

## Lesson 01 Demo 04

### Working with Branches

**Objective:** To understand, create, and work with branches in a GitHub repository

**Tools required:** Terminal

**Prerequisites:** Git

Steps to be followed:

1. Check the branches in the Foodie directory
2. Create a new branch
3. Add two new HTML files
4. Commit the HTML files
5. Add an HTML file for videos in a new branch
6. Commit the new file
7. Change the branch
8. Merge the branch
9. Delete the branch
10. Push the branch to the remote repository
11. Check for the new branch in repository
12. Create a pull request and merge

#### Step 1: Check branches in the Foodie directory

- 1.1 Check branches in Foodie directory (created in the previous demo) using the given commands:

```
cd Documents
```

```
ls
```

```
cd Foodie
```

```
ls
```

```
git status
```

```
git branch
```

```
srijanighataksi@ip-172-31-27-104: ~/Documents/Foodie
File Edit View Search Terminal Help
Node.js version v17.2.0 detected.
Odd numbered Node.js versions will not enter LTS status and should not be used for production. For more information, please see https://nodejs.org/en/about/releases/.
srijanighataksi@ip-172-31-27-104:~$ cd Documents/
srijanighataksi@ip-172-31-27-104:~/Documents$ ls
Foodie JavaScriptDemos MyWebApp estore-end-user
srijanighataksi@ip-172-31-27-104:~/Documents$ cd Foodie/
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ ls
index.html login.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch
* master
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$
```

## Step 2: Create a new branch

2.1 Create a new branch using the given command:

**git checkout -b prime-user-feature**

```
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch
* master
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git checkout -b prime-user-feature
Switched to a new branch 'prime-user-feature'
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$
```

## Step 3: Add two new HTML files

3.1 Add two new HTML files using the given commands:

**touch upgrade-to-prime.html**  
**touch prime-membership-plans.html**  
**ls**  
**git status**

```
srijanighataksi@ip-172-31-27-104: ~/Documents/Foodie
File Edit View Search Terminal Help
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch
* master
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git checkout -b prime-user-
feature
Switched to a new branch 'prime-user-feature'
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ touch upgrade-to-prime.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ ls
index.html login.html upgrade-to-prime.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ touch prime-membership-plan
s.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ ls
index.html login.html prime-membership-plans.html upgrade-to-prime.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch prime-user-feature
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    prime-membership-plans.html
    upgrade-to-prime.html

nothing added to commit but untracked files present (use "git add" to track)
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$
```

## Step 4: Commit the HTML files

4.1 Commit the files using the following commands:

```
git add .
git status
git commit -m "Prime User Feature"
git status
```

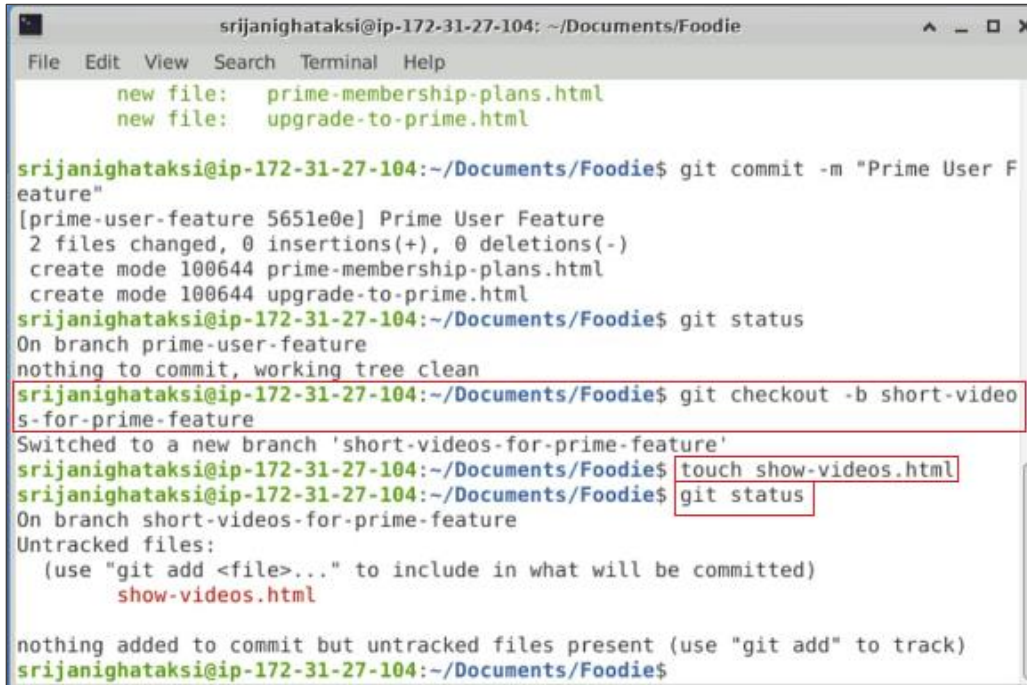
```
nothing added to commit but untracked files present (use "git add" to track)
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git add .
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch prime-user-feature
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   prime-membership-plans.html
    new file:   upgrade-to-prime.html

srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git commit -m "Prime User F
eature"
[prime-user-feature 5651e0e] Prime User Feature
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 prime-membership-plans.html
create mode 100644 upgrade-to-prime.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch prime-user-feature
nothing to commit, working tree clean
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$
```

