

Git Assignment

Git Repository Details:

- Repository Name: git-assignment1
- GitHub Repository Link: <https://github.com/vidhijaiswal-2702/git-assignment1>
- Branches Created: main, feature1, feature2

Steps Performed:

Create a New Repository

- git clone <https://github.com/vidhijaiswal-2702/git-assignment1.git>
(cloned the repo in vscode terminal)
- cd git-assignment1

Create a New File

Created new file index.html in vscode.

- git add index.html
- git commit -m "added new file"
- git push origin main

```
PS C:\Users\vidhi\OneDrive\Desktop\git> git clone https://github.com/vidhijaiswal-2702/git-assignment1.git
Cloning into 'git-assignment1'...
remote: Enumerating objects: 6, done.
remote: Counting objects: 100% (6/6), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (6/6), done.
PS C:\Users\vidhi\OneDrive\Desktop\git> cd git-assignment1
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> 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)
  index.html

nothing added to commit but untracked files present (use "git add" to track)
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git add index.html
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git commit -m "added new file"
[main 9200683] added new file
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 index.html
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 281 bytes | 281.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/vidhijaiswal-2702/git-assignment1.git
 e6e063d..9200683  main -> main
```

Create a Branch

Created and switched to branch feature1:

- git branch
- git checkout -b feature1
- git checkout feature1

```
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git branch
* main
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout -b feature1
Switched to a new branch 'feature1'
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout feature1
Already on 'feature1'
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git branch
  feature1
* main
```

Make Changes in the New Branch

In feature1 added new paragraph tag in index.html

Staged and committed the changes:

- git add index.html
- git commit -m "added new paragraph tag"
- git push origin feature1

```
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout feature1
Switched to branch 'feature1'
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git add index.html
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git commit -m "added new feature para"
[feature1 84e6635] added new feature para
 1 file changed, 1 insertion(+)
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git push origin main
Everything up-to-date
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git branch
* feature1
  main
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git push origin feature1
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 310 bytes | 310.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'feature1' on GitHub by visiting:
remote:   https://github.com/vidhijaiswal-2702/git-assignment1/pull/new/feature1
remote:
To https://github.com/vidhijaiswal-2702/git-assignment1.git
 * [new branch]      feature1 -> feature1
```

Create Another Branch

From main, created and switched to branch feature2:

- `git branch`
- `git checkout -b feature2`
- `git checkout feature2`

Added new paragraph tag in index.html

Staged and committed the updates:

- `git add index.html`
- `git commit -m "added new paragraph tag"`
- `git push origin feature2`

```
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout feature2
error: pathspec 'feature2' did not match any file(s) known to git
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout -b feature2
Switched to a new branch 'feature2'
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout feature2
Already on 'feature2'
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git add index.html
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git push origin feature2
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'feature2' on GitHub by visiting:
remote:   https://github.com/vidhijaiswal-2702/git-assignment1/pull/new/feature2
remote:
To https://github.com/vidhijaiswal-2702/git-assignment1.git
 * [new branch]      feature2 -> feature2
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git add index.html
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git commit -m "added new feature para"
[feature2 d5d69d6] added new feature para
 1 file changed, 2 insertions(+), 1 deletion(-)
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git push origin feature2
Enumerating objects: 5, done.
```

Merge Branches

Merged feature1 into main:

- `git checkout main`
- `git merge feature1`
- resolved merge conflicts in index.html

Merged feature2 into main:

- `git merge feature2`
- resolved merge conflicts in index.html

```

PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git checkout main
Already on 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git merge feature1
Already up to date.
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git merge feature2
Auto-merging index.html
CONFLICT (content): Merge conflict in index.html
Automatic merge failed; fix conflicts and then commit the result.
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git add index.html
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git commit -m "resolved merge conflict in index.html for feature2 branch"
[main 7944751] resolved merge conflict in index.html for feature2 branch
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 389 bytes | 389.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/vidhijaiswal-2702/git-assignment1.git
609ba4d..7944751 main -> main

```

Pull Changes from Remote

Ensured local repository was up-to-date:

- git pull origin main

```

PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git pull origin main
From https://github.com/vidhijaiswal-2702/git-assignment1
* branch      main      -> FETCH_HEAD
Already up to date.

```

View Git Log and History

- git log

```

PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git log
commit 7944751c3f1c5ff82bcb228a13613a6c455e5a42 (HEAD -> main, origin/main, origin/HEAD)
Merge: 609ba4d d5d69d6
Author: vidhijaiswal-2702 <vidhijais123@gmail.com>
Date: Tue Feb 18 18:18:38 2025 +0530

    resolved merge conflict in index.html for feature2 branch

commit 609ba4d4578e21af431046dffbf5ec012055230
Merge: 1899970 84e6635
Author: vidhijaiswal-2702 <vidhijais123@gmail.com>
Date: Tue Feb 18 18:09:55 2025 +0530

    resolved merge conflict in index.html

commit d5d69d6971dfa467a8cc56b3683145c7b7aea42d (origin/feature2, feature2)
Author: vidhijaiswal-2702 <vidhijais123@gmail.com>

```

Git Status and Staging

- `git status`
- `git add .`

Revert and Reset

- `git reset --`

```
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git add .
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> git reset --
PS C:\Users\vidhi\OneDrive\Desktop\git\git-assignment1> 
```