



Department of Information Technology

Academic Year: 2025-26

Semester: V

Class / Branch: TEIT/Div C

Subject: DevOps Lab

Name of Instructor: Prof. Sujata Oak

Name of Student: Shravani Sawant

Student ID: 24204018

Date of Performance: 25/07/25

Date of Submission: 25/07/25

Experiment No. 03

Aim: To understand and perform version control system / source code management using Git Branch.

Outputs:

STEP1: Goto your working directory

```
Activities Terminal Jul 25 08:31
root@vora: /home/apsit/git-shravani/git-shravanis

apsit@vora:~$ sudo su
[sudo] password for apsit:
root@vora: /home/apsit# cd git-shravanis/
bash: cd: git-shravanis/: No such file or directory
root@vora: /home/apsit# cd git-shravani/
root@vora: /home/apsit/git-shravani# ls
29_dl Downloads 'Experiment list(1).docx' Git_Bhumika git-shravanis 'Screenshot from 2025-07-18 09-08-18.png' yadnika
root@vora: /home/apsit/git-shravani# cd git-shravanis/
root@vora: /home/apsit/git-shravani/git-shravanis# ls
CodeGeeXProjects gitdemo18072025 snap
root@vora: /home/apsit/git-shravani/git-shravanis#
```

```
root@vora: /home/apsit/git-shravani/git-shravanis# git branch
root@vora: /home/apsit/git-shravani/git-shravanis# cd gitdemo18072025
root@vora: /home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
* main
root@vora: /home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
Activities Terminal Jul 25 08:40
root@vora: /home/apsit/git-shravani/git-shravanis/gitdemo18072025

apsit@vora:~$ sudo su
[sudo] password for apsit:
root@vora:/home/apsit# cd git-shravanis/
bash: cd: git-shravanis/: No such file or directory
root@vora:/home/apsit# cd git-shravani/
root@vora:/home/apsit/git-shravani# ls
29_d1 Downloads 'Experiment list(1).docx' Git_Thumika git-shravanis 'Screenshot from 2025-07-18 09-08-18.png' yadnika
root@vora:/home/apsit/git-shravani# cd git-shravanis/
root@vora:/home/apsit/git-shravani/git-shravanis# ls
CodeRunnerProjects gitdemo18072025 saag
root@vora:/home/apsit/git-shravani/git-shravanis# git branch
root@vora:/home/apsit/git-shravani/git-shravanis# cd gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch featured
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
* main
  featured
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch featured
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
  featured
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git checkout featured
Switched to branch 'featured'
```

```
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
* featured
  main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
Activities Terminal Jul 25 08:50
root@vora: /home/apsit/git-shravani/git-shravanis/gitdemo18072025

root@vora:/home/apsit/git-shravani/git-shravanis# git branch
root@vora:/home/apsit/git-shravani/git-shravanis# cd gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch featured
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
  featured
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git checkout featured
Switched to branch 'featured'
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
  featured
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# touch add.py
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# gedit add.py

(gedit:9983): Tepl-WARNING **: 08:47:28.244: GVfs metadata is not supported. Fallback to TeplMetadataManager. Either GVfs is not correctly installed or GVfs metadata are not supported on this platform. In the latter case, you should configure Tepl with --disable-gvfs-metadata.
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git status
On branch featured
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    add.py
    gitdemo18072025/

nothing added to commit but untracked files present (use "git add" to track)
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git add add.py
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git status
On branch featured
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   add.py

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    gitdemo18072025/