## Step 5: Add an HTML file for videos in a new branch

5.1 Create a new branch and add an HTML file for videos using the following commands:

```
git checkout -b short-videos-for-prime-feature
touch show-videos.html
git status
```



```
srijanighataksi@ip-172-31-27-104: ~/Documents/Foodie
File Edit View Search Terminal Help
new file:   prime-membership-plans.html
new file:   upgrade-to-prime.html

srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git commit -m "Prime User Feature"
[prime-user-feature 5651e0e] Prime User Feature
2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 prime-membership-plans.html
create mode 100644 upgrade-to-prime.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch prime-user-feature
nothing to commit, working tree clean
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git checkout -b short-videos-for-prime-feature
Switched to a new branch 'short-videos-for-prime-feature'
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ touch show-videos.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch short-videos-for-prime-feature
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    show-videos.html

nothing added to commit but untracked files present (use "git add" to track)
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$
```

## Step 6: Commit the new file

6.1 Commit the show-videos.html file using the given commands:

```
git add .
git commit -m "Video feature"
git status
```



```
nothing added to commit but untracked files present (use "git add" to track)
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git add .
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git commit -m "Video Feature"
[short-videos-for-prime-feature 423584c] Video Feature
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 show-videos.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status
On branch short-videos-for-prime-feature
nothing to commit, working tree clean
```

