops.txt
root@DESKTOP-PDOJQQA:Project_repo_pull# ll
total 24
drwxr-xr-x 3 root root 4096 Jan  4 18:02 ./
drwxr-xr-x 3 root root 4096 Jan  4 17:56 ../
drwxr-xr-x 8 root root 4096 Jan  4 17:56 .git/
-rw-r--r-- 1 root root  38 Jan  4 17:56 README.md
-rw-r--r-- 1 root root  14 Jan  4 18:02 devops.txt
-rw-r--r-- 1 root root  13 Jan  4 18:02 linux.txt
```

```
root@DESKTOP-PDOJQQA:Project_repo_pull# git add .
root@DESKTOP-PDOJQQA:Project_repo_pull# git comit -m "linux.txt and devops.txt is
added"
git: 'comit' is not a git command. See 'git --help'.
```

The most similar command is

```
commit
root@DESKTOP-PDOJQQA:Project_repo_pull# git commit -m "linux.txt and devops.txt is
added"
[main a1f89c0] linux.txt and devops.txt is added
2 files changed, 2 insertions(+)
create mode 100644 devops.txt
create mode 100644 linux.txt
root@DESKTOP-PDOJQQA:Project_repo_pull# git log
commit a1f89c0c20136b2bd79612d5144f80fc0b4c6a50 (HEAD -> main)
Author: vivek more <vivekmore1992@gmail.com.com>
Date: Thu Jan 4 18:04:24 2024 +0530
```

linux.txt and devops.txt is added

```
commit 71e6360c007188be82c43d61fc05360e3e3dc5b4 (origin/main, origin/UAT,
origin/QA, origin/PROD, origin/HEAD, origin/DEV)
Author: vivek more <122422142+vivekmore2001@users.noreply.github.com>
Date: Thu Jan 4 13:29:49 2024 +0530
```

Initial commit


```
root@DESKTOP-PDOJQQA:Project_repo_pull# git remote add origin
git@github.com:vivekmore2001/Project\_repo\_pull.git
```

```
root@DESKTOP-PDOJQQA:Project_repo_pull# git push origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 360 bytes | 360.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:vivekmore2001/Project_repo_pull.git
71e6360..a1f89c0 main -> main
```


## linux.txt and devops.txt is added #1

 Merged vivekmore2001 merged 1 commit into DEV from main  now

 Conversation 0

 Commits 1

 Checks 0

 Files changed 2

2. Set up a remote "repository" with a project name that holds significance. In the master branch of the remote repository, create a file named demo.txt. After creating the file, clone the repository locally. Within the local repository, create three branches: feature/login, feature/mainline, and release. Add a login.txt file to the feature/login branch and push the branch to the remote repository. Create a PR, approve it, and then merge the feature/login branch into the remote master branch.

```
root@DESKTOP-PDOJQQA:project_repo# git clone
git@github.com:vivekmore2001/project_dashboard.git
```

