Mastering Git and GitHub for Test Automation: A Practical Guide

As a tester, I wanted to manage my test scripts and automation frameworks more efficiently. I often heard about Git and GitHub from the development team but wasn't sure what they were or how they could apply to my work. So, I decided to dive in.

What Are Git and GitHub?

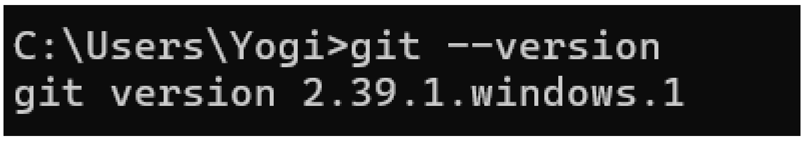
- **Git**: A tool that keeps track of changes in your code and test scripts. It allows you to save different versions of your work and go back to older ones if needed.
- **GitHub**: A website where you can store and share your Git projects with others. It's great for collaboration and working with a team.

Step 1: Installing Git

To use Git, I first installed it on my computer:

1. **Download Git**:
   I went to git-scm.com and downloaded the latest version for my operating system.
2. **Install Git**:
   I ran the installer and kept the default options.
3. **Check Installation**:
   After installation, I opened the terminal (or Command Prompt) and typed:

git –version



```
C:\Users\Yogi>git --version
git version 2.39.1.windows.1
```

If a version number appeared, it meant Git was installed successfully.

Step 2: Setting Up Git

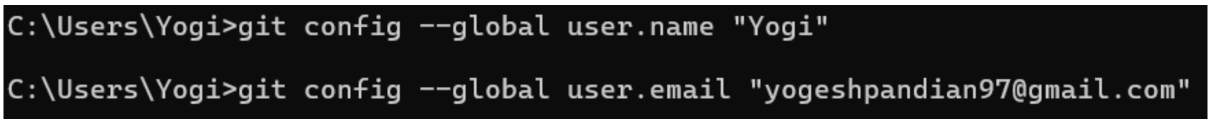
Before using Git, I configured my name and email. This information is needed to identify who made changes.

1. **Set Your Name**:

git config --global user.name "Your Name"

2. **Set Your Email**:

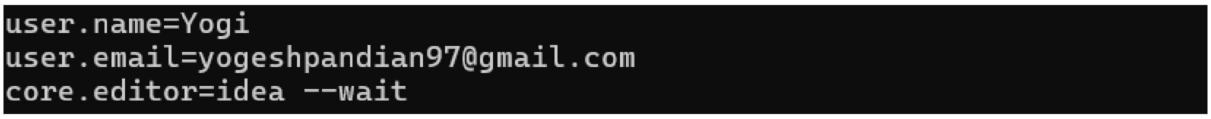
git config --global user.email your.email@example.com



```
C:\Users\Yogi>git config --global user.name "Yogi"

C:\Users\Yogi>git config --global user.email "yogeshpandian97@gmail.com"
```

3. **Check Your Settings**:

git config –list

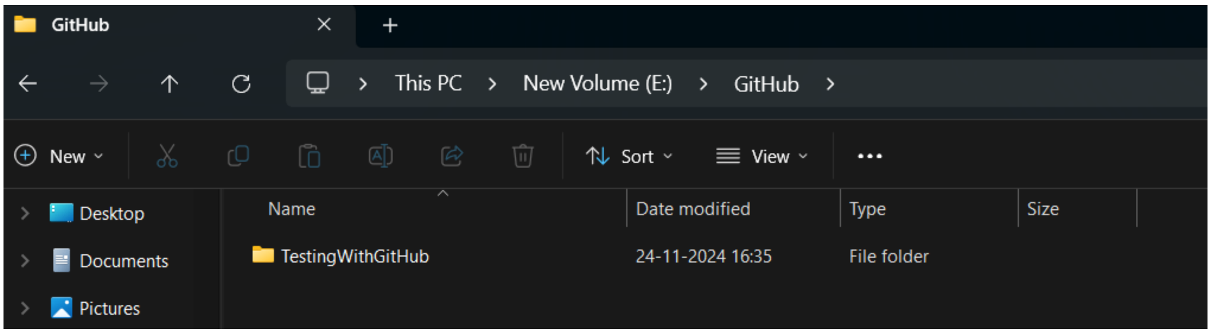


```
user.name=Yogi
user.email=yogeshpandian97@gmail.com
core.editor=idea --wait
```

This shows the name and email I just set.

Step 3: Creating a Local Project

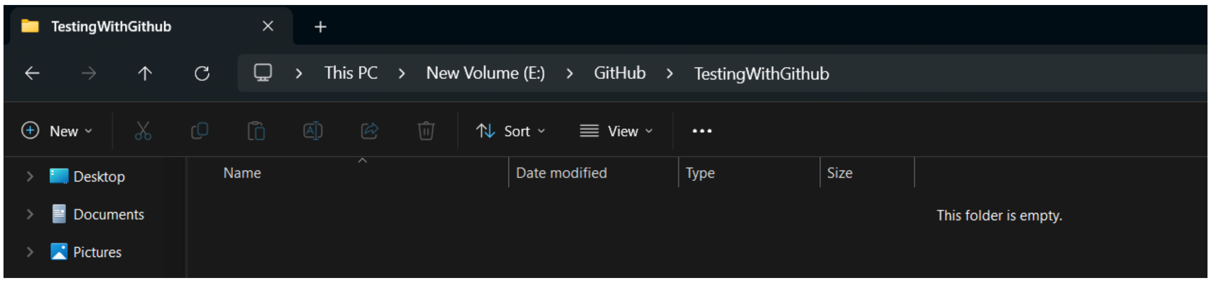
I created a new folder on my system called TestingWithGitHub to store my test scripts.
Then, I opened this folder in IntelliJ IDEA so I could work on it directly.



Name	Date modified	Type	Size
TestingWithGitHub	24-11-2024 16:35	File folder	

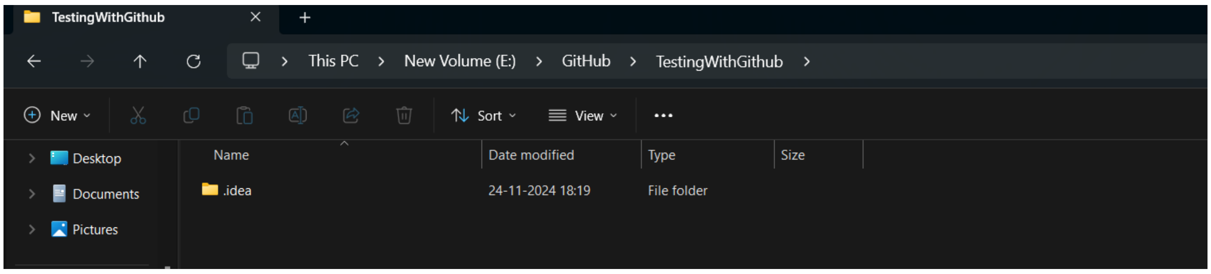
Next, I opened **IntelliJ IDEA**, navigated to **File > Open**, and selected the **TestingWithGitHub** folder. This made it easy to work within the folder directly from IntelliJ.

Before



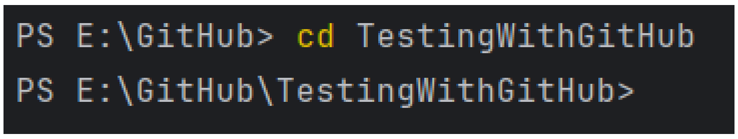
This folder is empty.

After



Name	Date modified	Type	Size
.idea	24-11-2024 18:19	File folder	

To start using Git commands, I opened the built-in terminal in IntelliJ. I navigated to the path where the **TestingWithGitHub** folder was located using the cd command:



```
PS E:\GitHub> cd TestingWithGitHub
PS E:\GitHub\TestingWithGitHub>
```

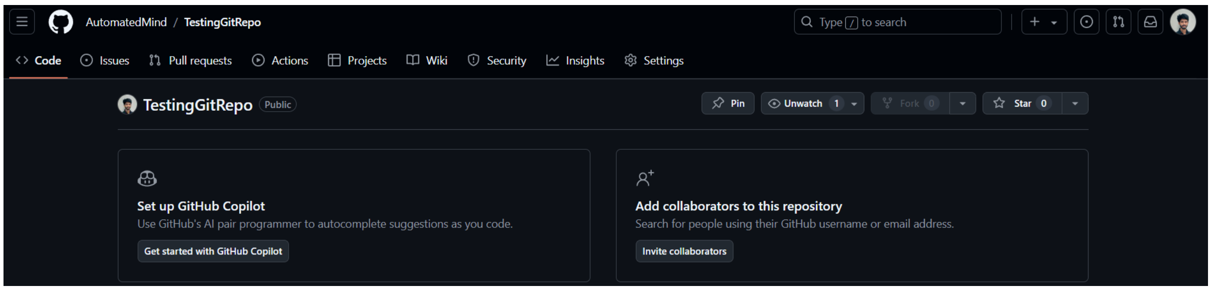
Step 4: Creating a GitHub Repository

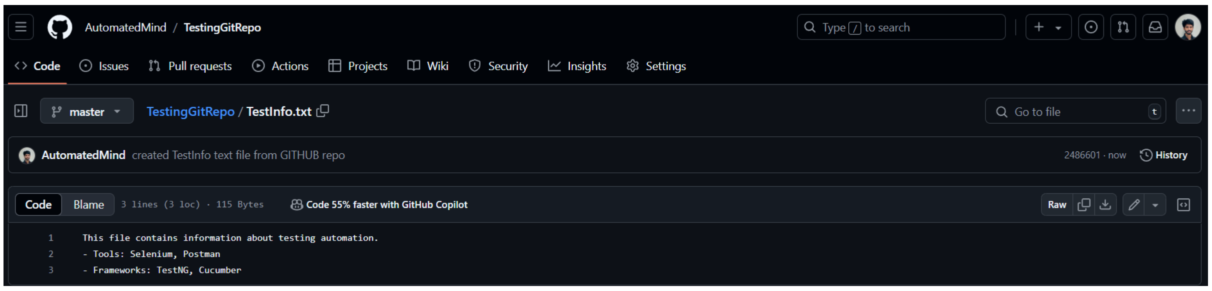
Next, I logged into my GitHub account and created a new repository named TestingGitRepo. In this repository, I added a file called **TestInfo.txt** with the following content:

This file contains information about test automation:

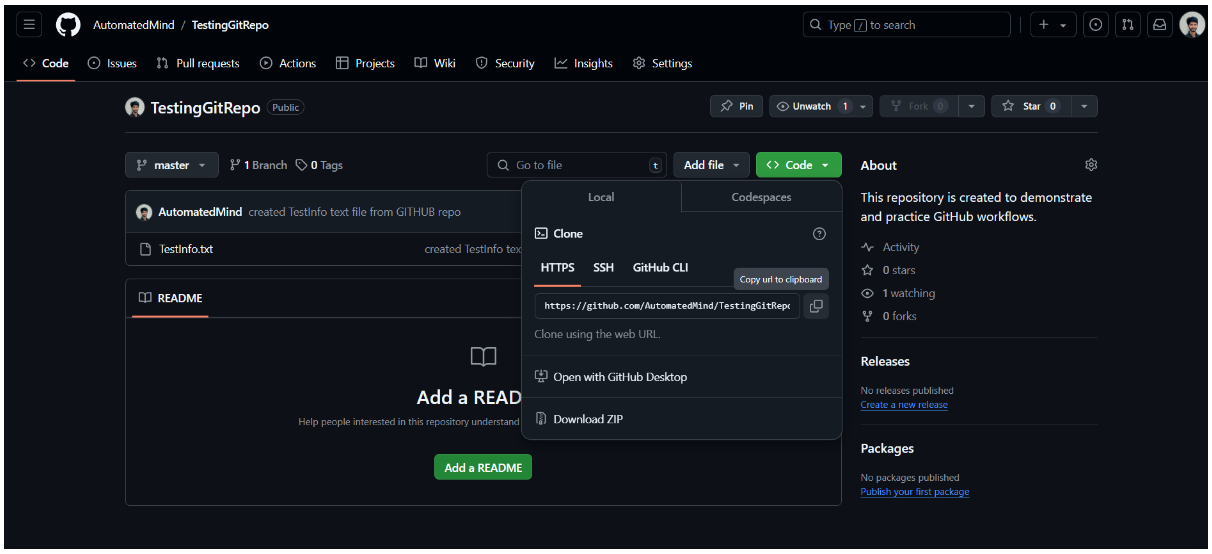
- Tools: Selenium, Postman

- Frameworks: TestNG, Cucumber


AutomatedMind / TestingGitRepo
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
TestingGitRepo
Public
Pin
Unwatch 1
Fork 0
Star 0
Set up GitHub Copilot
Use GitHub's AI pair programmer to autocomplete suggestions as you code.
Get started with GitHub Copilot
Add collaborators to this repository
Search for people using their GitHub username or email address.
Invite collaborators


AutomatedMind / TestingGitRepo
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
master
TestingGitRepo / TestInfo.txt
Go to file
AutomatedMind created TestInfo text file from GITHUB repo
2486601 · now
History
Code
Blame
3 lines (3 loc) · 115 Bytes
Code 55% faster with GitHub Copilot
Raw

```
This file contains information about testing automation.
- Tools: Selenium, Postman
- Frameworks: TestNG, Cucumber
```



```
https://github.com/AutomatedMind/TestingGitRepc
```

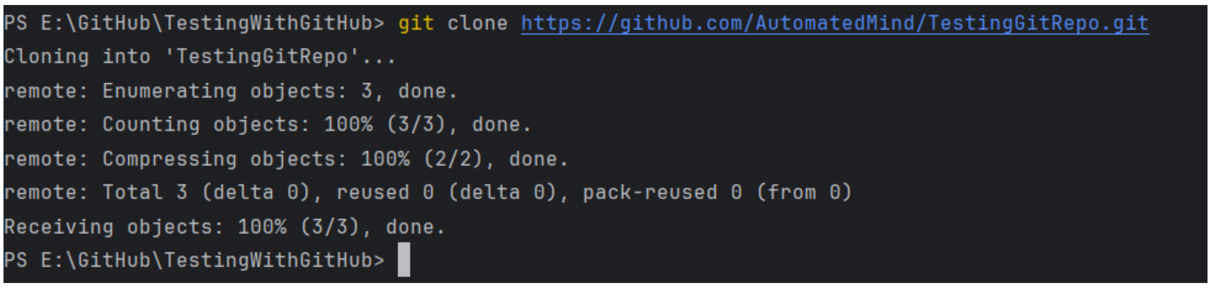
This repository is created to demonstrate and practice GitHub workflows.

GitHub provided a URL for this repository, which I copied.

Step 5: Cloning the Repository

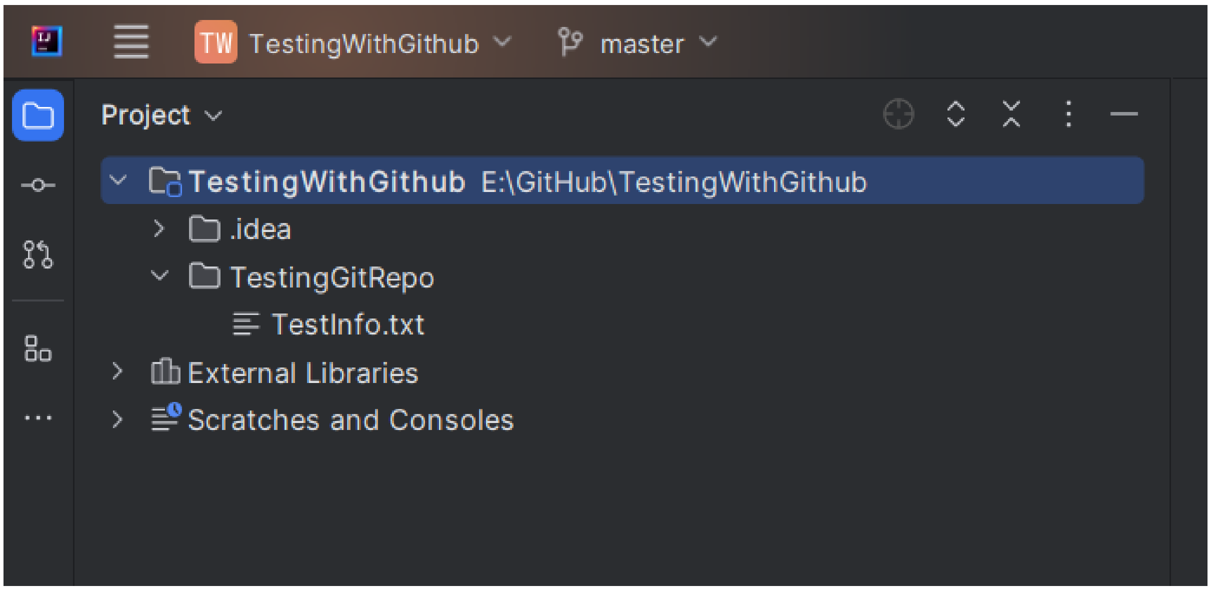
To connect my local project with the GitHub repository, I used the **clone** command. In the terminal, I typed:

git clone <GitHub-Repo-URL>



```
PS E:\GitHub\TestingWithGitHub> git clone https://github.com/AutomatedMind/TestingGitRepo.git
Cloning into 'TestingGitRepo'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
PS E:\GitHub\TestingWithGitHub>
```

This command downloaded the GitHub repository into my local system. Now, I could see the **TestingGitRepo** folder and the **TestInfo.txt** file inside IntelliJ.