root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git commit -m "Added add.py on 250725"
[featured0 ff0b325] Added add.py on 250725
 1 file changed, 5 insertions(+)
 create mode 100644 add.py
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git log
commit ff0b3251e05da273262144efa2898771ec3c6c59 (HEAD -> featured)
Author: bhumika9385 <bhumikapandhare1395@gmail.com>
Date:   Fri Jul 25 08:50:02 2025 +0530

    Added add.py on 250725

commit 7bf38fe74f3a597388d3e4af620f378b6dfc90fd (main)
Author: shravanisawant813 <24204018@apsit.edu.in>
Date:   Fri Jul 18 09:03:53 2025 +0530

    first file added helloworld.py

commit 34143641d3b2afdsbde0734e9c8293eff01d194a (origin/main, origin/HEAD)
Author: shravanisawant819 <24204018@apsit.edu.in>
Date:   Fri Jul 18 08:47:03 2025 +0530

    Initial commit
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
Activities Terminal Jul 25 09:13
root@vora: /home/apsit/git-shravani/git-shravanis/gitdemo18072025

Author: shravanisawant813 <24204018@apsit.edu.in>
Date: Fri Jul 18 09:03:53 2025 +0530

first file added helloworld.py

commit 34143641d3b2ef5dbd6734e9c0293eff01d194a (origin/main, origin/HEAD)
Author: shravanisawant819 <24204018@apsit.edu.in>
Date: Fri Jul 18 08:47:03 2025 +0530

Initial commit
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git push --set-upstream origin featureD
remote: Repository not found.
fatal: repository 'https://github.com/shravanisawant813/gitdemo18072025/' not found
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git remote set-url origin https://https://github.com/shravanisawant819/gitdemo18072025.git
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git remote set-url origin https://github.com/shravanisawant819/gitdemo18072025.git
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git remote set-url origin https://github.com/shravanisawant819/gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git remote set-url origin https://github.com/shravanisawant819/gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git remote set-url origin ghp_cwPpyc03AQvuzLe5QVGgGTtNMD1d153Um9sb@github.com/shravanisawant819/gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git push --set-upstream origin featureD
fatal: 'ghp_cwPpyc03AQvuzLe5QVGgGTtNMD1d153Um9sb@github.com/shravanisawant819/gitdemo18072025' does not appear to be a git repository
fatal: could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git remote set-url origin https://ghp_cwPpyc03AQvuzLe5QVGgGTtNMD1d153Um9sb@github.com/shravanisawant819/gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git push --set-upstream origin featureD
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 12 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (9/9), 1.52 KiB | 779.00 KiB/s, done.
Total 9 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'featureD' on GitHub by visiting:
remote: https://github.com/shravanisawant819/gitdemo18072025/pull/new/featureD
remote:
To https://github.com/shravanisawant819/gitdemo18072025
 * [new branch] featureD -> featureD
Branch 'featureD' set up to track remote branch 'featureD' from 'origin'.
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

Activities Google Chrome Jul 25 09:13

ITL503 DevOps Lab DIV- < x Exp3_Major_Lab.pdf x shravanisawant819/gitdemo18072025

github.com/shravanisawant819/gitdemo18072025

shravanisawant819 / gitdemo18072025

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

gitdemo18072025 (Public)

featureD had recent pushes 31 seconds ago Compare & pull request

main 2 Branches 0 Tags Go to file Add file <> Code

shravanisawant819 Create mynewfile18072025 e9ed079 · last week 2 Commits

README.md Initial commit last week

mynewfile18072025 Create mynewfile18072025 last week

README

gitdemo18072025

setup of git experiment 18072025

About

setup of git experiment 18072025

Readme

Activity

0 stars

0 watching

0 forks

Releases

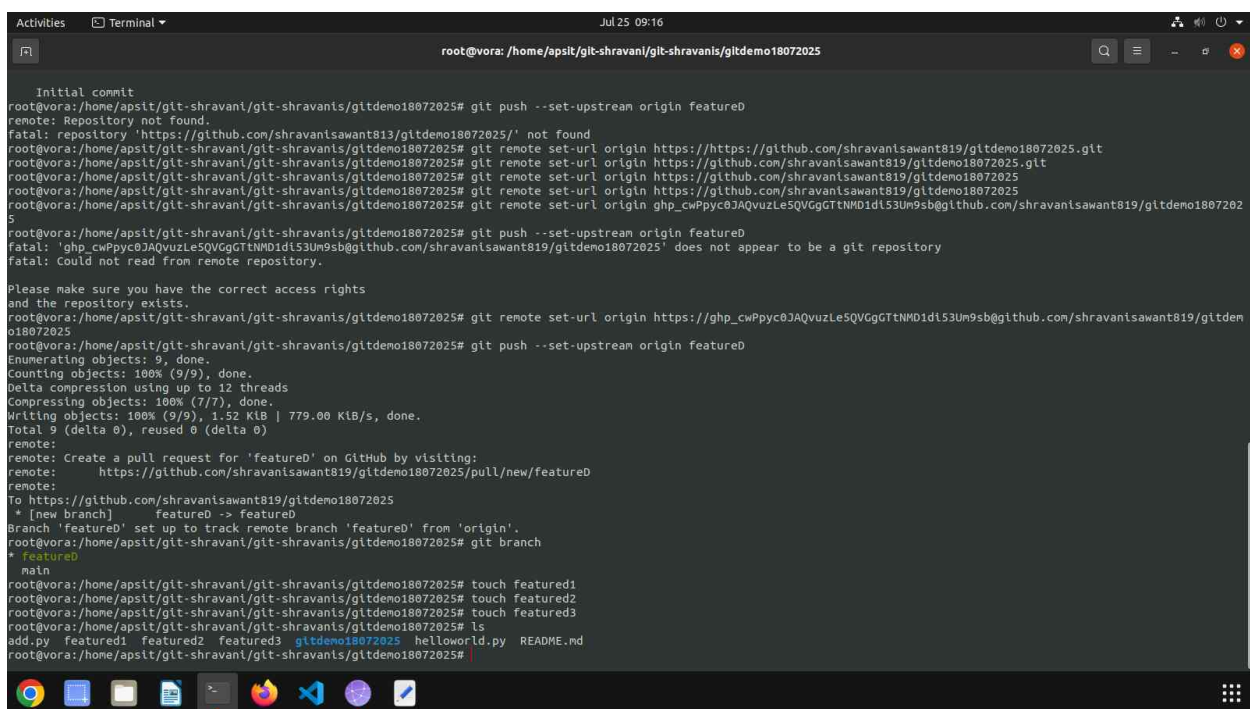
No releases published

Create a new release

Packages

No packages published

Publish your first package