```
Cloning into 'project_dashboard'...
```

```
remote: Enumerating objects: 6, done.
```

```
remote: Counting objects: 100% (6/6), done.
```

```
remote: Compressing objects: 100% (3/3), done.
```

```
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
```

```
Receiving objects: 100% (6/6), done.
```

```
root@DESKTOP-PDOJQQA:project_repo# git branch -a
```

```
root@DESKTOP-PDOJQQA:project_repo# ll
```

```
total 20
```

```
drwxr-xr-x 5 root root 4096 Jan  5 11:22 ./
```

```
drwxr-x--- 7 vivek vivek 4096 Jan  5 11:21 ../
```

```
drwxr-xr-x 7 root root 4096 Jan  5 11:21 .git/
```

```
drwxr-xr-x 3 root root 4096 Jan  4 18:02 Project_repo_pull/
```

```
drwxr-xr-x 3 root root 4096 Jan  5 11:22 project_dashboard/
```

```
root@DESKTOP-PDOJQQA:project_repo# cd project_dashboard/
```

```
root@DESKTOP-PDOJQQA:project_dashboard# ll
```

```
total 20
```

```
drwxr-xr-x 3 root root 4096 Jan  5 11:22 ./
```

```
drwxr-xr-x 5 root root 4096 Jan  5 11:22 ../
```

```
drwxr-xr-x 8 root root 4096 Jan  5 11:22 .git/
```

```
-rw-r--r-- 1 root root  38 Jan  5 11:22 README.md
```

```
-rw-r--r-- 1 root root  21 Jan  5 11:22 demo.txt
```

```
root@DESKTOP-PDOJQQA:project_dashboard# git checkout -b feature/login

Switched to a new branch 'feature/login'

root@DESKTOP-PDOJQQA:project_dashboard# git branch -a

* feature/login

root@DESKTOP-PDOJQQA:project_dashboard# git checkout -b feature/mainline

Switched to a new branch 'feature/mainline'

root@DESKTOP-PDOJQQA:project_dashboard# git branch -a

feature/login

* feature/mainline

root@DESKTOP-PDOJQQA:project_dashboard# git checkout -b release

Switched to a new branch 'release'

root@DESKTOP-PDOJQQA:project_dashboard# git branch -a

feature/login

feature/mainline

main

* release

remotes/origin/HEAD -> origin/main

remotes/origin/main

root@DESKTOP-PDOJQQA:project_dashboard# git checkout feature/login

Switched to branch 'feature/login'

root@DESKTOP-PDOJQQA:project_dashboard# vi login.txt

root@DESKTOP-PDOJQQA:project_dashboard# ll

total 24


drwxr-xr-x 3 root root 4096 Jan  5 11:25 ./
drwxr-xr-x 5 root root 4096 Jan  5 11:22 ../
drwxr-xr-x 8 root root 4096 Jan  5 11:25 .git/
-rw-r--r-- 1 root root  38 Jan  5 11:22 README.md
```

```
-rw-r--r-- 1 root root 21 Jan 5 11:22 demo.txt
-rw-r--r-- 1 root root 6 Jan 5 11:25 login.txt
root@DESKTOP-PDOJQQA:project_dashboard# git add .
root@DESKTOP-PDOJQQA:project_dashboard# git commit -m "login.txt added"
[feature/login 12e77a2] login.txt added
1 file changed, 1 insertion(+)
create mode 100644 login.txt
root@DESKTOP-PDOJQQA:project_dashboard# git remote -v
origin git@github.com:vivekmore2001/project_dashboard.git (fetch)
origin git@github.com:vivekmore2001/project_dashboard.git (push)
root@DESKTOP-PDOJQQA:project_dashboard# git push origin feature/login
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 316 bytes | 316.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:vivekmore2001/project_dashboard.git
6c32507..12e77a2 feature/login -> feature/login
```


## login.txt added #1


**Merged** vivekmore2001 merged 1 commit into `main` from `feature/login` 4 minutes ago


Conversation 0 Commits 1 Checks 0 Files changed 1

 vivekmore2001 commented 4 minutes ago Owner ...

No description provided.

 login.txt added 12e77a2

 vivekmore2001 merged commit `fcf4734` into `main` 4 minutes ago Revert

 Pull request successfully merged and closed  
You're all set—the `feature/login` branch can be safely deleted. Delete branch

3. Populate the local repository's feature/mainline branch with files and push that branch to the remote repository. Add additional files to the feature/mainline remote branch through the UI. Fetch the latest changes on the local feature/mainline using the Fetch and Pull commands.