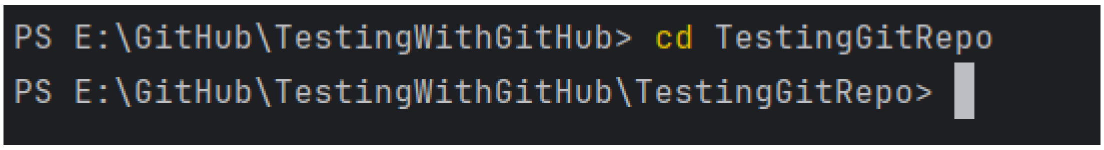
```
TestingWithGithub    master
Project
TestingWithGithub E:\GitHub\TestingWithGithub
  .idea
  TestingGitRepo
    TestInfo.txt
External Libraries
Scratches and Consoles
```

This copied all the files from the GitHub repository into my local folder.

Step 6: Adding and Committing Files

I navigated into the newly cloned repository:

cd TestingGitRepo

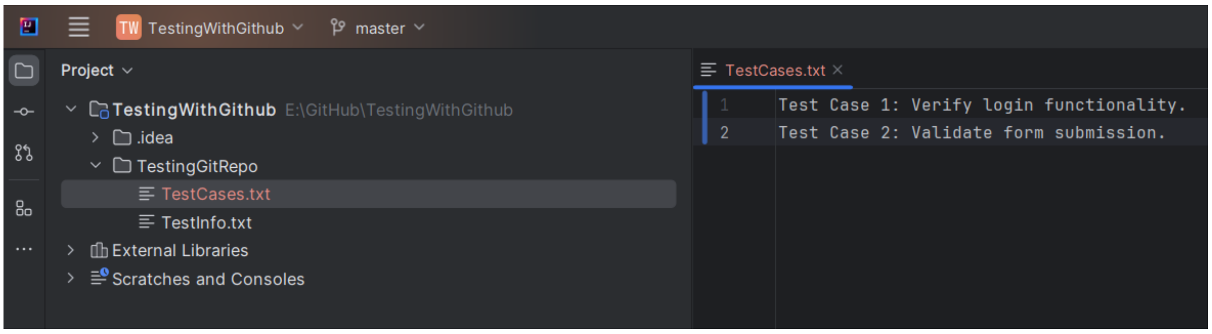


```
PS E:\GitHub\TestingWithGitHub> cd TestingGitRepo
PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

In IntelliJ, I created a new file named **TestCases.txt** with this content:

Test Case 1: Verify login functionality.

Test Case 2: Validate form submission.

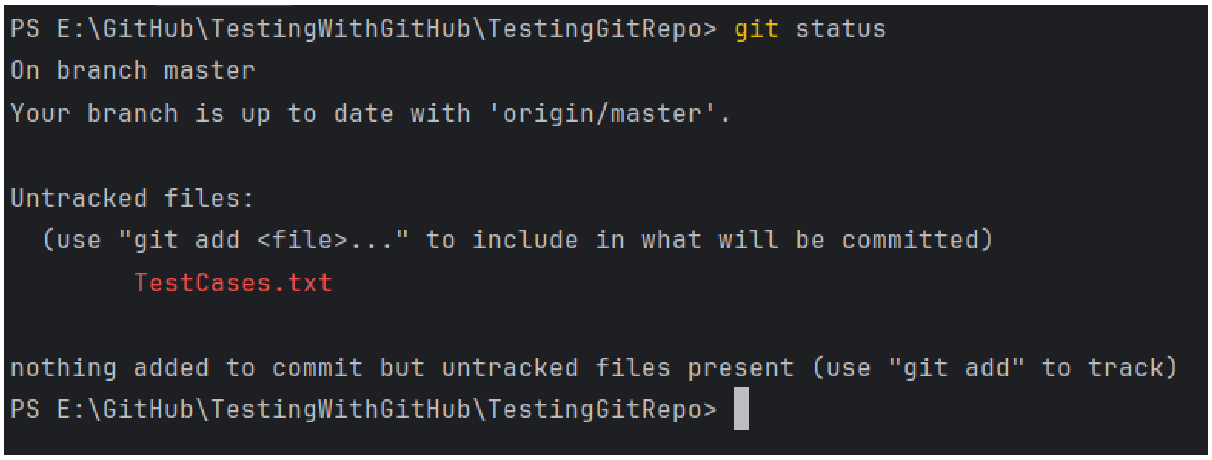


```
Test Case 1: Verify login functionality.
Test Case 2: Validate form submission.
```

The red line of the file indicates the file is untracked which means it is not in git

I saved the file, then checked its status with:

git status



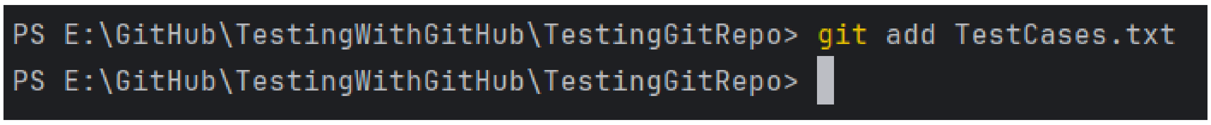
```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git status
On branch master
Your branch is up to date with 'origin/master'.

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

nothing added to commit but untracked files present (use "git add" to track)
PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

The file showed as "untracked," meaning Git was not tracking it yet.

Staging the File

To tell Git to start tracking the file, I staged it using the following command:

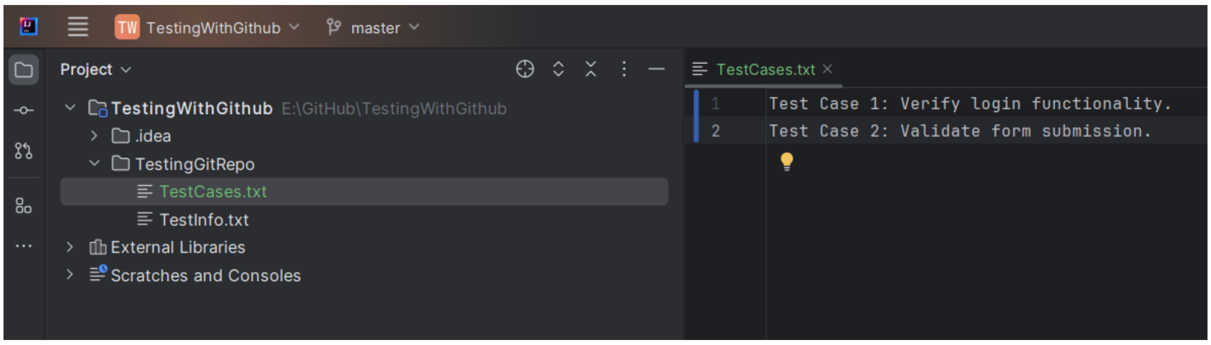
git add TestCases.txt



```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git add TestCases.txt
PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

This moved the file to the **staging area**, which is where changes are prepared before being committed.

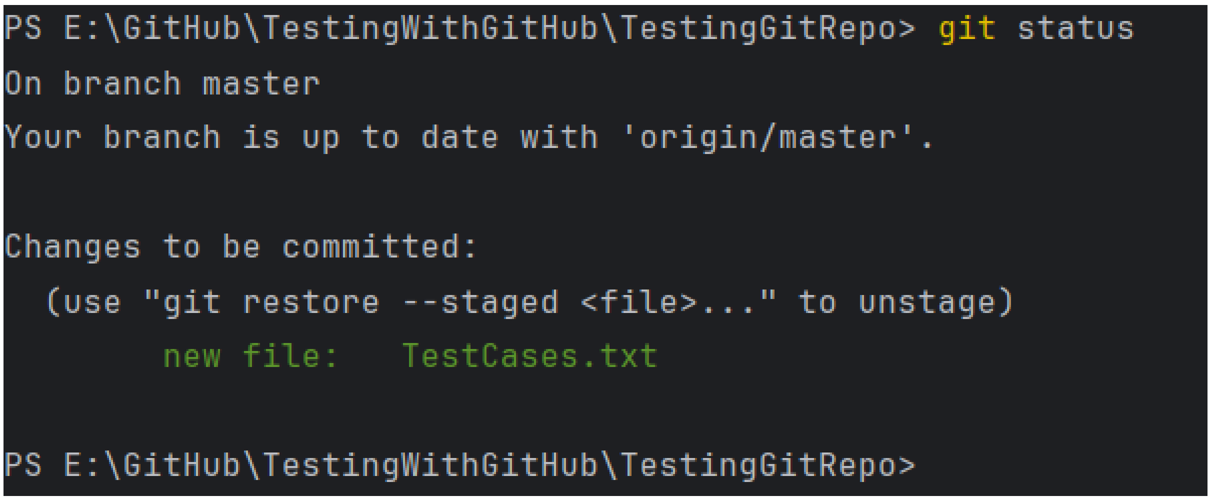
Now the colour of the file changed to green which indicates it is staged now



```
Test Case 1: Verify login functionality.
Test Case 2: Validate form submission.
```

To confirm check the git status

git status

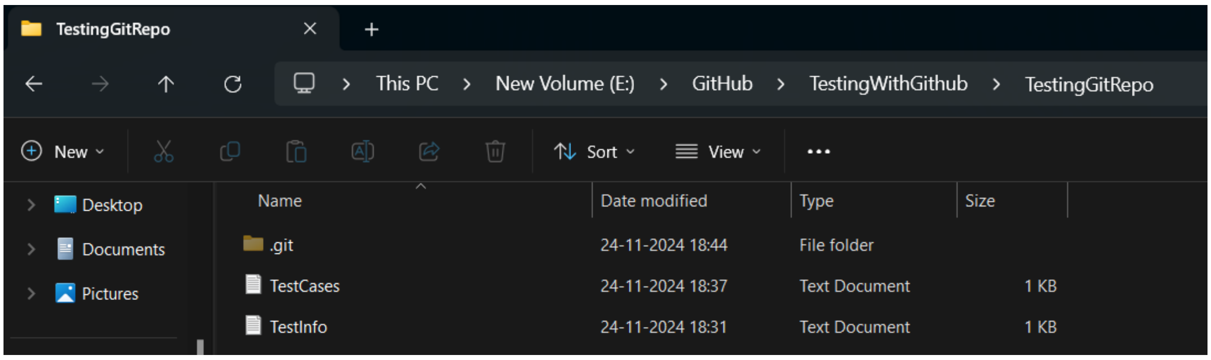


```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   TestCases.txt

PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

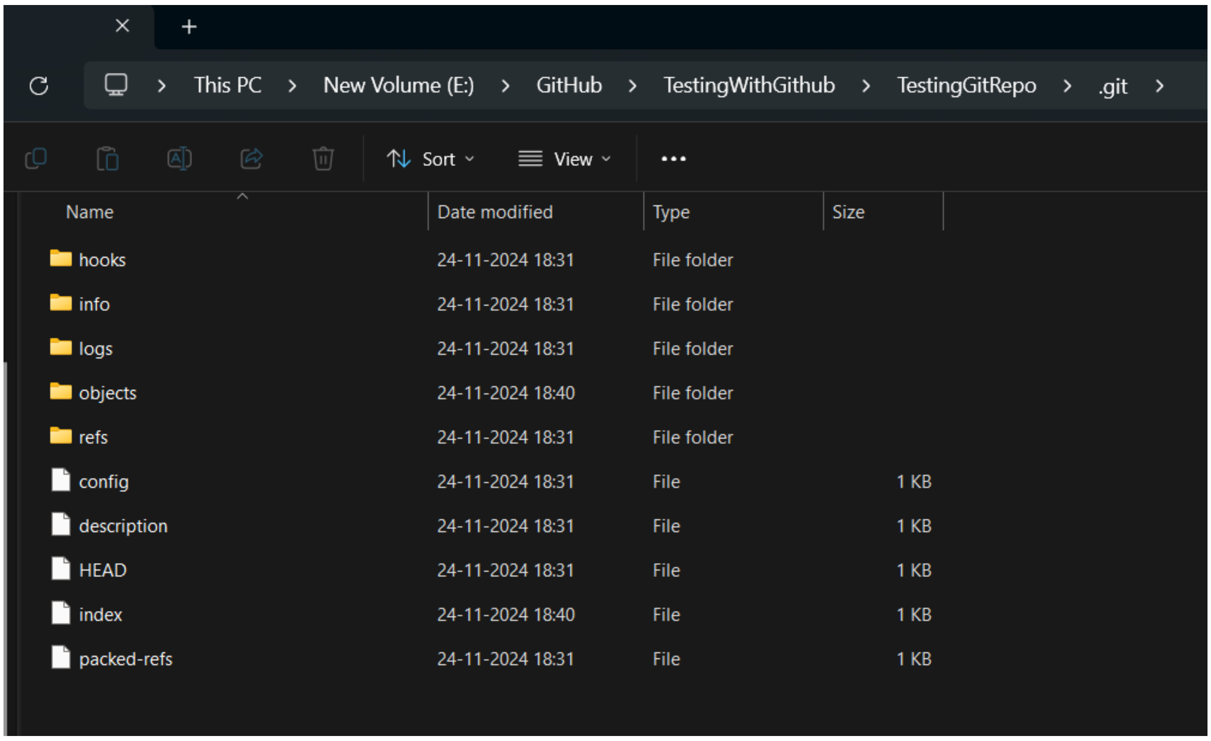
The file **TestCases.txt** is now in the staging area, which means it is ready to be committed to the local repository.

Additional Point: When we refer to the local repository, it is stored in the .git folder, which is created when we clone or initialize a repository. This folder is usually hidden in the project directory.

Once the **TestCases.txt** file is committed, it will be saved as part of the version history in the .git folder (local repository).