```
Activities Terminal Jul 25 09:18
root@vora: /home/apsit/git-shravani/git-shravanis/gitdemo18072025

root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# touch featured3
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# ls
add.py featured1 featured2 featured3 gitdemo18072025 helloworld.py README.md
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git status
On branch feature0
Your branch is up to date with 'origin/feature0'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    featured1
    featured2
    featured3
    gitdemo18072025/

nothing added to commit but untracked files present (use "git add" to track)
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git add .
warning: adding embedded git repository: gitdemo18072025
hint: You've added another git repository inside your current repository.
hint: Clones of the outer repository will not contain the contents of
hint: the embedded repository and will not know how to obtain it.
hint: If you meant to add a submodule, use:
hint:
hint:   git submodule add <url> gitdemo18072025
hint:
hint: If you added this path by mistake, you can remove it from the
hint: index with:
hint:
hint:   git rm --cached gitdemo18072025
hint:
hint: See "git help submodule" for more information.
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git status
On branch feature0
Your branch is up to date with 'origin/feature0'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   featured1
    new file:   featured2
    new file:   featured3
    new file:   gitdemo18072025

root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
new file:   gitdemo18072025

root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git commit -m "Added 3 files in feature0 branch"
[feature0 c91fc13] Added 3 files in feature0 branch
 4 files changed, 1 insertion(+)
 create mode 100644 featured1
 create mode 100644 featured2
 create mode 100644 featured3
 create mode 100600 gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git commit -m "Added 3 files in feature0 branch"
[feature0 c91fc13] Added 3 files in feature0 branch
 4 files changed, 1 insertion(+)
 create mode 100644 featured1
 create mode 100644 featured2
 create mode 100644 featured3
 create mode 100600 gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git push -u origin feature0
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 414 bytes | 414.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/shravanisawant819/gitdemo18072025
   ff0b325..c91fc13 feature0 -> feature0
Branch 'feature0' set up to track remote branch 'feature0' from 'origin'.
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

Activities Google Chrome Jul 25 09:21

ITL503 DevOps Lab DIV Exp3_Major_Lab.pdf shrvanisawant819/gitdemo18072025

github.com/shrvanisawant819/gitdemo18072025/tree/featureD Relaunch to update

gitdemo18072025 Public

featureD had recent pushes 1 minute ago Compare & pull request

featureD 2 Branches 0 Tags Go to file Add file Code

This branch is 3 commits ahead of, 1 commit behind main. Contribute

bhumika9385 Added 3 files in featureD branch c91fc13 · 2 minutes ago 4 Commits

gitdemo18072025	Added 3 files in featureD branch	2 minutes ago
README.md	Initial commit	last week
add.py	Added add.py on 250725	31 minutes ago
featureD1	Added 3 files in featureD branch	2 minutes ago
featureD2	Added 3 files in featureD branch	2 minutes ago
featureD3	Added 3 files in featureD branch	2 minutes ago
helloworld.py	first file added helloworld.py	last week

README

gitdemo18072025

About setup of git experiment 18072025

- Readme
- Activity
- 0 stars
- 0 watching
- 0 forks

Releases

No releases published
[Create a new release](#)

Packages

No packages published
[Publish your first package](#)

