Problem Statement

Three Developers are working in Aperture Technology co. Their company wants a better Source Code Management System because the earlier tool had the tendency to save redundant code. Multiple Developers working simultaneously on the same block of code also caused problems. You are Mike, and your manager has given you the task of moving the company's code base to git and Github.

Action Items

- Create a local git repository and move the entire code base to it
- Create a new branch for a new feature you want to add to the application
- Merge back the created branch with the master branch
- Create a remote repository
- Push the local repository to company's remote repository

Solution:

1. Creating a local git repo and moving the codebase to it.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\Shamswaroop M S> cd D:\Learning\DevOps_E2\Assignments
PS D:\Learning\DevOps_E2\Assignments> mkdir assignment_1
    Directory: D:\Learning\DevOps_E2\Assignments
Mode
                     LastWriteTime
                                           Length Name
              26-05-2025
                             18:04
                                                  assignment_1
PS D:\Learning\DevOps_E2\Assignments> cd assignment_1
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git init
Initialized empty Git repository in D:/Learning/DevOps_E2/Assignments/assignment_1/.git/
PS D:\Learning\DevOps_E2\Assignments\assignment_1>
```

```
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git commit -m "first commit"
Author identity unknown
*** 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 'Shamswaroop M S@DESKTOP-97MODQR.(none)')
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git config --global user.email "shamswaroopms@gamil.com"
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git config --global user.name "Sham"
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git status
On branch master
No commits yet
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git commit -m "first commit" [master (root-commit) 6aea4ca] first commit
 1 file changed, 1 insertion(+)
create mode 100644 codebase.txt.txt
PS D:\Learning\DevOps_E2\Assignments\assignment_1>
 PS D:\Learning\DevOps_E2\Assignments\assignment_1> git status
 On branch master
 nothing to commit, working tree clean
 PS D:\Learning\DevOps_E2\Assignments\assignment_1>
```

2. Creating a new branch for the new feature.

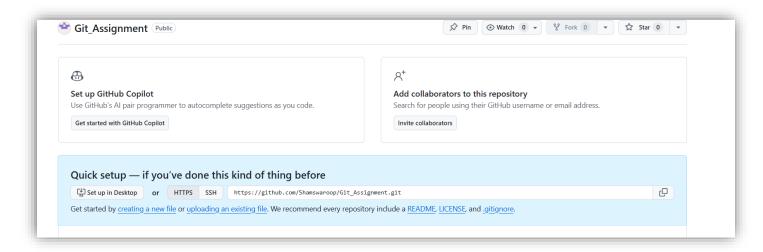
```
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git branch newFeature
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git checkout newFeature
Switched to branch 'newFeature'
```

```
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git branch
* newFeature
PS D:\Learning\DevOps_E2\Assignments\assignment_1> ls
    Directory: D:\Learning\DevOps_E2\Assignments\assignment_1
Mode
                     LastWriteTime
                                           Length Name
              26-05-2025
-a----
                             18:37
                                               33 codebase.txt.txt
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git add .
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git commit -m
error: switch 'm' requires a value
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git commit -m "new feature commit"
[newFeature 141082b] new feature commit
1 file changed, 2 insertions(+)
PS D:\Learning\DevOps_E2\Assignments\assignment_1>
```

3. Merge back the created branch with the master.

```
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git checkout master
Switched to branch 'master'
PS D:\Learning\DevOps_E2\Assignments\assignment_1> ls
   Directory: D:\Learning\DevOps_E2\Assignments\assignment_1
Mode
                     LastWriteTime
                                           Length Name
              26-05-2025
                             18:39
                                                18 codebase.txt.txt
-a---
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git merge newFeature
Updating 6aea4ca..141082b
Fast-forward
codebase.txt.txt | 2 ++
1 file changed, 2 insertions(+)
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git status
On branch master
nothing to commit, working tree clean
PS D:\Learning\DevOps_E2\Assignments\assignment_1>
```

4. Creating a remote repo



5. Push the local repo to remote repo

```
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git remote add origin https://github.com/Shamswaroop/Git_Assignment.git
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git remote -v
origin https://github.com/Shamswaroop/Git_Assignment.git (fetch)
origin https://github.com/Shamswaroop/Git_Assignment.git (push)
PS D:\Learning\DevOps_E2\Assignments\assignments\assignment_1> git status
On branch master
nothing to commit, working tree clean
PS D:\Learning\DevOps_E2\Assignments\assignment_1> git push origin master
info: please complete authentication in your browser..
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 482 bytes | 482.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Shamswaroop/Git_Assignment.git
* [new branch] master -> master
PS D:\Learning\DevOps_E2\Assignments\assignment_1>
```