TestingGitRepo
This PC > New Volume (E:) > GitHub > TestingWithGithub > TestingGitRepo
New
Sort
View
Desktop
Documents
Pictures

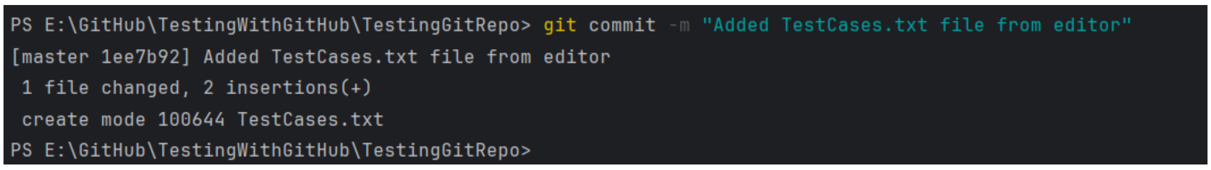
Name	Date modified	Type	Size
.git	24-11-2024 18:44	File folder	
TestCases	24-11-2024 18:37	Text Document	1 KB
TestInfo	24-11-2024 18:31	Text Document	1 KB


This PC > New Volume (E:) > GitHub > TestingWithGithub > TestingGitRepo > .git >
Sort
View

Name	Date modified	Type	Size
hooks	24-11-2024 18:31	File folder	
info	24-11-2024 18:31	File folder	
logs	24-11-2024 18:31	File folder	
objects	24-11-2024 18:40	File folder	
refs	24-11-2024 18:31	File folder	
config	24-11-2024 18:31	File	1 KB
description	24-11-2024 18:31	File	1 KB
HEAD	24-11-2024 18:31	File	1 KB
index	24-11-2024 18:40	File	1 KB
packed-refs	24-11-2024 18:31	File	1 KB

Then, I committed the changes with:

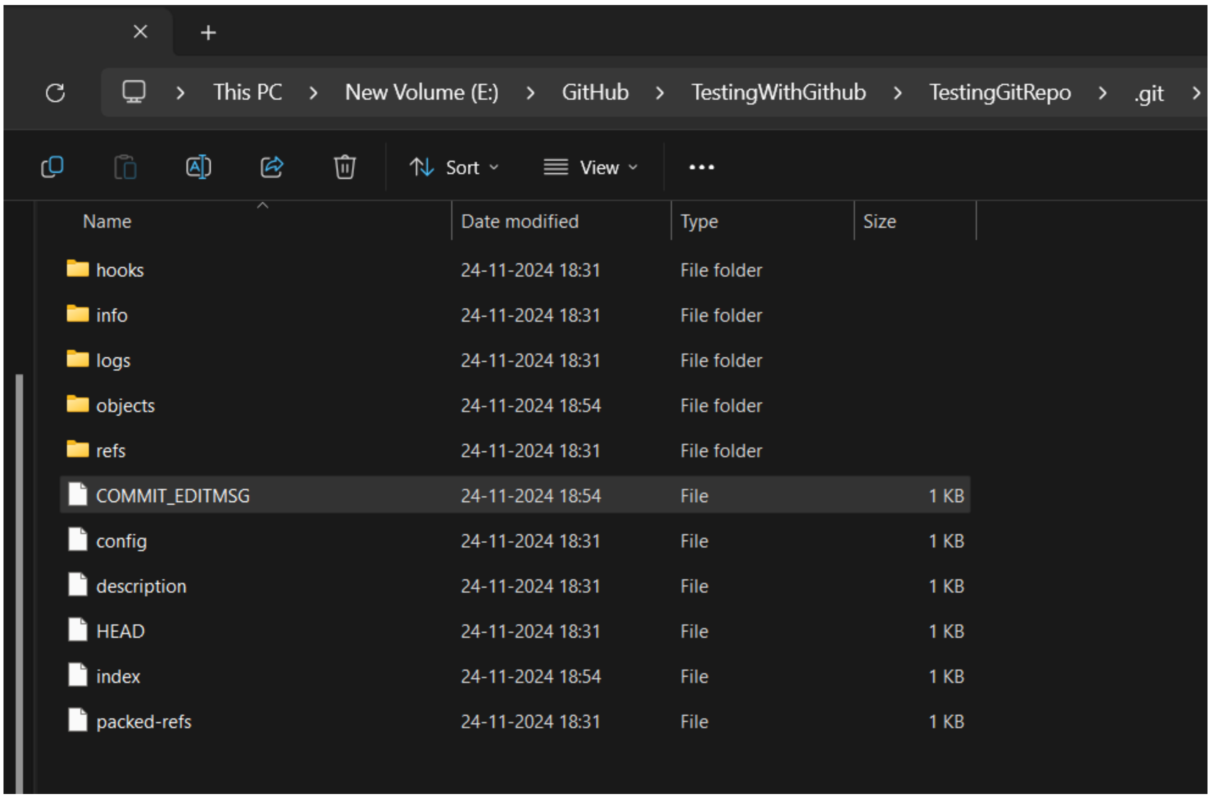
git commit -m "Added TestCases.txt"


```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git commit -m "Added TestCases.txt file from editor"
[master 1ee7b92] Added TestCases.txt file from editor
 1 file changed, 2 insertions(+)
 create mode 100644 TestCases.txt
PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

This saved the changes in my local Git repository.

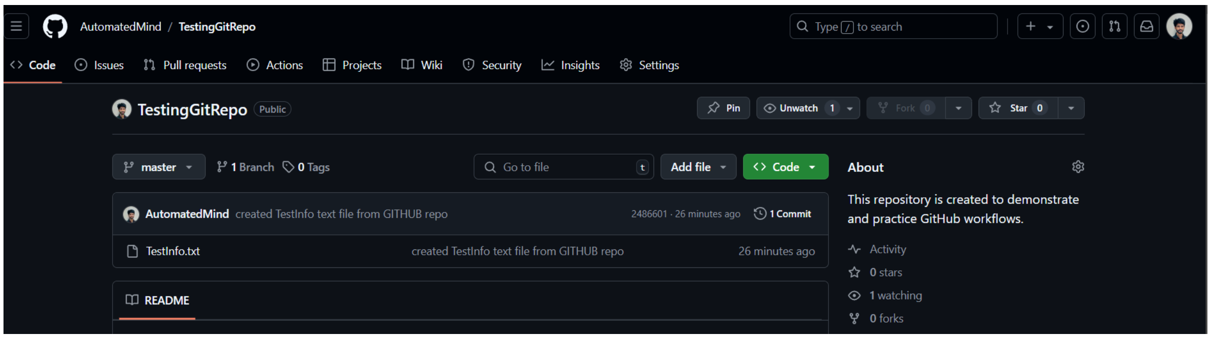
Here’s what happened:

- The commit saved the changes (adding the new file) in my local repository.


This PC > New Volume (E:) > GitHub > TestingWithGithub > TestingGitRepo > .git >
Sort
View

Name	Date modified	Type	Size
hooks	24-11-2024 18:31	File folder	
info	24-11-2024 18:31	File folder	
logs	24-11-2024 18:31	File folder	
objects	24-11-2024 18:54	File folder	
refs	24-11-2024 18:31	File folder	
COMMIT_EDITMSG	24-11-2024 18:54	File	1 KB
config	24-11-2024 18:31	File	1 KB
description	24-11-2024 18:31	File	1 KB
HEAD	24-11-2024 18:31	File	1 KB
index	24-11-2024 18:54	File	1 KB
packed-refs	24-11-2024 18:31	File	1 KB

- It created a new version of my project’s history, but the changes were still local and not yet visible on GitHub.



TestingGitRepo Public

AutomatedMind created TestInfo text file from GITHUB repo 2486601 · 26 minutes ago 1 Commit

TestInfo.txt created TestInfo text file from GITHUB repo 26 minutes ago

About

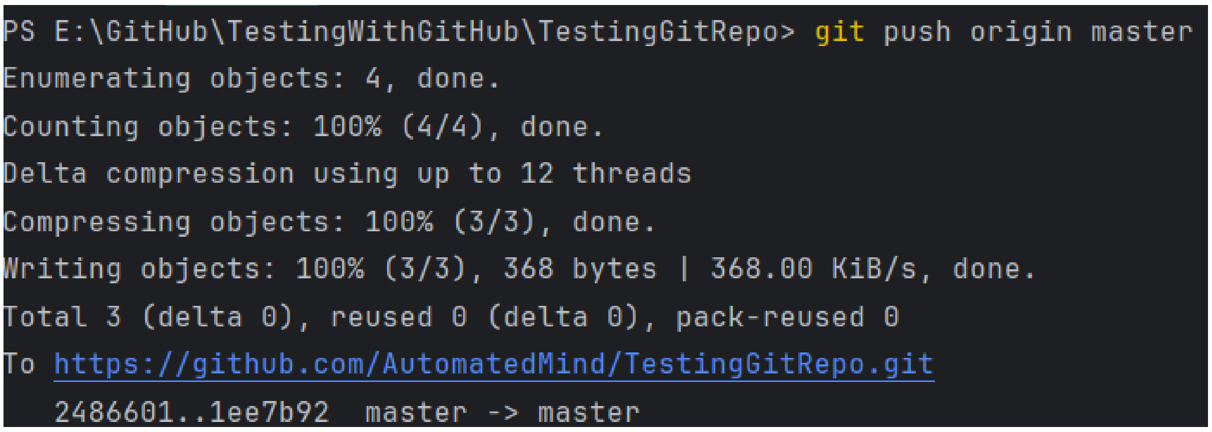
This repository is created to demonstrate and practice GitHub workflows.

Activity
0 stars
1 watching
0 forks

Step 7: Pushing Changes to GitHub

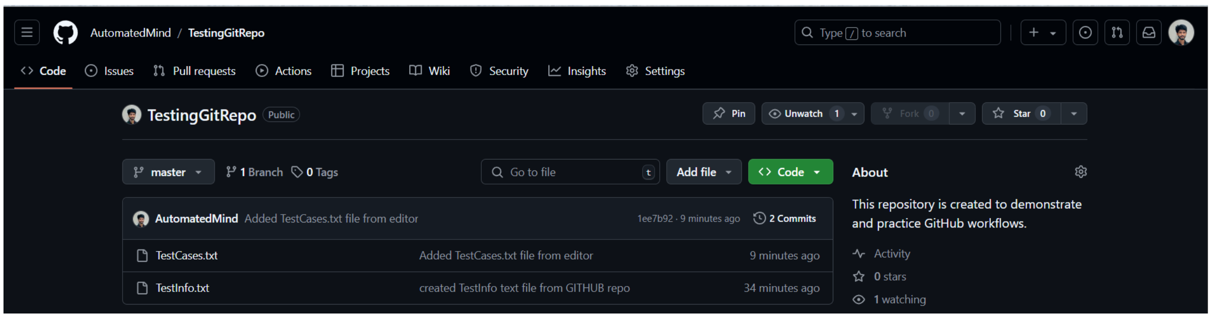
To upload the changes to GitHub, I used:

git push origin master



```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git push origin master
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), 368 bytes | 368.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/AutomatedMind/TestingGitRepo.git
   2486601..1ee7b92  master -> master
```

Now, the **TestCases.txt** file appeared in my GitHub repository.



AutomatedMind Added TestCases.txt file from editor — 1ee7b92 · 9 minutes ago — 2 Commits

TestCases.txt	Added TestCases.txt file from editor	9 minutes ago
TestInfo.txt	created TestInfo text file from GITHUB repo	34 minutes ago

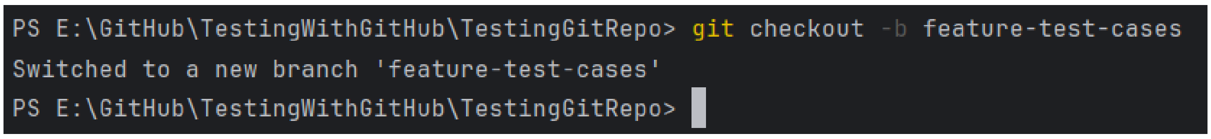
This repository is created to demonstrate and practice GitHub workflows.

Activity
0 stars
1 watching

Step 8: Creating a New Branch

To organize my work, I created a new branch named **feature-test-cases**:

git checkout -b feature-test-cases

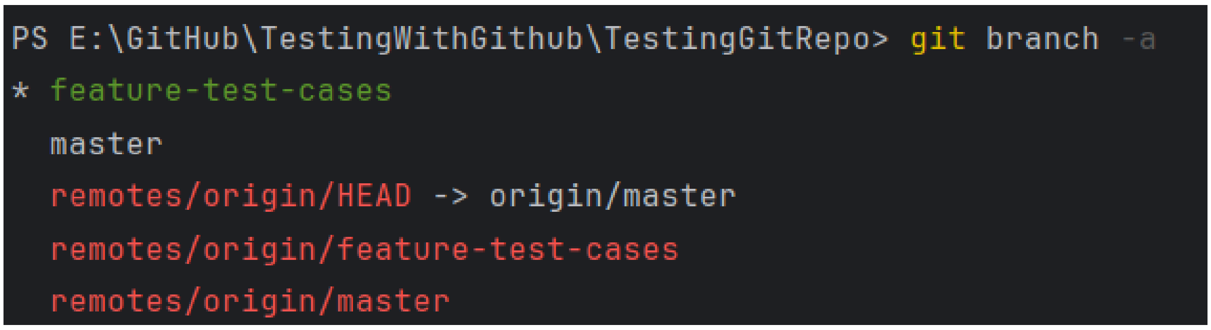


```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git checkout -b feature-test-cases
Switched to a new branch 'feature-test-cases'
PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

This command created and switched to the new branch.

To verify which branch it points

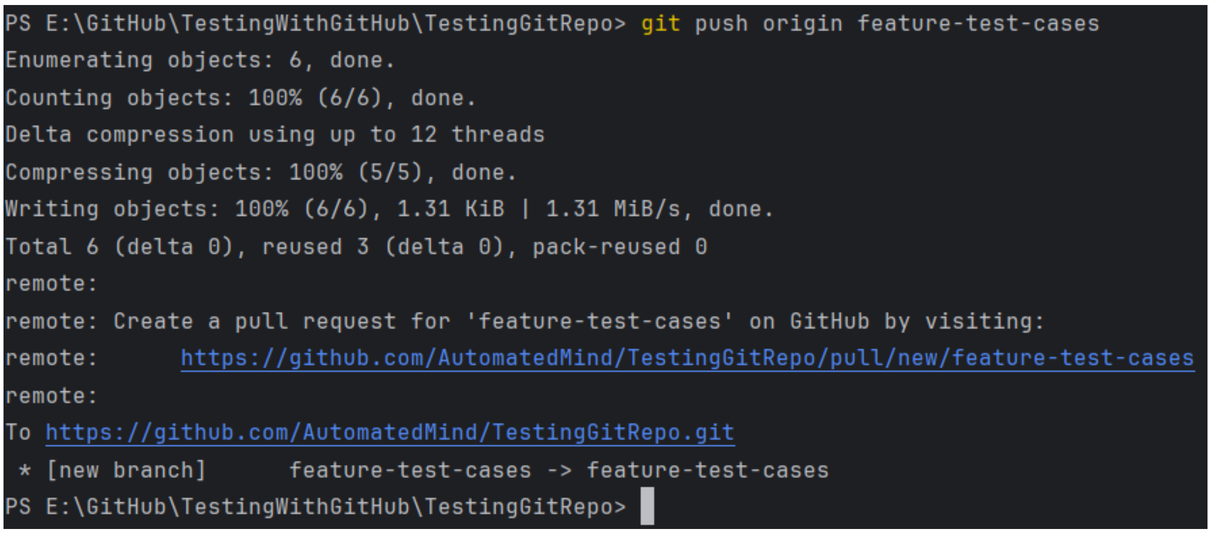
git branch -a



```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git branch -a
* feature-test-cases
  master
  remotes/origin/HEAD -> origin/master
  remotes/origin/feature-test-cases
  remotes/origin/master
```

Push the branch to the remote repository:

git push origin feature-test-cases



```
PS E:\GitHub\TestingWithGitHub\TestingGitRepo> git push origin feature-test-cases
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (6/6), 1.31 KiB | 1.31 MiB/s, done.
Total 6 (delta 0), reused 3 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'feature-test-cases' on GitHub by visiting:
remote:      https://github.com/AutomatedMind/TestingGitRepo/pull/new/feature-test-cases
remote:
To https://github.com/AutomatedMind/TestingGitRepo.git
 * [new branch]      feature-test-cases -> feature-test-cases
PS E:\GitHub\TestingWithGitHub\TestingGitRepo>
```

Note:

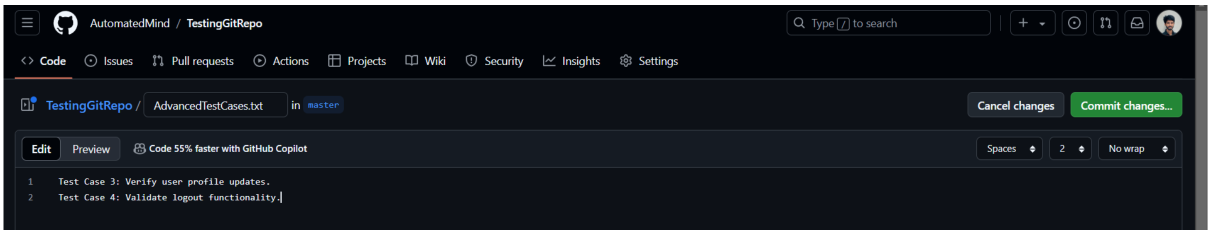
Creating a branch only? No need to stage or commit before pushing.