Activities Google Chrome Jul 25 09:26

ITL503 DevOps Lab DIV Exp3_Major_Lab.pdf Feature d by shrvanisawant819

github.com/shrvanisawant819/gitdemo18072025/pull/1 Relaunch to update

Merged Feature d #1 shrvanisawant819 merged 3 commits into main from featureD now

MERGING A BRANCH FEATURED TO MAIN BRANCH

shravanisawant819 and others added 3 commits last week

- first file added helloworld.py 7bf38fe
- Added add.py on 250725 ffeb325
- Added 3 files in featureD branch c91fc13

shravanisawant819 merged commit 92efbd8 into main now Revert

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

Add a comment

Write Preview H B I E < > @ Paste, drop, or click to add files

Add your comment here...

Markdown is supported

No reviews
Still in progress? Convert to draft

Assignees
No one—assign yourself

Labels
None yet

Projects
None yet

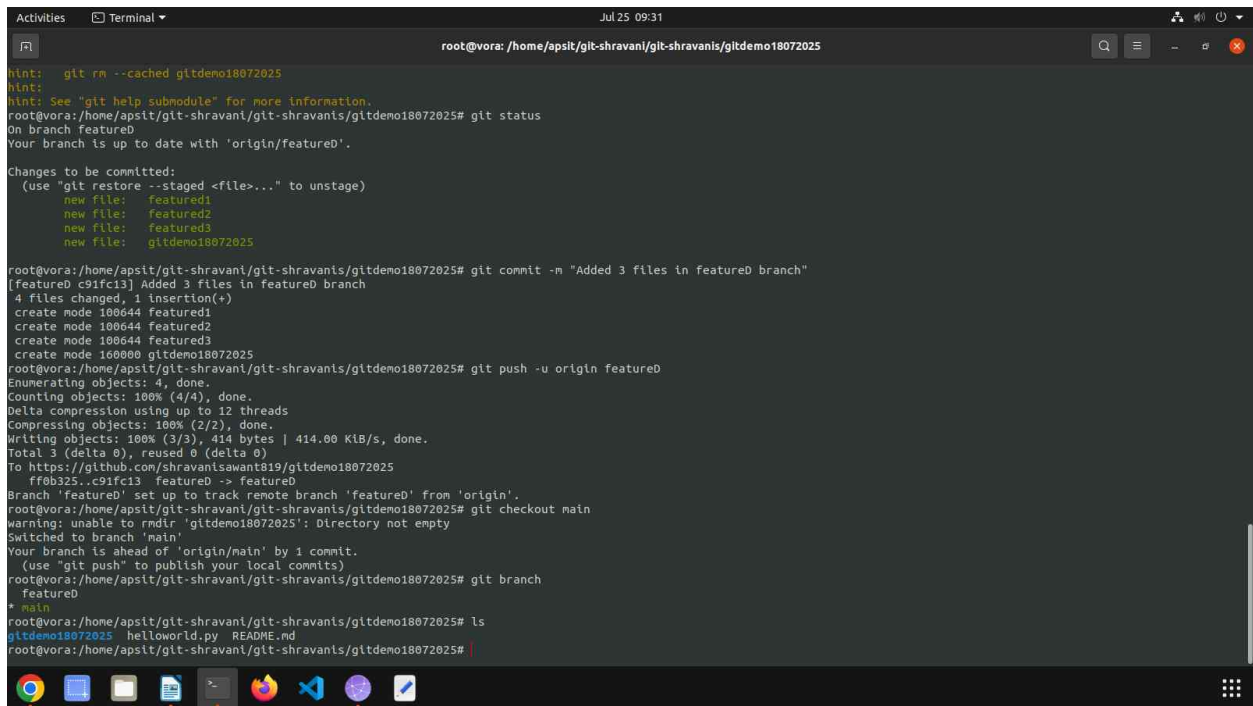
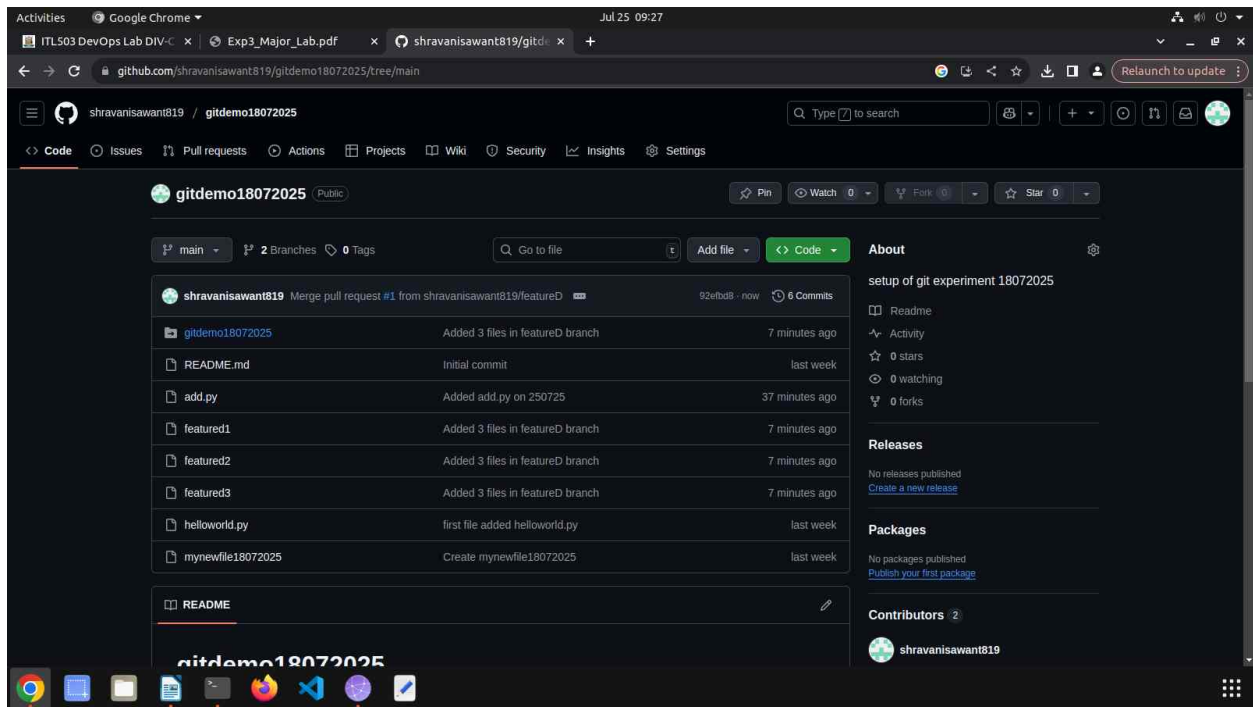
Milestone
No milestone