```
root@DESKTOP-PDOJQQA:project_dashboard# git checkout feature/mainline
Switched to branch 'feature/mainline'
root@DESKTOP-PDOJQQA:project_dashboard# ll
total 20
drwxr-xr-x 3 root root 4096 Jan  5 11:32 ./
drwxr-xr-x 5 root root 4096 Jan  5 11:22 ../
drwxr-xr-x 8 root root 4096 Jan  5 11:45 .git/
-rw-r--r-- 1 root root  38 Jan  5 11:22 README.md
-rw-r--r-- 1 root root  21 Jan  5 11:22 demo.txt
root@DESKTOP-PDOJQQA:project_dashboard# vi hello.txt
root@DESKTOP-PDOJQQA:project_dashboard# ll
total 24
drwxr-xr-x 3 root root 4096 Jan  5 11:45 ./
drwxr-xr-x 5 root root 4096 Jan  5 11:22 ../
drwxr-xr-x 8 root root 4096 Jan  5 11:45 .git/
-rw-r--r-- 1 root root  38 Jan  5 11:22 README.md
-rw-r--r-- 1 root root  21 Jan  5 11:22 demo.txt
-rw-r--r-- 1 root root  22 Jan  5 11:45 hello.txt
root@DESKTOP-PDOJQQA:project_dashboard# git add .
root@DESKTOP-PDOJQQA:project_dashboard# git commit -m "hello.txt added"
[feature/mainline b037d3b] hello.txt added
1 file changed, 3 insertions(+)
create mode 100644 hello.txt
root@DESKTOP-PDOJQQA:project_dashboard# git log
commit b037d3bd6983ffbe1d1143eaebde66db6f4a2b12 (HEAD -> feature/mainline)
Author: vivek more <vivekmore1992@gmail.com.com>
Date: Fri Jan 5 11:46:29 2024 +0530
```

hello.txt added

```
commit 6c32507bdb79b2e610b00491c7e543da72be2b8e (origin/main, origin/HEAD,
release, main)
Author: vivek more <122422142+vivekmore2001@users.noreply.github.com>
Date: Fri Jan 5 11:20:46 2024 +0530
```

Create demo.txt

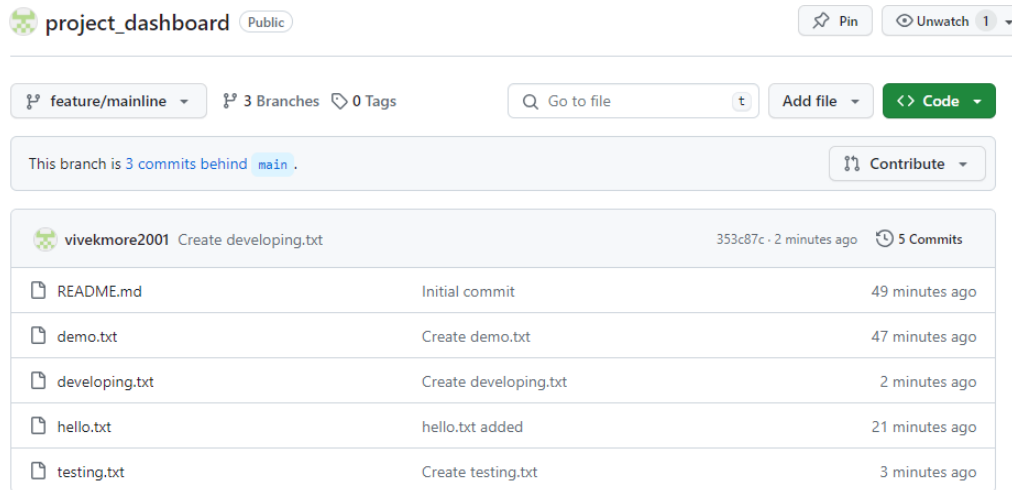
```
commit e045801b5f14204e3298609f1d8a42cf48273249
Author: vivek more <122422142+vivekmore2001@users.noreply.github.com>
Date: Fri Jan 5 11:18:19 2024 +0530
```