Made changes in the branch? You must stage and commit before pushing.

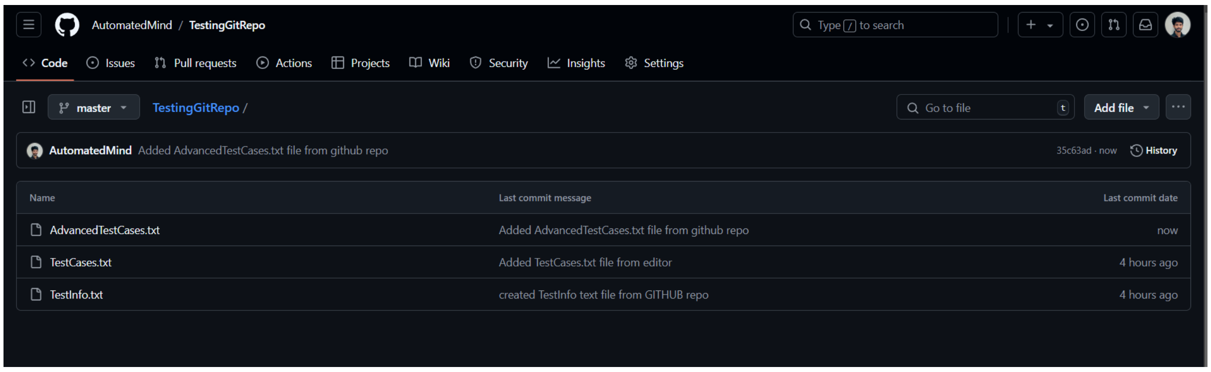
I then added a file called **AdvancedTestCases.txt** on GitHub with the content:

Test Case 3: Verify user profile updates.

Test Case 4: Validate logout functionality.



```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
```

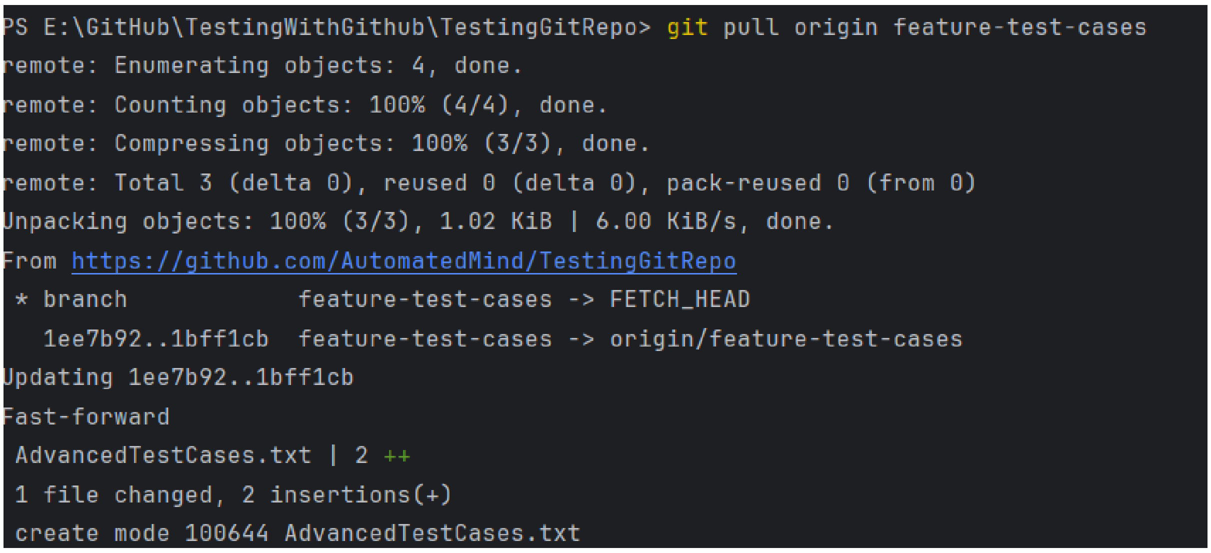


AutomatedMind Added AdvancedTestCases.txt file from github repo 35c63ad · now

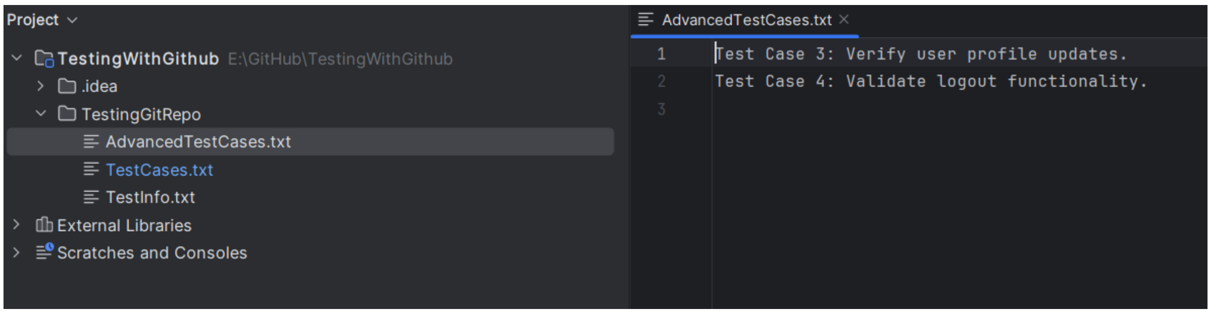
Name	Last commit message	Last commit date
AdvancedTestCases.txt	Added AdvancedTestCases.txt file from github repo	now
TestCases.txt	Added TestCases.txt file from editor	4 hours ago
TestInfo.txt	created TestInfo text file from GITHUB repo	4 hours ago

To pull this file into my local repository, I ran:

git pull origin feature-test-cases

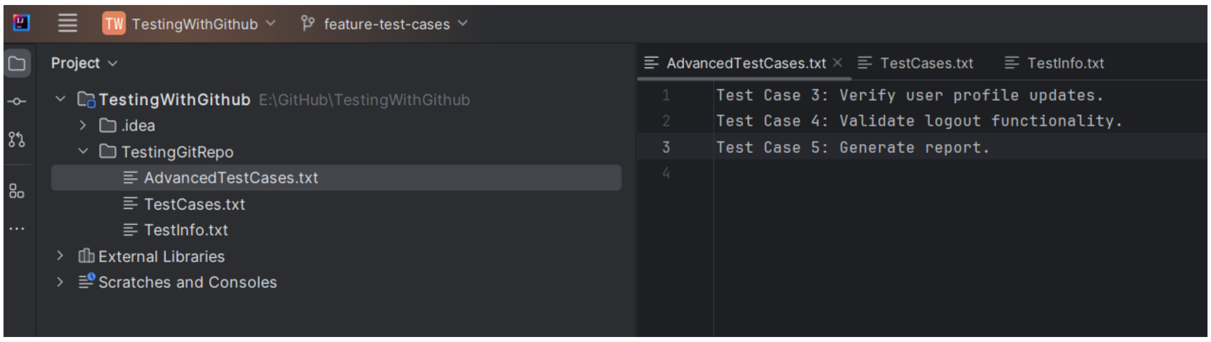


```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git pull origin feature-test-cases
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (3/3), 1.02 KiB | 6.00 KiB/s, done.
From https://github.com/AutomatedMind/TestingGitRepo
 * branch            feature-test-cases -> FETCH_HEAD
   1ee7b92..1bff1cb  feature-test-cases -> origin/feature-test-cases
Updating 1ee7b92..1bff1cb
Fast-forward
 AdvancedTestCases.txt | 2 ++
 1 file changed, 2 insertions(+)
 create mode 100644 AdvancedTestCases.txt
```



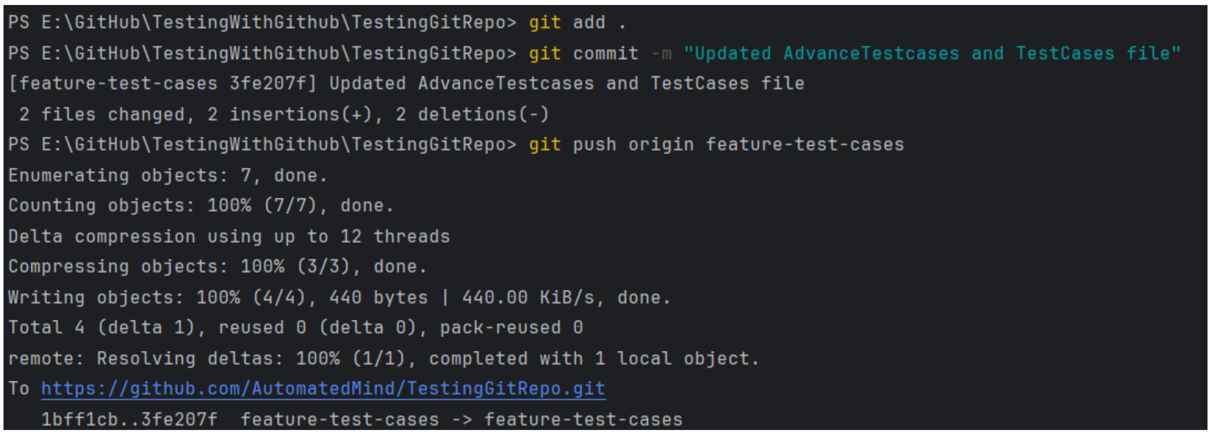
```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
```

Again, I made changes in AdvancedTestCases and TestCases text file.

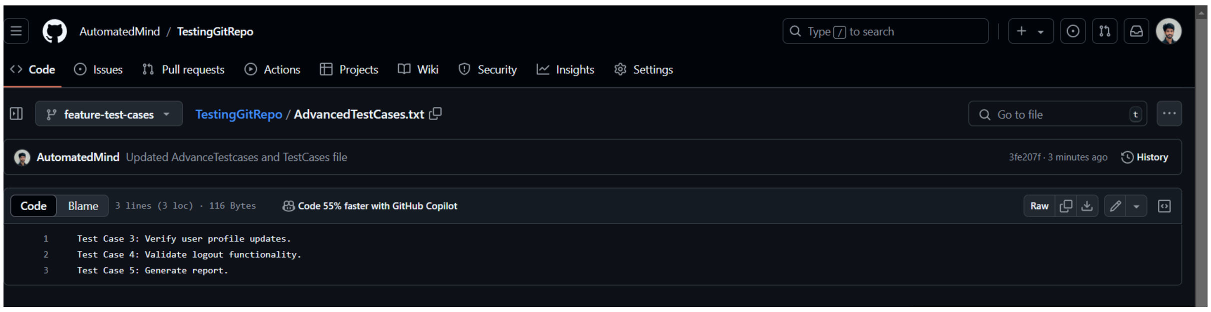


```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
```

Since I Made changes in the branch I did stage and commit before pushing



```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git add .
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git commit -m "Updated AdvanceTestcases and TestCases file"
[feature-test-cases 3fe207f] Updated AdvanceTestcases and TestCases file
 2 files changed, 2 insertions(+), 2 deletions(-)
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git push origin feature-test-cases
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 440 bytes | 440.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/AutomatedMind/TestingGitRepo.git
   1bff1cb..3fe207f  feature-test-cases -> feature-test-cases
```

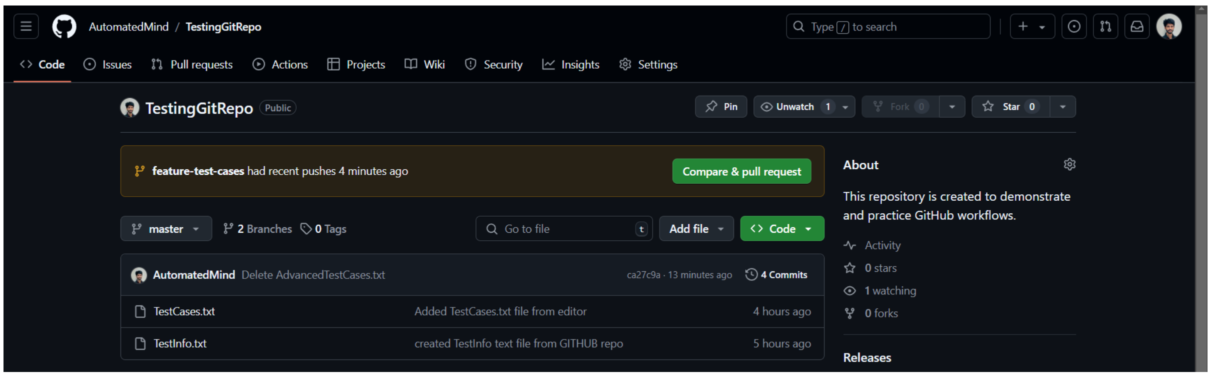

AutomatedMind / TestingGitRepo
Type / to search
Code
Issues
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
feature-test-cases
TestingGitRepo / AdvancedTestCases.txt
Go to file
History
Code
Blame
3 lines (3 loc) · 116 Bytes
Code 55% faster with GitHub Copilot
Raw

AutomatedMind Updated AdvanceTestcases and TestCases file 3fe207f · 3 minutes ago

```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
```

I could see the changes in feature-test-case branch in GITHUB repo after push.

Verify master branch **from GITHUB**



feature-test-cases had recent pushes 4 minutes ago

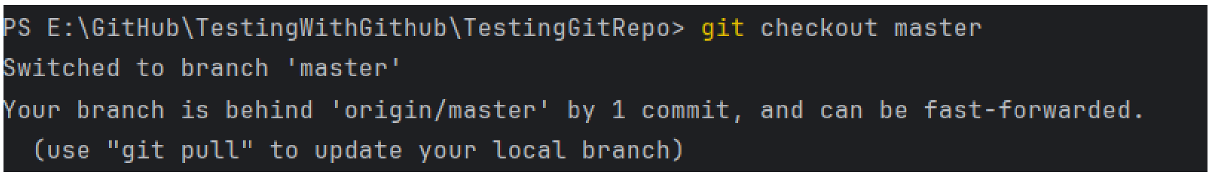
This repository is created to demonstrate and practice GitHub workflows.

AutomatedMind Delete AdvancedTestCases.txt ca27c9a · 13 minutes ago 4 Commits

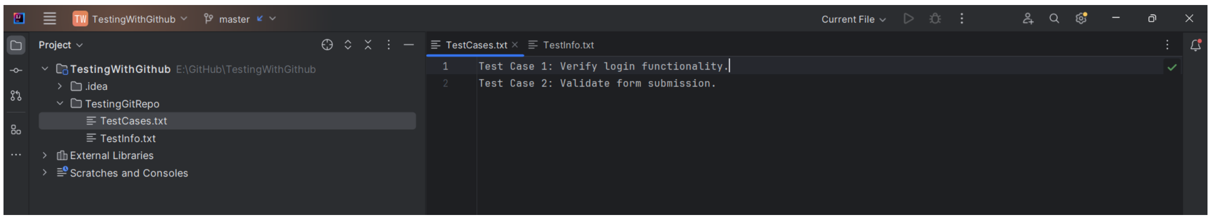
TestCases.txt	Added TestCases.txt file from editor	4 hours ago
TestInfo.txt	created TestInfo text file from GITHUB repo	5 hours ago

From local

git checkout master



```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git checkout master
Switched to branch 'master'
Your branch is behind 'origin/master' by 1 commit, and can be fast-forwarded.
  (use "git pull" to update your local branch)
```



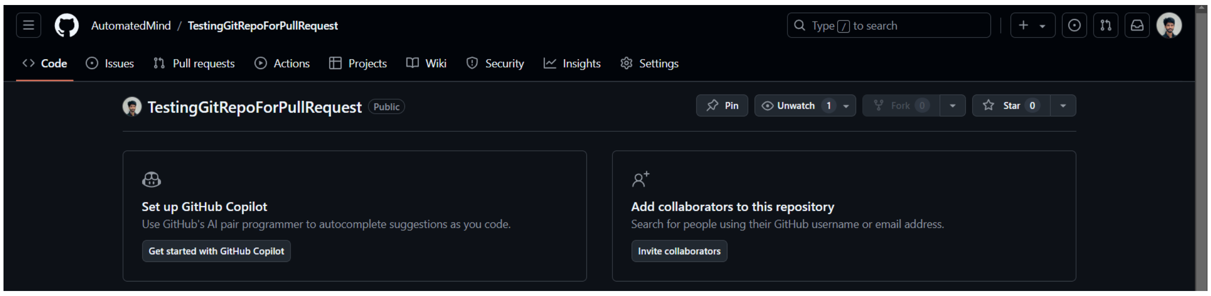
```
Test Case 1: Verify login functionality.
Test Case 2: Validate form submission.
```

The newly added file is present only in new branch which is feature-test-case and not in master.