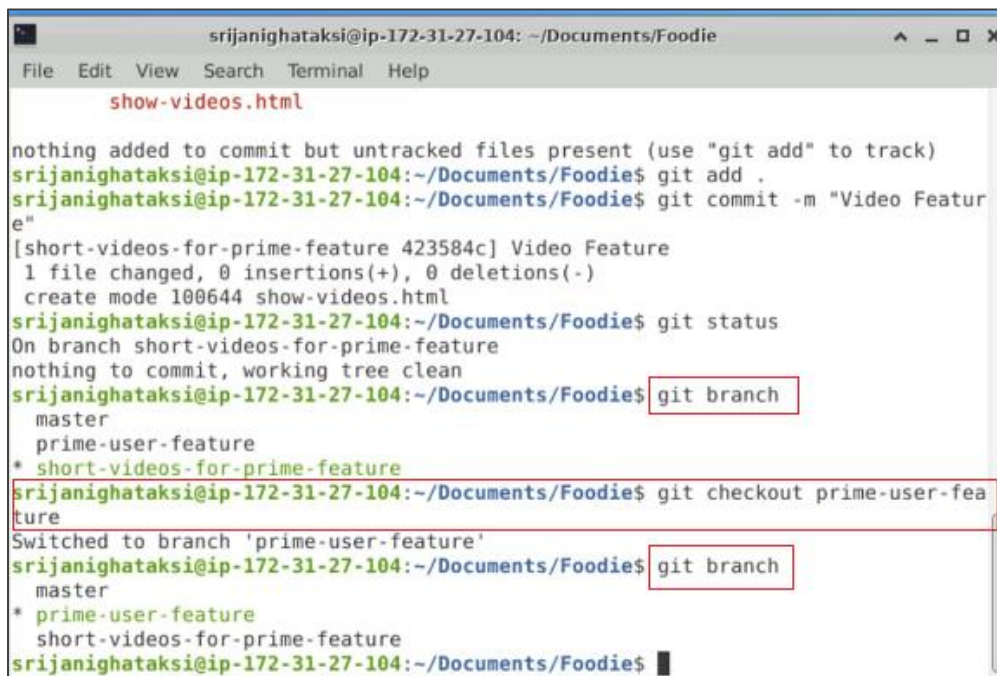
## Step 7: Change the branch

7.1 Change to prime-user-feature branch by running the following commands:

```
git branch
```

```
git checkout prime-user-feature
```

```
git branch
```

A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~/Documents/Foodie' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following sequence of commands and output:  
1. `show-videos.html` (file name)  
2. `nothing added to commit but untracked files present (use "git add" to track)`  
3. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git add .`  
4. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git commit -m "Video Feature"`  
5. `[short-videos-for-prime-feature 423584c] Video Feature`  
6. `1 file changed, 0 insertions(+), 0 deletions(-)`  
7. `create mode 100644 show-videos.html`  
8. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git status`  
9. `On branch short-videos-for-prime-feature`  
10. `nothing to commit, working tree clean`  
11. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch`  
12. `master`  
13. `prime-user-feature`  
14. `* short-videos-for-prime-feature`  
15. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git checkout prime-user-feature`  
16. `Switched to branch 'prime-user-feature'`  
17. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch`  
18. `master`  
19. `* prime-user-feature`  
20. `short-videos-for-prime-feature`  
21. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$`

## Step 8: Merge the branch

8.1 Merge both the feature branches by running the following command:

```
git merge short-video-for-prime-feature
```

A terminal window titled 'srijanighataksi@ip-172-31-27-104: ~/Documents/Foodie' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following sequence of commands and output:  
1. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch`  
2. `master`  
3. `* prime-user-feature`  
4. `short-videos-for-prime-feature`  
5. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git merge short-videos-for-prime-feature`  
6. `Updating 5651e0e..423584c`  
7. `Fast-forward`  
8. `show-videos.html | 0`  
9. `1 file changed, 0 insertions(+), 0 deletions(-)`  
10. `create mode 100644 show-videos.html`  
11. `srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$`



## Step 9: Delete the branch

9.1 Delete the short-videos-for-prime-feature branch using the following commands:

```
git branch -d short-videos-for-prime-feature
git branch
```

```
Updating 5651e0e..423584c
Fast-forward
 show-videos.html | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 show-videos.html
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch -d short-videos-
for-prime-feature
Deleted branch short-videos-for-prime-feature (was 423584c).
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch
master
* prime-user-feature
```