Development
Successfully merging this pull request may close these issues.

None yet

Notifications
Customize
Unsubscribe
You're receiving notifications because you modified the open/close state.

2 participants




```
gitdemo18072025 helloworld.py README.md
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git merge featured
Updating 7bf38fe..c91fc13
Fast-forward
 add.py      | 5 +++++
 featured1   | 0
 featured2   | 0
 featured3   | 0
 gitdemo18072025 | 1 +
 5 files changed, 6 insertions(+)
create mode 100644 add.py
create mode 100644 featured1
create mode 100644 featured2
create mode 100644 featured3
create mode 100000 gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
create mode 160000 gitdemo18072025
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# ls
add.py featured1 featured2 featured3 gitdemo18072025 helloworld.py README.md
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch -d featuredD
Deleted branch featuredD (was c91fc13).
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git branch
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

```
* main
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025# git push --delete origin featuredD
To https://github.com/shravanisawant819/gitdemo18072025
- [deleted]    featuredD
root@vora:/home/apsit/git-shravani/git-shravanis/gitdemo18072025#
```

shravanisawant819 / gitdemo18072025

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

gitdemo18072025 Public

main 1 Branch 0 Tags

Go to file Add file Code About

Switch branches/tags

Find or create a branch...

Branches Tags

main default

View all branches

rom shravanisawant819/featureD 92fbd8 - 10 minutes ago 6 Commits

Added 3 files in featured branch 17 minutes ago

Initial commit last week

Added add.py on 250725 46 minutes ago

Added 3 files in featuredD branch 17 minutes ago

About

setup of git experiment 18072025

Readme

Activity

0 stars

0 watching

0 forks

Releases

Conclusion:

Git branches play a crucial role in version control by allowing developers to work on different features or fixes simultaneously without disrupting the main codebase. This isolation improves collaboration among team members and minimizes conflicts during development. By organizing work into separate branches, projects become easier to manage and workflows more efficient. Once changes are ready and tested, branches can be merged back smoothly, ensuring code integrity. Overall, understanding and using Git branches is essential for effective source code management and streamlined software development.