Step 9: Managing Multiple Repositories

I wanted to practice managing more than one repository.

1. **Created a New Repository**:
   On GitHub, I created another repository called **TestingGitRepoForPullRequest**.

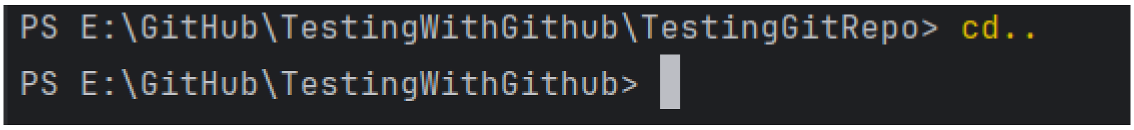


Set up GitHub Copilot
Use GitHub's AI pair programmer to autocomplete suggestions as you code.

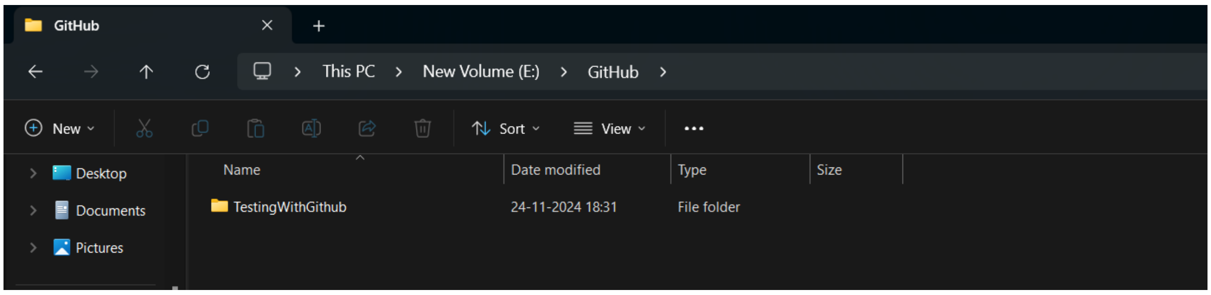
Add collaborators to this repository
Search for people using their GitHub username or email address.

2. **Initialized Git**:
   Before initialize it have the proper folder structure

   In my local folder, I navigated to Base project folder **TestingWithGithub**



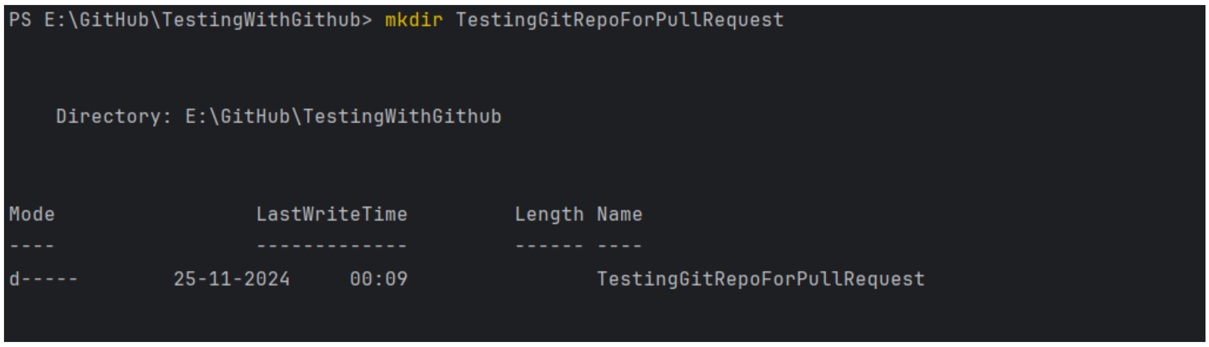
```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> cd..
PS E:\GitHub\TestingWithGithub>
```



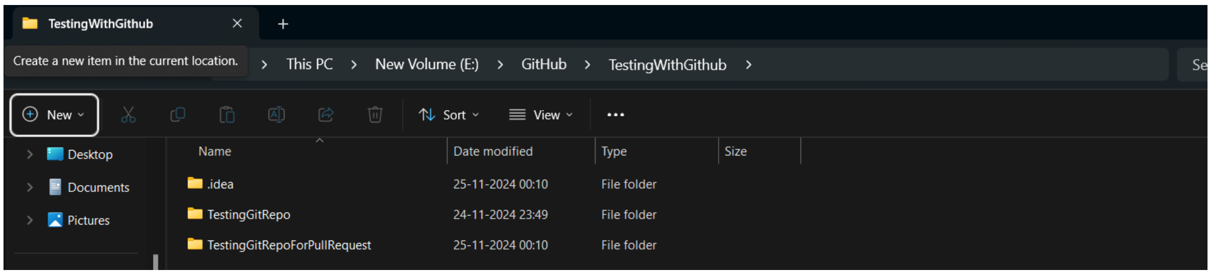
Name	Date modified	Type	Size
TestingWithGithub	24-11-2024 18:31	File folder	

Now I created a new directory

mkdir TestingGitRepoForPullRequest



```
PS E:\GitHub\TestingWithGithub> mkdir TestingGitRepoForPullRequest


    Directory: E:\GitHub\TestingWithGithub


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----        25-11-2024     00:09                TestingGitRepoForPullRequest
```

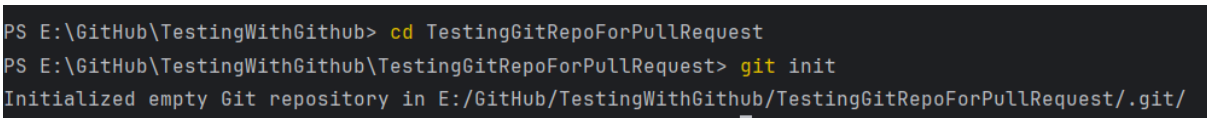


TestingWithGithub
Create a new item in the current location.
This PC > New Volume (E:) > GitHub > TestingWithGithub
New
Sort
View
Desktop
Documents
Pictures

Name	Date modified	Type	Size
.idea	25-11-2024 00:10	File folder	
TestingGitRepo	24-11-2024 23:49	File folder	
TestingGitRepoForPullRequest	25-11-2024 00:10	File folder	

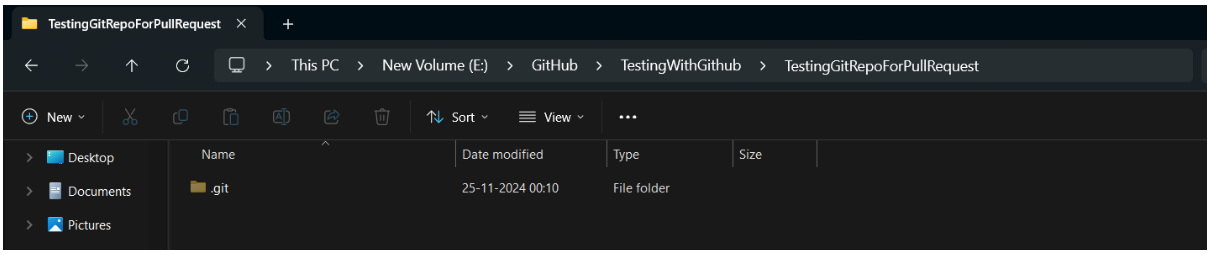
Then navigate to new repo and initialize git

git init



```
PS E:\GitHub\TestingWithGithub> cd TestingGitRepoForPullRequest
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest> git init
Initialized empty Git repository in E:/GitHub/TestingWithGithub/TestingGitRepoForPullRequest/.git/
```

This created a .git folder to track the project.



TestingGitRepoForPullRequest
This PC > New Volume (E:) > GitHub > TestingWithGithub > TestingGitRepoForPullRequest
New
Sort
View
Desktop
Documents
Pictures

Name	Date modified	Type	Size
.git	25-11-2024 00:10	File folder	

1. **Adding and Committing Files**:
   I created a file named **TestPlan.txt** with this content:

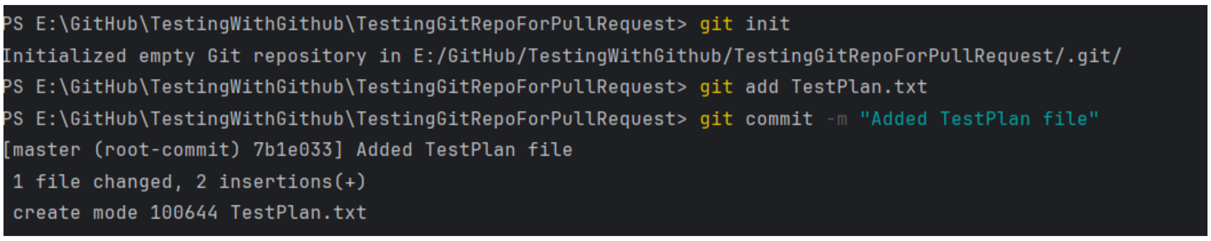
Test Plan: Automation scripts for E2E testing.

Tools: Selenium, Postman, TestNG.

Then, I staged and committed the file:

git add .

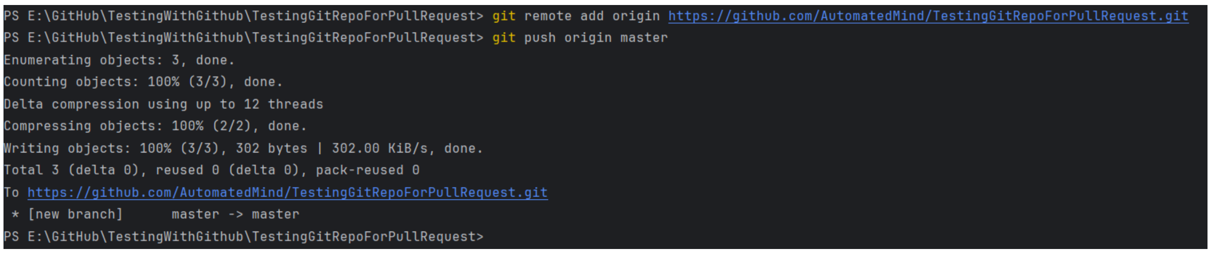
git commit -m "Added TestPlan.txt"



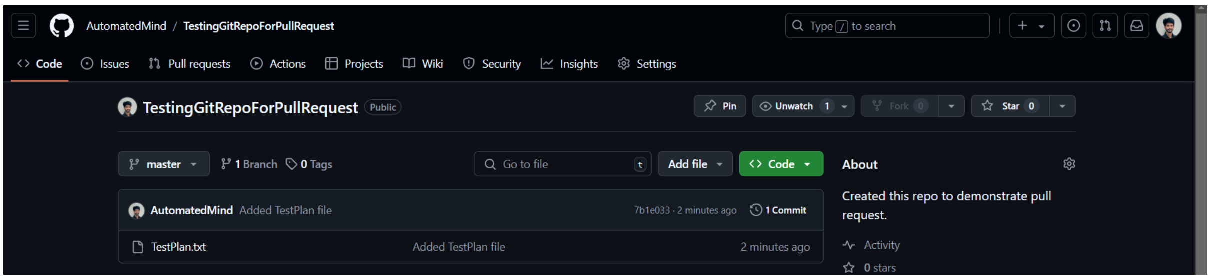
```
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest> git init
Initialized empty Git repository in E:/GitHub/TestingWithGithub/TestingGitRepoForPullRequest/.git/
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest> git add TestPlan.txt
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest> git commit -m "Added TestPlan file"
[master (root-commit) 7b1e033] Added TestPlan file
 1 file changed, 2 insertions(+)
 create mode 100644 TestPlan.txt
```

2. **Connected to GitHub**:
   I linked my local folder to the GitHub repository using:

git remote add origin <GitHub-Repo-URL>



```
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest> git remote add origin https://github.com/AutomatedMind/TestingGitRepoForPullRequest.git
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest> git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 302 bytes | 302.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/AutomatedMind/TestingGitRepoForPullRequest.git
 * [new branch]      master -> master
PS E:\GitHub\TestingWithGithub\TestingGitRepoForPullRequest>
```



TestingGitRepoForPullRequest Public

AutomatedMind Added TestPlan file 7b1e033 · 2 minutes ago 1 Commit

TestPlan.txt Added TestPlan file 2 minutes ago

About

Created this repo to demonstrate pull request.

Activity

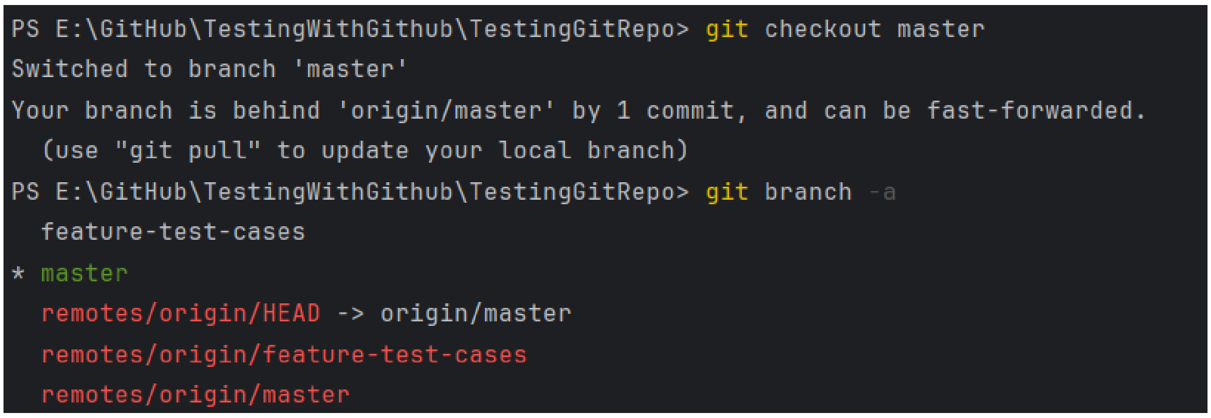
0 stars

Step 10: Merging Changes

To merge changes from one branch to another:

1. Switched to the **master** branch:

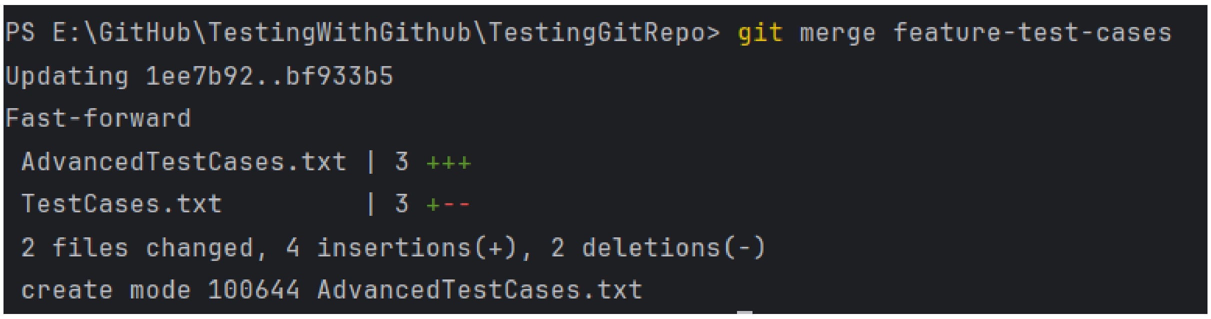
git checkout master



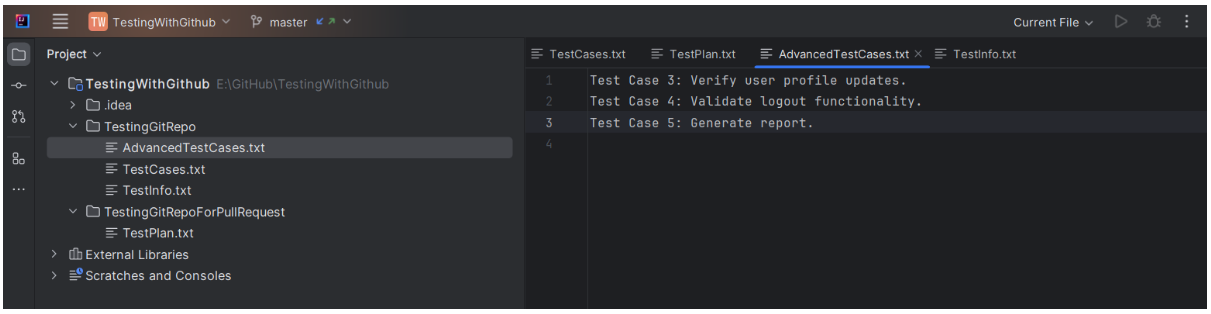
```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git checkout master
Switched to branch 'master'
Your branch is behind 'origin/master' by 1 commit, and can be fast-forwarded.
  (use "git pull" to update your local branch)
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git branch -a
  feature-test-cases
* master
  remotes/origin/HEAD -> origin/master
  remotes/origin/feature-test-cases
  remotes/origin/master
```