## Step 10: Push the branch to the remote repository

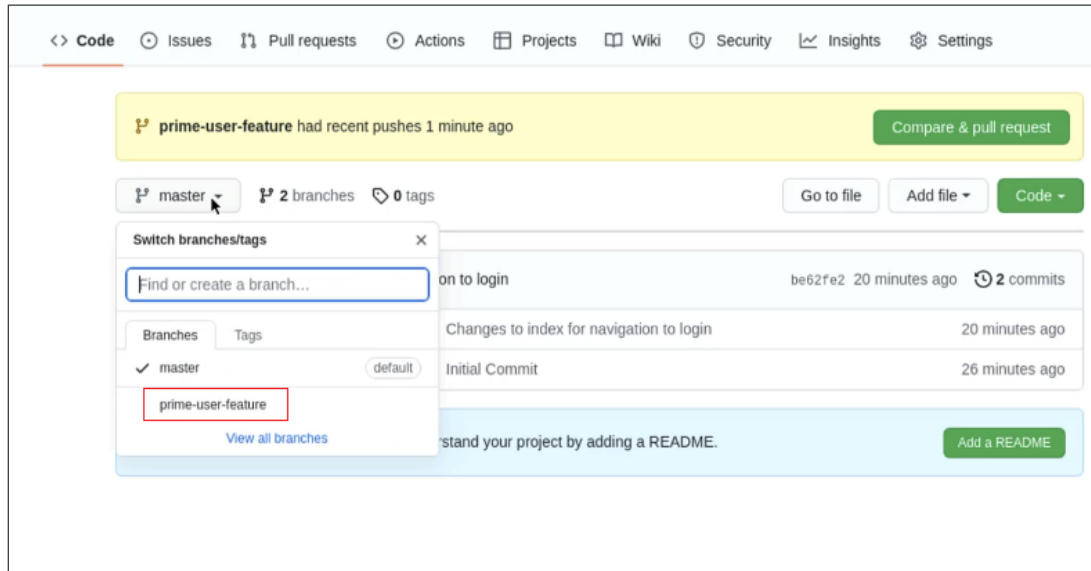
10.1 Push the branch to the remote repository using the following commands:

```
git remote -v
git push -u origin prime-user-feature
```

```
srijanighataksi@ip-172-31-27-104: ~/Documents/Foodie
File Edit View Search Terminal Help
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git branch
master
* prime-user-feature
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git remote -v
origin https://github.com/tuser6794/foodie.git (fetch)
origin https://github.com/tuser6794/foodie.git (push)
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$ git push -u origin prime-us
er-feature
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 4 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (5/5), 521 bytes | 521.00 KiB/s, done.
Total 5 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), done.
remote:
remote: Create a pull request for 'prime-user-feature' on GitHub by visiting:
remote:   https://github.com/tuser6794/foodie/pull/new/prime-user-feature
remote:
To https://github.com/tuser6794/foodie.git
 * [new branch]      prime-user-feature -> prime-user-feature
Branch 'prime-user-feature' set up to track remote branch 'prime-user-feature' f
rom 'origin'.
srijanighataksi@ip-172-31-27-104:~/Documents/Foodie$
```

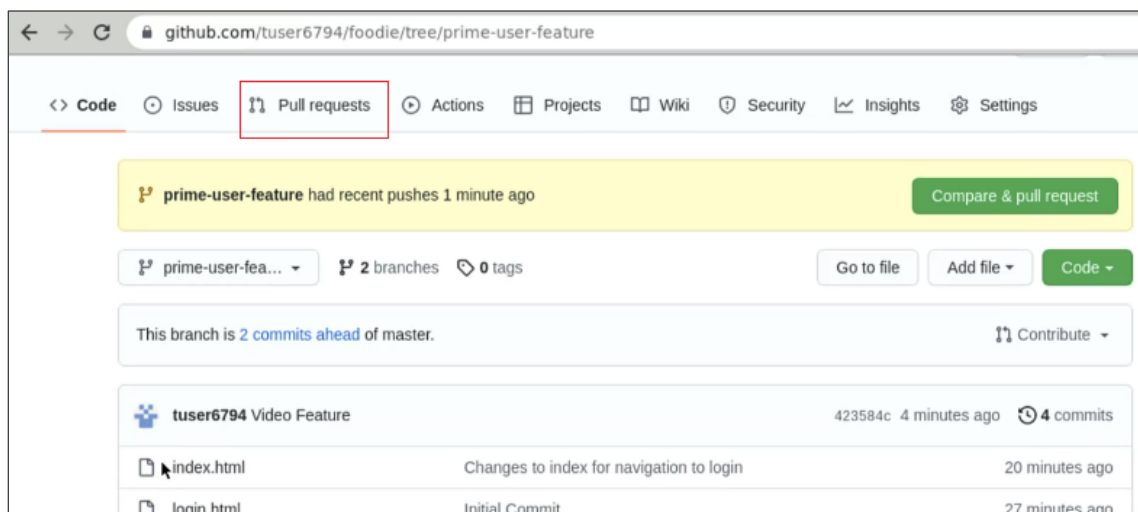
## Step 11: Check for the new branch in repository