```

Initial commit
root@DESKTOP-PDOJQQA:project_dashboard# git branch -a
feature/login
* feature/mainline
main
release
remotes/origin/HEAD -> origin/main
remotes/origin/feature/login
remotes/origin/main
root@DESKTOP-PDOJQQA:project_dashboard# git push origin feature/mainline
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 332 bytes | 332.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'feature/mainline' on GitHub by visiting:
remote:
https://github.com/vivekmore2001/project_dashboard/pull/new/feature/mainline
remote:
To github.com:vivekmore2001/project_dashboard.git
* [new branch] feature/mainline -> feature/mainline
root@DESKTOP-PDOJQQA:project_dashboard# git pull origin feature/mainline
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 6 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (6/6), 1.33 KiB | 226.00 KiB/s, done.
From github.com:vivekmore2001/project_dashboard
* branch feature/mainline -> FETCH_HEAD
b037d3b..353c87c feature/mainline -> origin/feature/mainline
Updating b037d3b..353c87c
Fast-forward
 developing.txt | 1 +
 testing.txt    | 1 +
 2 files changed, 2 insertions(+)
 create mode 100644 developing.txt
 create mode 100644 testing.txt
root@DESKTOP-PDOJQQA:project_dashboard# ll
total 32
drwxr-xr-x 3 root root 4096 Jan  5 12:07 ./
drwxr-xr-x 5 root root 4096 Jan  5 11:22 ../
drwxr-xr-x 8 root root 4096 Jan  5 12:07 .git/
-rw-r--r-- 1 root root  38 Jan  5 11:22 README.md

```

```
-rw-r--r-- 1 root root 21 Jan 5 11:22 demo.txt
-rw-r--r-- 1 root root 21 Jan 5 12:07 developing.txt
-rw-r--r-- 1 root root 22 Jan 5 11:45 hello.txt
-rw-r--r-- 1 root root 6 Jan 5 12:07 testing.txt
```



The screenshot shows the GitHub interface for a repository named 'project\_dashboard'. At the top, it indicates the repository is 'Public'. Below this, there are buttons for 'Pin' and 'Unwatch' (with a count of 1). The main section shows the current branch as 'feature/mainline', with 3 branches and 0 tags. A search bar is present with the text 'Go to file'. To the right, there are buttons for 'Add file' and '<> Code'. Below this, a message states 'This branch is 3 commits behind main'. A 'Contribute' button is also visible. The commit history table shows the following entries:

File	Commit Message	Time Ago
README.md	Initial commit	49 minutes ago
demo.txt	Create demo.txt	47 minutes ago
developing.txt	Create developing.txt	2 minutes ago
hello.txt	hello.txt added	21 minutes ago
testing.txt	Create testing.txt	3 minutes ago

- Establish a remote "repository" for a dashboard application with a meaningful project name. Create the following branches: master, release, hotfix, feature/login, feature/submit, and feature/dashboard. Clone the repository locally. Create a local branch named after you, add files, commit them locally, and then push that branch to the remote repository. Create a PR and merge your branch into the respective branch.

```
root@DESKTOP-PDOJQQA:vivek# mkdir project_dash1
root@DESKTOP-PDOJQQA:vivek# cd project_dash1/
root@DESKTOP-PDOJQQA:project_dash1# ll
total 8
drwxr-xr-x 2 root root 4096 Jan 5 12:17 ./
drwxr-x--- 8 vivek vivek 4096 Jan 5 12:17 ../
root@DESKTOP-PDOJQQA:project_dash1# git init
Initialized empty Git repository in /home/vivek/project_dash1/.git/
root@DESKTOP-PDOJQQA:project_dash1# ll
```

```
root@DESKTOP-PDOJQQA:.git# git clone
git@github.com:vivekmore2001/Project_Dashboard1.git
Cloning into 'Project_Dashboard1'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
root@DESKTOP-PDOJQQA:.git# ll
```