2. Merged the changes:

git merge feature-test-cases



```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git merge feature-test-cases
Updating 1ee7b92..bf933b5
Fast-forward
 AdvancedTestCases.txt | 3 +++
 TestCases.txt         | 3 +--
 2 files changed, 4 insertions(+), 2 deletions(-)
 create mode 100644 AdvancedTestCases.txt
```

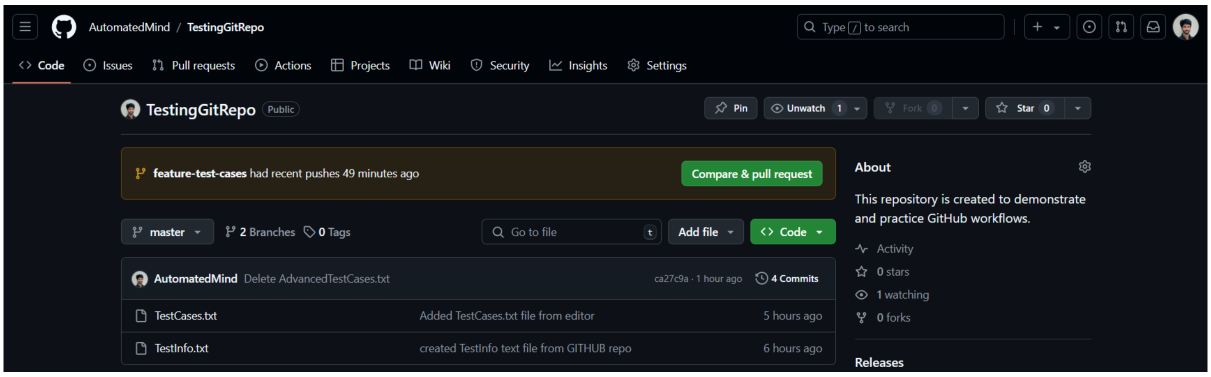


```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
```

After merge now the AdvancedTestCases.txt file is merged to master from feature-test-cases branch

3. Created a pull request on GitHub for review and merged it.

   Still in GITHUB repo the AdvancedTestCases.txt file is missing even after merge, because we merged in local repo but to merge in remote repo master or main branch we need to raise a pull request.


AutomatedMind / TestingGitRepo

Type / to search

Code · Issues · Pull requests · Actions · Projects · Wiki · Security · Insights · Settings

TestingGitRepo Public

Pin · Unwatch 1 · Fork 0 · Star 0

feature-test-cases had recent pushes 49 minutes ago — Compare & pull request

master · 2 Branches · 0 Tags · Go to file · Add file · Code

AutomatedMind Delete AdvancedTestCases.txt — ca27c9a · 1 hour ago — 4 Commits

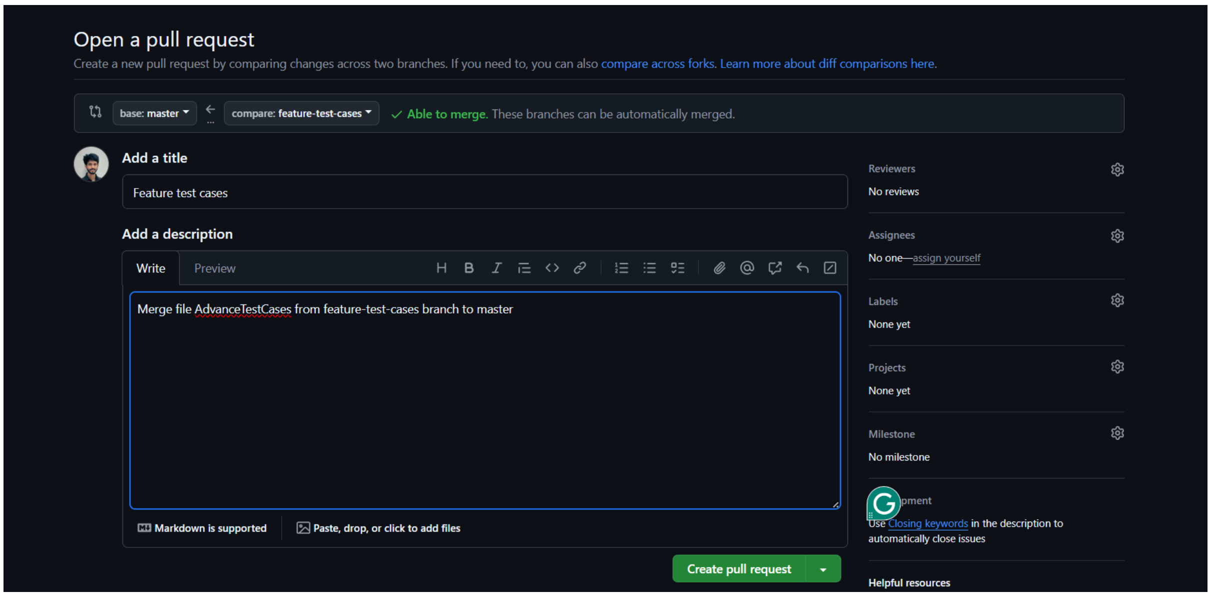
TestCases.txt	Added TestCases.txt file from editor	5 hours ago
TestInfo.txt	created TestInfo text file from GITHUB repo	6 hours ago

About

This repository is created to demonstrate and practice GitHub workflows.

Activity
0 stars
1 watching
0 forks

Releases


Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks. Learn more about diff comparisons here.

base: master ← compare: feature-test-cases ✓ Able to merge. These branches can be automatically merged.

Add a title

Feature test cases

Add a description

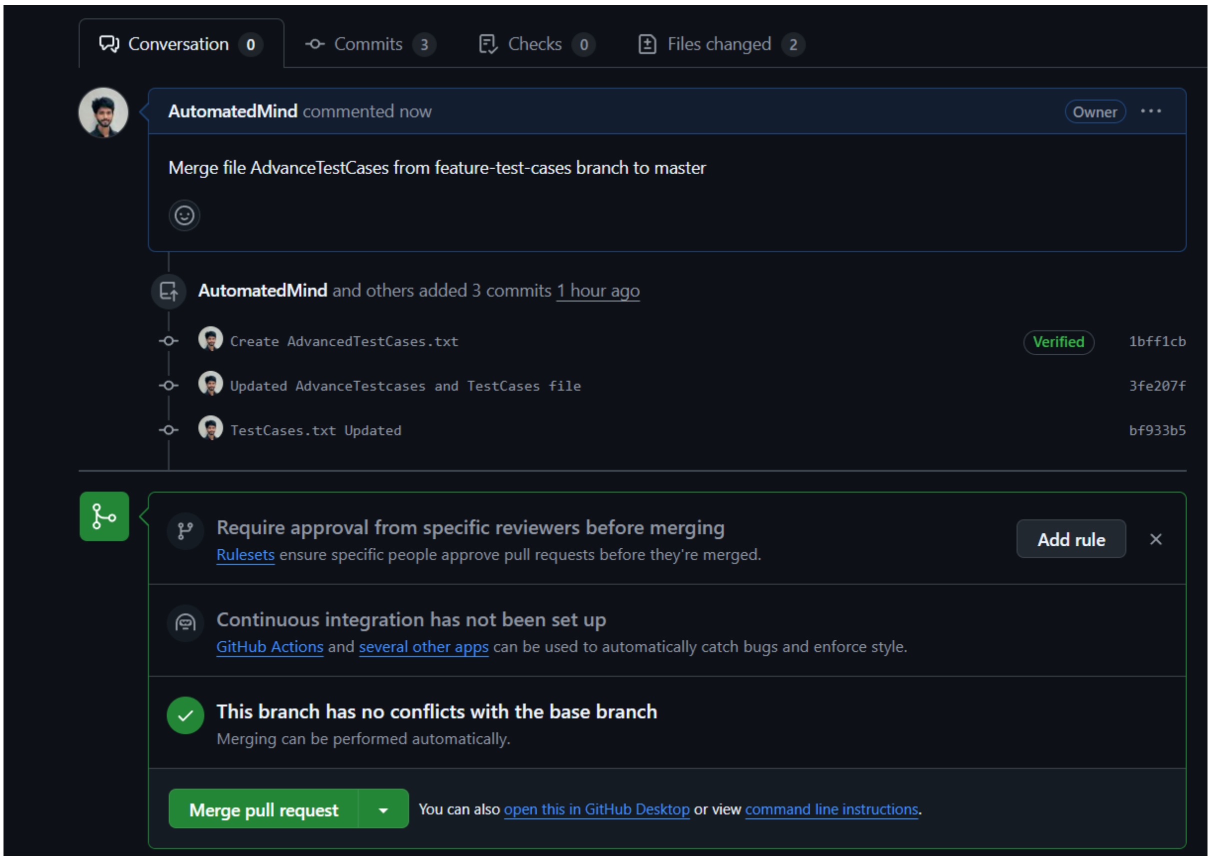
Write · Preview

Merge file AdvanceTestCases from feature-test-cases branch to master

Markdown is supported · Paste, drop, or click to add files

Create pull request

Reviewers: No reviews
Assignees: No one—assign yourself
Labels: None yet
Projects: None yet
Milestone: No milestone
Development: Use Closing keywords in the description to automatically close issues
Helpful resources


Conversation 0 · Commits 3 · Checks 0 · Files changed 2

AutomatedMind commented now — Owner

Merge file AdvanceTestCases from feature-test-cases branch to master

AutomatedMind and others added 3 commits 1 hour ago

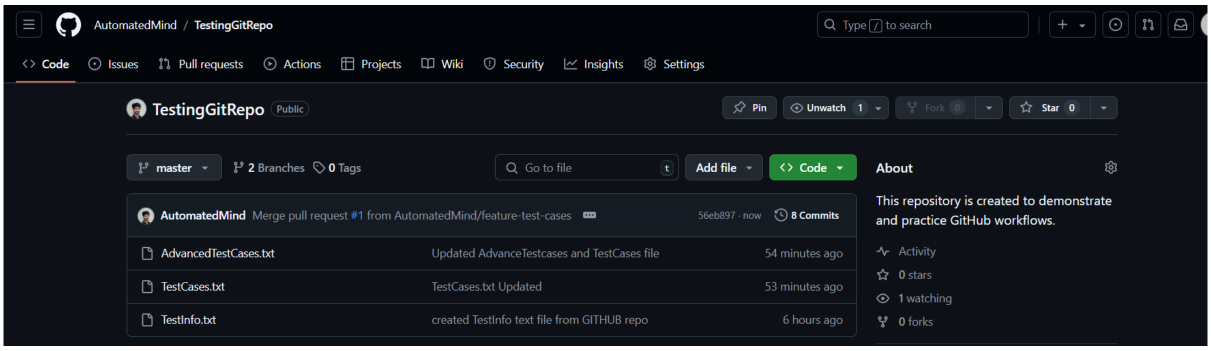
```
Create AdvancedTestCases.txt                 Verified  1bff1cb
Updated AdvanceTestcases and TestCases file            3fe207f
TestCases.txt Updated                                  bf933b5
```

Require approval from specific reviewers before merging
Rulesets ensure specific people approve pull requests before they're merged. — Add rule

Continuous integration has not been set up
GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.

This branch has no conflicts with the base branch
Merging can be performed automatically.

Merge pull request — You can also open this in GitHub Desktop or view command line instructions.



AutomatedMind / TestingGitRepo

Code | Issues | Pull requests | Actions | Projects | Wiki | Security | Insights | Settings

TestingGitRepo Public

master | 2 Branches | 0 Tags

AutomatedMind Merge pull request #1 from AutomatedMind/feature-test-cases — 56eb897 · now — 8 Commits

AdvancedTestCases.txt	Updated AdvanceTestcases and TestCases file	54 minutes ago
TestCases.txt	TestCases.txt Updated	53 minutes ago
TestInfo.txt	created TestInfo text file from GITHUB repo	6 hours ago

About

This repository is created to demonstrate and practice GitHub workflows.

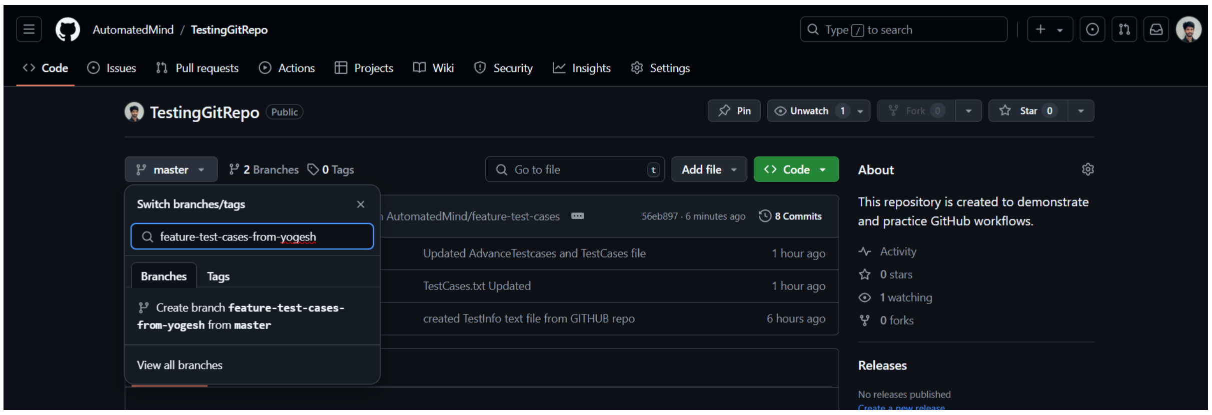
Activity · 0 stars · 1 watching · 0 forks

Now I could see the merged file in master branch.

Step 11: Conflict

To demonstrate conflict I have created one more branch from master

This time from GITHUB



AutomatedMind / TestingGitRepo

TestingGitRepo Public

master | 2 Branches | 0 Tags

Switch branches/tags

feature-test-cases-from-yogesh

Branches | Tags

Create branch **feature-test-cases-from-yogesh** from **master**

View all branches

AutomatedMind/feature-test-cases — 56eb897 · 6 minutes ago — 8 Commits

Updated AdvanceTestcases and TestCases file	1 hour ago
TestCases.txt Updated	1 hour ago
created TestInfo text file from GITHUB repo	6 hours ago

About

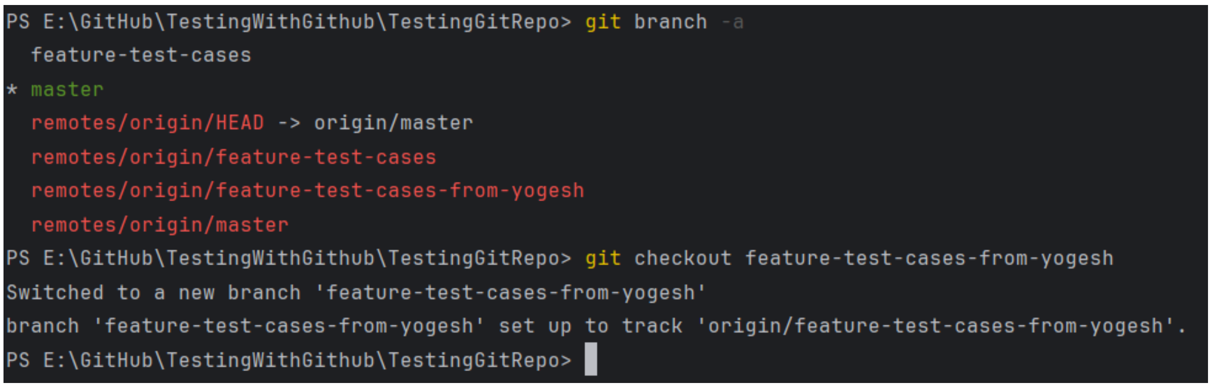
This repository is created to demonstrate and practice GitHub workflows.

