

Case Study: Git and GitHub Workflow Exercise

1. Project Initialization:

git init

git add .

git commit -m "First commit"

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git init
Initialized empty Git repository in F:/VickyKumar-NexTurn-Program/M2_SDE_Assignments/Assignments_Set_2/.git/
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git add .
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git commit -m "First commit"
[master (root-commit) adf09a7] First commit
 2 files changed, 2 insertions(+)
 create mode 100644 file2.txt
```

git remote add origin https://github.com/Vickykumar1001/git_exercise.git

git branch -M master

git push -u origin master

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git remote add origin https://github.com/Vickykumar1001/git_exercise.git
>>
>> git branch -M master
>>
>> git push -u origin master
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% (4/4), 307 bytes | 153.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Vickykumar1001/git_exercise.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.
```

2. Feature Addition: Adding readme file

```
readme.md > # Git Exercise
1  # Git Exercise
2  This is Git and GitHub Workflow Exercise
```

3. Branch Management: creating new branch

git checkout -b feature/update-readme

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git checkout -b feature/update-readme
Switched to a new branch 'feature/update-readme'
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git branch
* feature/update-readme
master
```

Pushing the branch to the remote repository

```
git add .\readme.md
git commit -m "Added readme.md file"

git push -u origin feature/update-readme
```

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git add .\readme.md
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git commit -m "Added readme.md file"
[feature/update-readme ca92ef8] Added readme.md file
1 file changed, 2 insertions(+)
create mode 100644 readme.md
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git push -u origin feature/update-readme
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 355 bytes | 177.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'feature/update-readme' on GitHub by visiting:
remote:   https://github.com/Vickykumar1001/git_exercise/pull/new/feature/update-readme
remote:
To https://github.com/Vickykumar1001/git_exercise.git
* [new branch]      feature/update-readme -> feature/update-readme
branch 'feature/update-readme' set up to track 'origin/feature/update-readme'.
```

4. Merge Branch to master:

Switching to master branch

```
git checkout master
```

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
```

Merging feature branch to master

```
git merge feature/update-readme
```

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git merge feature/update-readme
Updating adf09a7..ca92ef8
Fast-forward
 readme.md | 2 ++
1 file changed, 2 insertions(+)
create mode 100644 readme.md
```

Pushing the merged changes

```
git push -u origin master
```

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git push -u origin master
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Vickykumar1001/git_exercise.git
 adf09a7..ca92ef8 master -> master
branch 'master' set up to track 'origin/master'.
```

5. Branch Cleanup:

Deleting feature branch locally

```
git branch -d feature/update-readme
```

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git branch -d feature/update-readme
Deleted branch feature/update-readme (was ca92ef8).
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git branch
* master
```

Deleting feature branch remotely

```
git push origin --delete feature/update-readme
```

```
PS F:\VickyKumar-NexTurn-Program\M2_SDE_Assignments\Assignments_Set_2> git push origin --delete feature/update-readme
To https://github.com/Vickykumar1001/git_exercise.git
- [deleted]          feature/update-readme
```