```

total 44
drwxr-xr-x 8 root root 4096 Jan  5 12:18 ./
drwxr-xr-x 3 root root 4096 Jan  5 12:18 ../
-rw-r--r-- 1 root root  23 Jan  5 12:18 HEAD
drwxr-xr-x 3 root root 4096 Jan  5 12:18 Project_Dashboard1/
drwxr-xr-x 2 root root 4096 Jan  5 12:18 branches/
-rw-r--r-- 1 root root  92 Jan  5 12:18 config
-rw-r--r-- 1 root root  73 Jan  5 12:18 description
drwxr-xr-x 2 root root 4096 Jan  5 12:18 hooks/
drwxr-xr-x 2 root root 4096 Jan  5 12:18 info/
drwxr-xr-x 4 root root 4096 Jan  5 12:18 objects/
drwxr-xr-x 4 root root 4096 Jan  5 12:18 refs/
root@DESKTOP-PDOJQQA:.git# cd Project_Dashboard1/
root@DESKTOP-PDOJQQA:Project_Dashboard1# ll
total 16
drwxr-xr-x 3 root root 4096 Jan  5 12:18 ./
drwxr-xr-x 8 root root 4096 Jan  5 12:18 ../
drwxr-xr-x 8 root root 4096 Jan  5 12:18 .git/
-rw-r--r-- 1 root root  40 Jan  5 12:18 README.md
root@DESKTOP-PDOJQQA:Project_Dashboard1# git checkout -b module
Switched to a new branch 'module'
root@DESKTOP-PDOJQQA:Project_Dashboard1# touch abc{1..5}.txt
root@DESKTOP-PDOJQQA:Project_Dashboard1# ll
total 16
drwxr-xr-x 3 root root 4096 Jan  5 12:25 ./
drwxr-xr-x 8 root root 4096 Jan  5 12:18 ../
drwxr-xr-x 8 root root 4096 Jan  5 12:25 .git/
-rw-r--r-- 1 root root  40 Jan  5 12:18 README.md
-rw-r--r-- 1 root root   0 Jan  5 12:25 abc1.txt
-rw-r--r-- 1 root root   0 Jan  5 12:25 abc2.txt
-rw-r--r-- 1 root root   0 Jan  5 12:25 abc3.txt
-rw-r--r-- 1 root root   0 Jan  5 12:25 abc4.txt
-rw-r--r-- 1 root root   0 Jan  5 12:25 abc5.txt
root@DESKTOP-PDOJQQA:Project_Dashboard1# git add .
root@DESKTOP-PDOJQQA:Project_Dashboard1# git commit -m "added abc1.txt abc2.txt
abc3.txt abc4.txt abc.txt"
[module e0c1fb3] added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt
5 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 abc1.txt
create mode 100644 abc2.txt
create mode 100644 abc3.txt
create mode 100644 abc4.txt
create mode 100644 abc5.txt
root@DESKTOP-PDOJQQA:Project_Dashboard1# git log
commit e0c1fb3ec540d794a30fde63574aec9ceb2149bc (HEAD -> module)

```

Author: vivek more <vivekmore1992@gmail.com.com>

Date: Fri Jan 5 12:26:34 2024 +0530

added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt

commit 411b85c6f997ce5f8e4f9104b5740c8f3058fde9 (origin/release, origin/master, origin/main, origin/hotfix, origin/feature/submit, origin/feature/login, origin/feature/dashboard, origin/HEAD, main)

Author: vivek more <122422142+vivekmore2001@users.noreply.github.com>

Date: Fri Jan 5 12:12:56 2024 +0530

Initial commit

root@DESKTOP-PDOJQQA:Project\_Dashboard1# git push origin module

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 4 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 304 bytes | 304.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

remote:

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

remote: [https://github.com/vivekmore2001/Project\\_Dashboard1/pull/new/module](https://github.com/vivekmore2001/Project_Dashboard1/pull/new/module)

remote:

To github.com:vivekmore2001/Project\_Dashboard1.git

\* [new branch] module -> module

Project\_Dashboard1

Public

Pin

Unwatch 1

main

8 Branches

0 Tags

Go to file

Add file

Code

vivekmore2001

Merge pull request #1 from vivekmore2001/module

4702696 · 2 minutes ago

3 Commits

README.md	Initial commit	17 minutes ago
abc1.txt	added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt	4 minutes ago
abc2.txt	added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt	4 minutes ago
abc3.txt	added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt	4 minutes ago
abc4.txt	added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt	4 minutes ago
abc5.txt	added abc1.txt abc2.txt abc3.txt abc4.txt abc.txt	4 minutes ago