Activity · 0 stars · 1 watching · 0 forks

Releases

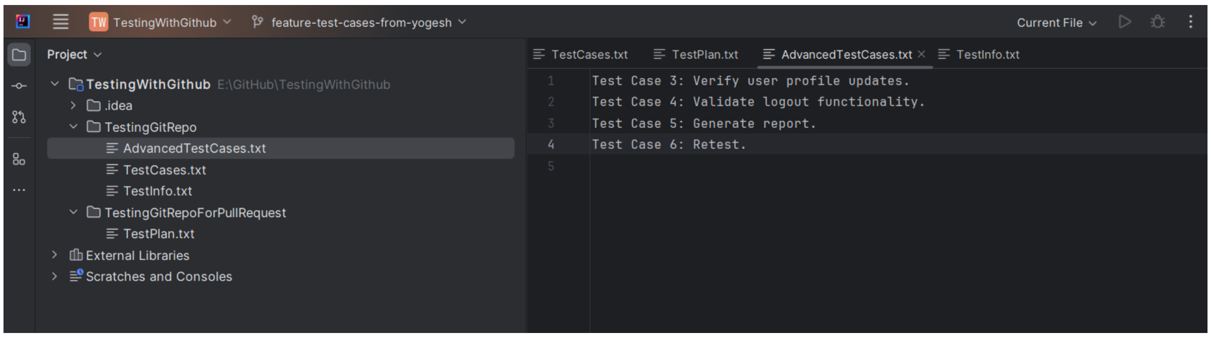
No releases published

Switched to new branch



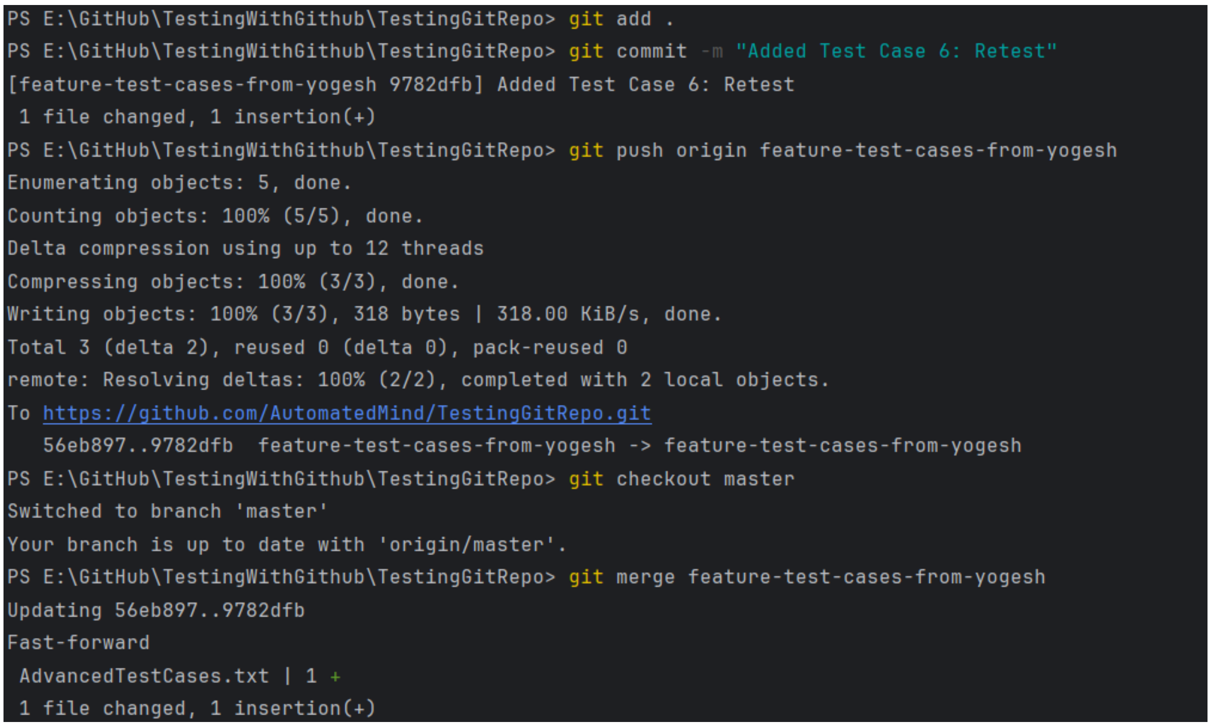
```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git branch -a
  feature-test-cases
* master
  remotes/origin/HEAD -> origin/master
  remotes/origin/feature-test-cases
  remotes/origin/feature-test-cases-from-yogesh
  remotes/origin/master
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git checkout feature-test-cases-from-yogesh
Switched to a new branch 'feature-test-cases-from-yogesh'
branch 'feature-test-cases-from-yogesh' set up to track 'origin/feature-test-cases-from-yogesh'.
PS E:\GitHub\TestingWithGithub\TestingGitRepo> 
```

Updating the file AdvancedTestCases.txt

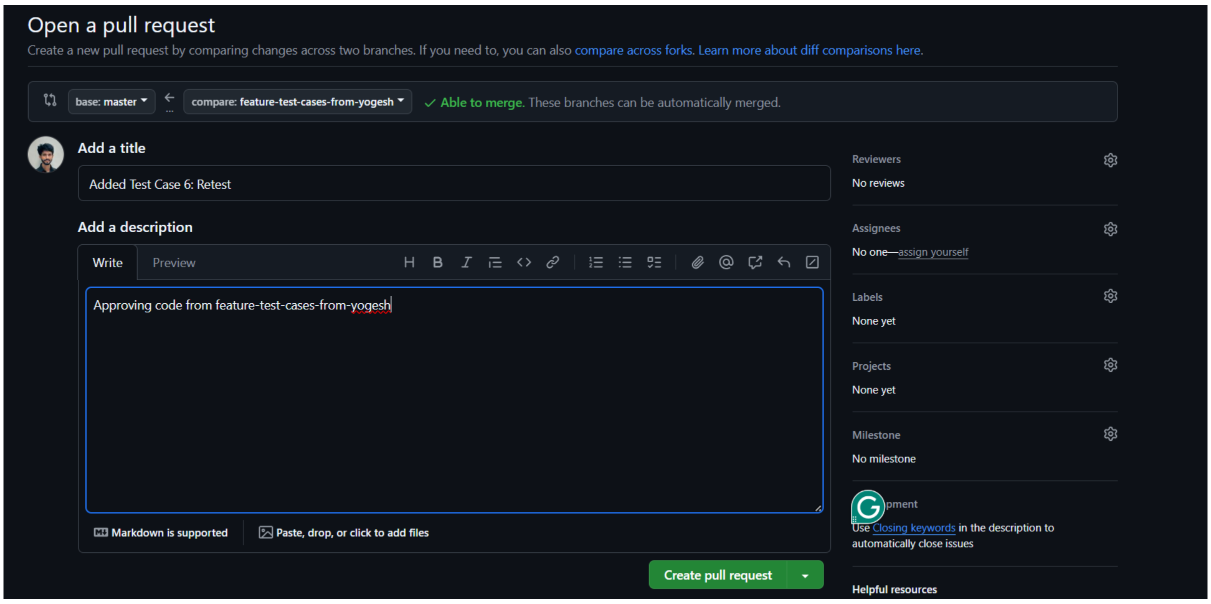


```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
Test Case 6: Retest.
```

Now merged this file to master from feature-test-cases-from-yogesh, but still the changes are reflected in local to make the changes in remote repo. Raise a pull request and merge.



```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git add .
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git commit -m "Added Test Case 6: Retest"
[feature-test-cases-from-yogesh 9782dfb] Added Test Case 6: Retest
 1 file changed, 1 insertion(+)
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git push origin feature-test-cases-from-yogesh
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 318 bytes | 318.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/AutomatedMind/TestingGitRepo.git
   56eb897..9782dfb  feature-test-cases-from-yogesh -> feature-test-cases-from-yogesh
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git merge feature-test-cases-from-yogesh
Updating 56eb897..9782dfb
Fast-forward
 AdvancedTestCases.txt | 1 +
 1 file changed, 1 insertion(+)
```



Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also compare across forks. Learn more about diff comparisons here.

base: master ← compare: feature-test-cases-from-yogesh ✓ Able to merge. These branches can be automatically merged.

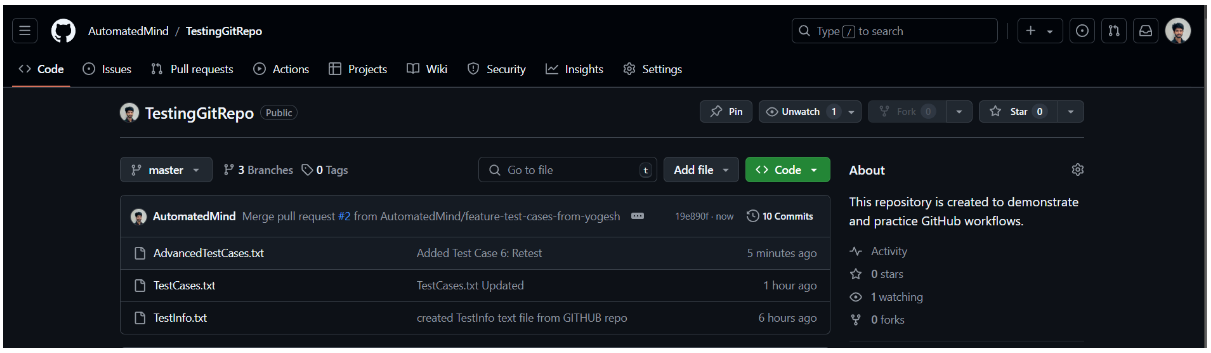
Add a title

Added Test Case 6: Retest

Add a description

Approving code from feature-test-cases-from-yogesh

Now the changes merged in master remote repo



AutomatedMind / TestingGitRepo

TestingGitRepo Public

master · 3 Branches · 0 Tags

AutomatedMind Merge pull request #2 from AutomatedMind/feature-test-cases-from-yogesh · 19e890f · now · 10 Commits

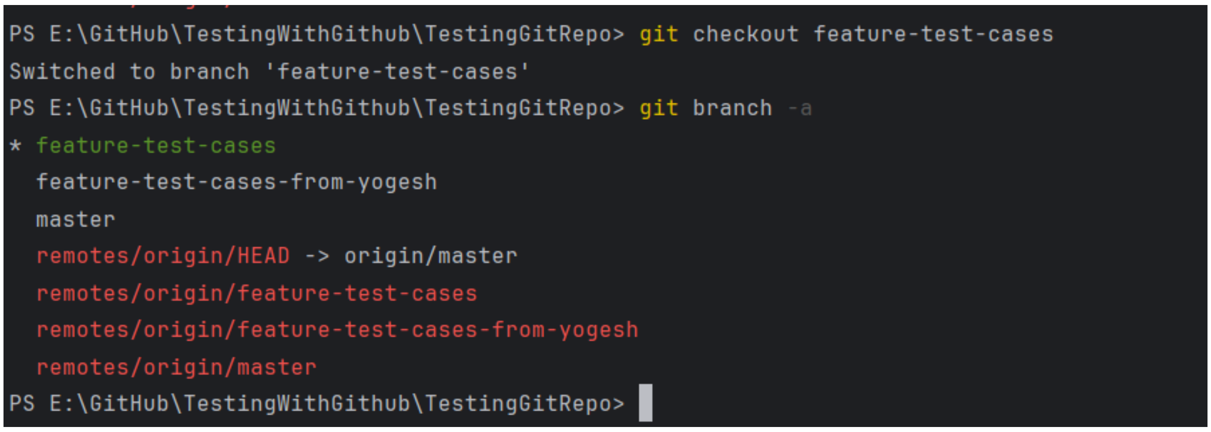
AdvancedTestCases.txt	Added Test Case 6: Retest	5 minutes ago
TestCases.txt	TestCases.txt Updated	1 hour ago
TestInfo.txt	created TestInfo text file from GITHUB repo	6 hours ago

About

This repository is created to demonstrate and practice GitHub workflows.

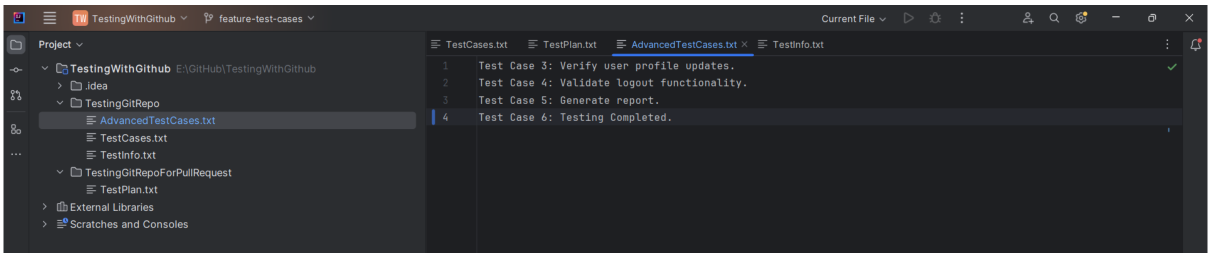
Activity · 0 stars · 1 watching · 0 forks

Again, make the changes in same file AdvancedTestCases.txt but from different branch feature-test-cases.



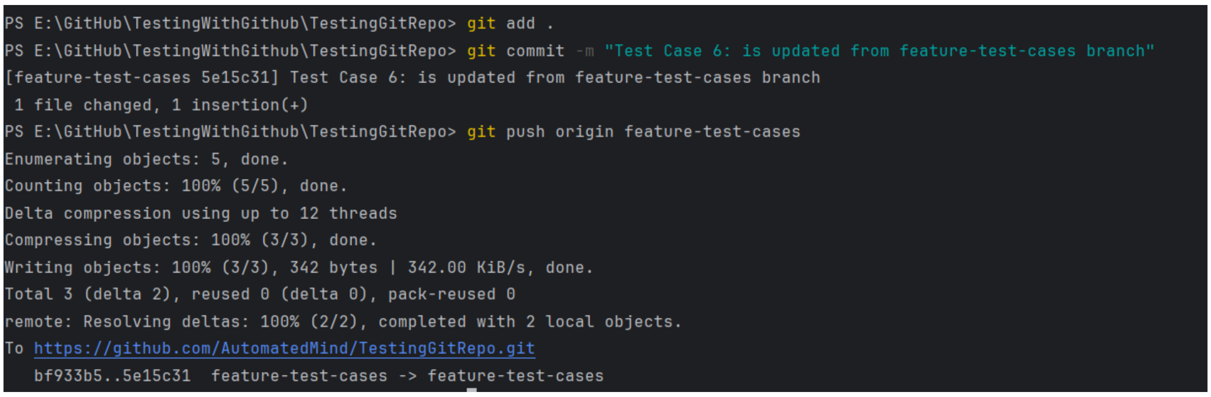
```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git checkout feature-test-cases
Switched to branch 'feature-test-cases'
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git branch -a
* feature-test-cases
  feature-test-cases-from-yogesh
  master
  remotes/origin/HEAD -> origin/master
  remotes/origin/feature-test-cases
  remotes/origin/feature-test-cases-from-yogesh
  remotes/origin/master
PS E:\GitHub\TestingWithGithub\TestingGitRepo>
```

Updating the file AdvancedTestCases.txt



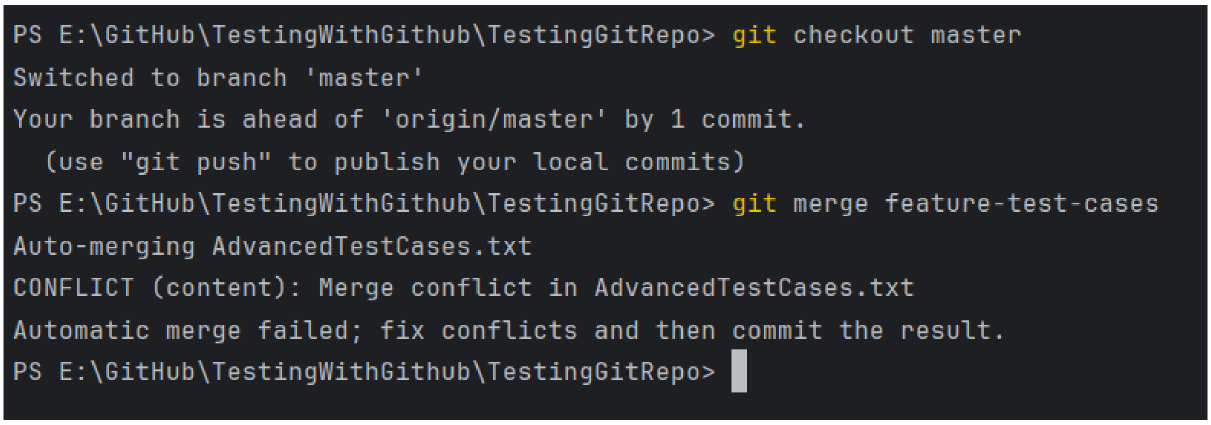
```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
Test Case 6: Testing Completed.
```

Now merged this file to master from feature-test-cases, but still the changes are reflected in local to make the changes in remote repo. Raise a pull request and merge.



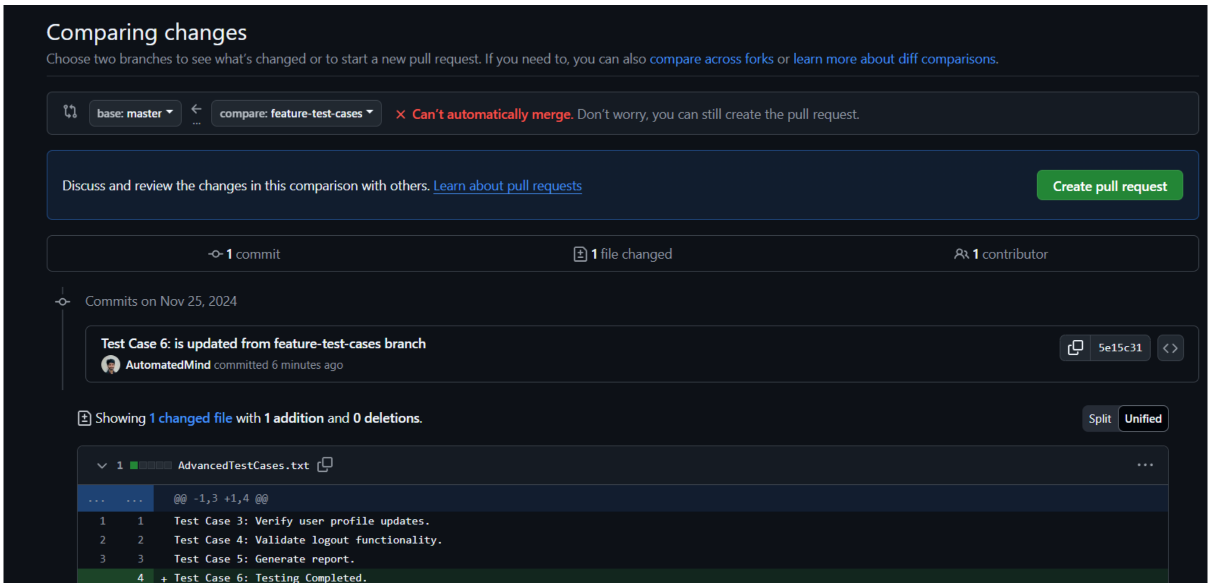
```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git add .
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git commit -m "Test Case 6: is updated from feature-test-cases branch"
[feature-test-cases 5e15c31] Test Case 6: is updated from feature-test-cases branch
 1 file changed, 1 insertion(+)
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git push origin feature-test-cases
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 342 bytes | 342.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/AutomatedMind/TestingGitRepo.git
   bf933b5..5e15c31  feature-test-cases -> feature-test-cases
```

Merge to master and make a pull request



```
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git checkout master
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)
PS E:\GitHub\TestingWithGithub\TestingGitRepo> git merge feature-test-cases
Auto-merging AdvancedTestCases.txt
CONFLICT (content): Merge conflict in AdvancedTestCases.txt
Automatic merge failed; fix conflicts and then commit the result.
PS E:\GitHub\TestingWithGithub\TestingGitRepo>
```

You will instantly see the Conflict message because I tried updating the same file from different branch and I pushed both of them to master branch.



Comparing changes

Choose two branches to see what's changed or to start a new pull request. If you need to, you can also compare across forks or learn more about diff comparisons.

base: master ← compare: feature-test-cases ✕ Can't automatically merge. Don't worry, you can still create the pull request.

Discuss and review the changes in this comparison with others. Learn about pull requests

1 commit   1 file changed   1 contributor

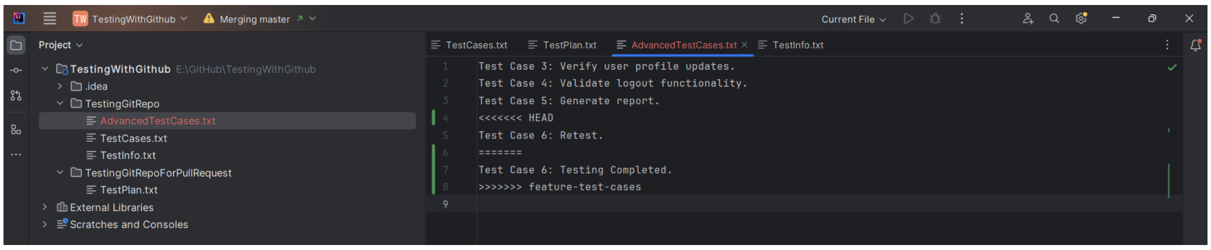
Commits on Nov 25, 2024

Test Case 6: is updated from feature-test-cases branch
AutomatedMind committed 6 minutes ago   5e15c31

Showing 1 changed file with 1 addition and 0 deletions.

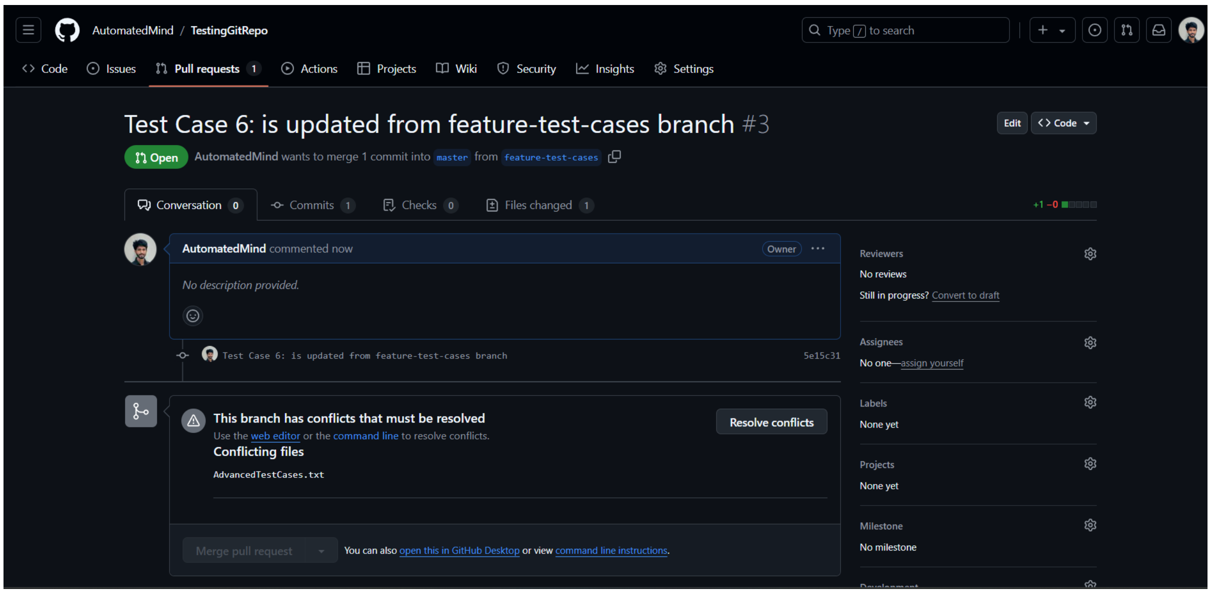
1 AdvancedTestCases.txt

```
@@ -1,3 +1,4 @@
1  1    Test Case 3: Verify user profile updates.
2  2    Test Case 4: Validate logout functionality.
3  3    Test Case 5: Generate report.
   4  + Test Case 6: Testing Completed.
```



```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
<<<<<<< HEAD
Test Case 6: Retest.
=======
Test Case 6: Testing Completed.
>>>>>>> feature-test-cases
```

To resolve this approve the pull request and click on **Resolve conflicts** button



AutomatedMind / TestingGitRepo

Code · Issues · Pull requests 1 · Actions · Projects · Wiki · Security · Insights · Settings

Test Case 6: is updated from feature-test-cases branch #3

Open AutomatedMind wants to merge 1 commit into `master` from `feature-test-cases`

Conversation 0 · Commits 1 · Checks 0 · Files changed 1

AutomatedMind commented now — Owner

No description provided.

`Test Case 6: is updated from feature-test-cases branch` 5e15c31

This branch has conflicts that must be resolved

Use the web editor or the command line to resolve conflicts.

Resolve conflicts

Conflicting files

`AdvancedTestCases.txt`

Merge pull request — You can also open this in GitHub Desktop or view command line instructions.

Reviewers: No reviews. Still in progress? Convert to draft

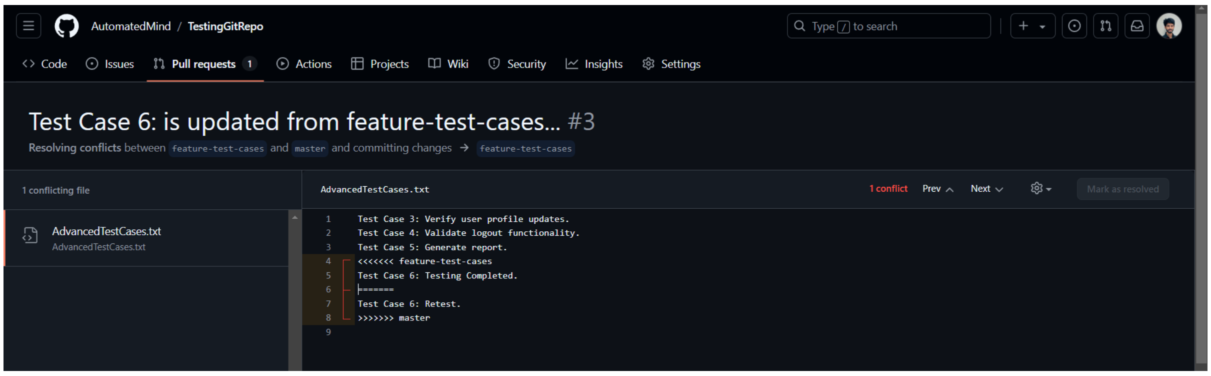
Assignees: No one—assign yourself

Labels: None yet

Projects: None yet

Milestone: No milestone

Resolve manually



AutomatedMind / TestingGitRepo

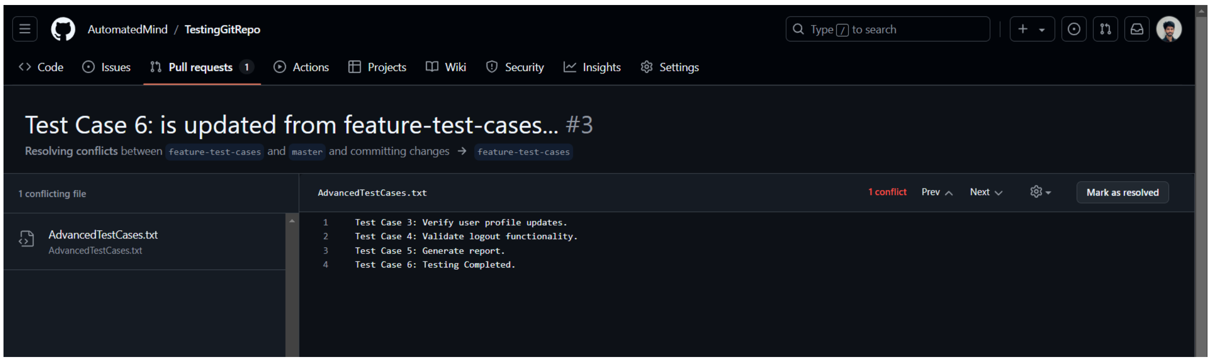
Test Case 6: is updated from feature-test-cases... #3

Resolving conflicts between `feature-test-cases` and `master` and committing changes → `feature-test-cases`

1 conflicting file — AdvancedTestCases.txt

AdvancedTestCases.txt — 1 conflict · Prev · Next · Mark as resolved

```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
<<<<<<< feature-test-cases
Test Case 6: Testing Completed.
=======
Test Case 6: Retest.
>>>>>>> master
```



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Test Case 6: is updated from feature-test-cases... #3

Resolving conflicts between `feature-test-cases` and `master` and committing changes → `feature-test-cases`

1 conflicting file — AdvancedTestCases.txt

AdvancedTestCases.txt — 1 conflict · Prev · Next · Mark as resolved

```
Test Case 3: Verify user profile updates.
Test Case 4: Validate logout functionality.
Test Case 5: Generate report.
Test Case 6: Testing Completed.
```

Quick Revision: Git Terminologies and Commands

1. **Git**
   - Purpose: Tracks changes in your files and saves versions.
   - Command:
     - git --version: Check if Git is installed.
2. **GitHub**
   - Purpose: A platform to store and share your Git projects.
3. **Git Config**
   - Purpose: Sets your username and email for commits.
   - Commands:
     - git config --global user.name "Your Name"
     - git config --global user.email "your.email@example.com"
     - git config --list: Check settings.
4. **Git Repository**
   - Purpose: A folder where Git tracks changes.
   - Command:
     - git init: Start a new Git repository.
5. **Clone**
   - Purpose: Copy a GitHub repository to your computer.
   - Command:
     - git clone <GitHub-Repo-URL>
6. **Add**
   - Purpose: Tell Git to track a new file.
   - Command:
     - git add <filename>
7. **Commit**
   - Purpose: Save your changes to the local repository.
   - Command:
     - git commit -m "Your message"
8. **Push**
   - Purpose: Upload your changes to GitHub.

- Command:
  - git push origin <branch-name>

9. **Pull**
   - Purpose: Download changes from GitHub to your local repository.
   - Command:
     - git pull origin <branch-name>
10. **Branch**
    - Purpose: Work on a separate copy of your project without affecting the main code.
    - Commands:
      - git branch <branch-name>: Create a new branch.
      - git checkout -b <branch-name>: Create and switch to a new branch.
      - git checkout <branch-name>: Switch branches.
11. **Merge**
    - Purpose: Combine changes from one branch into another.
    - Commands:
      - git checkout master: Switch to the main branch.
      - git merge <branch-name>: Merge another branch into the main branch.
12. **Status**
    - Purpose: Check the state of your files (tracked, untracked, changes).
    - Command:
      - git status
13. **Remote**
    - Purpose: Connect your local repository to GitHub.
    - Command:
      - git remote add origin <GitHub-Repo-URL>