11.1 Check for the new branch in the repository using the following commands:

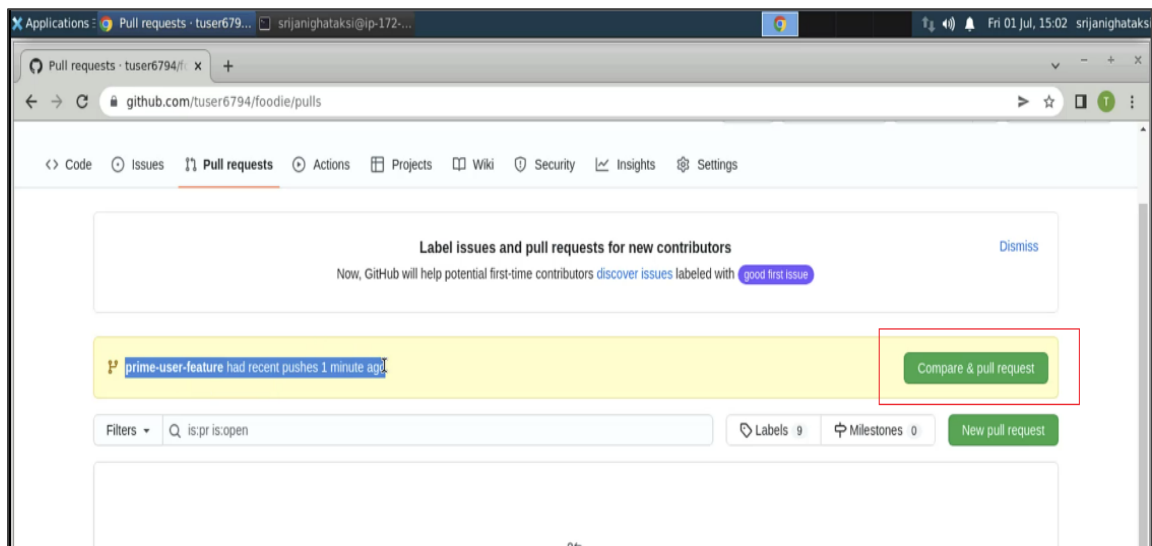


## Step 12: Create a pull request and merge

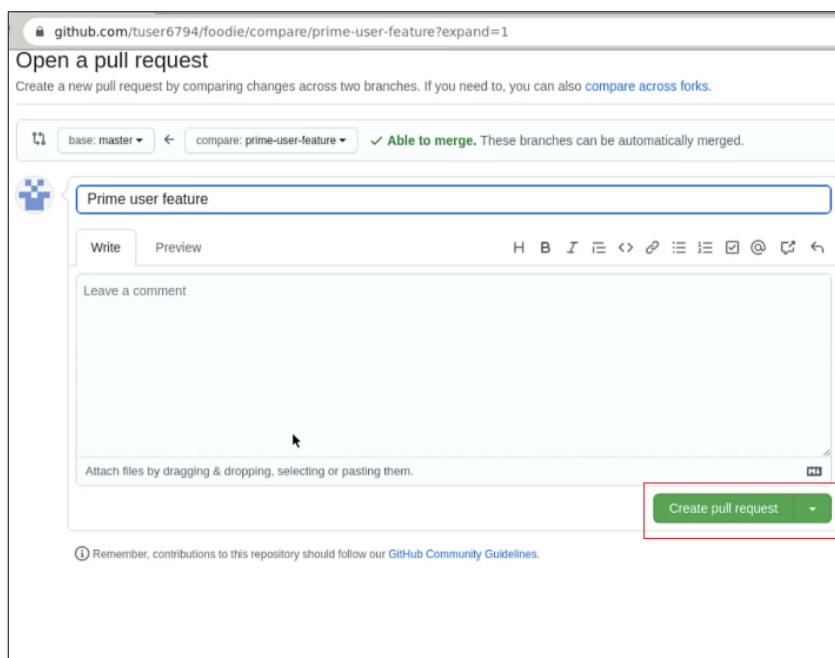
12.1 Go to the prime-user-feature repository and click on **Pull requests**



## 12.2 Click on **Compare and pull request**

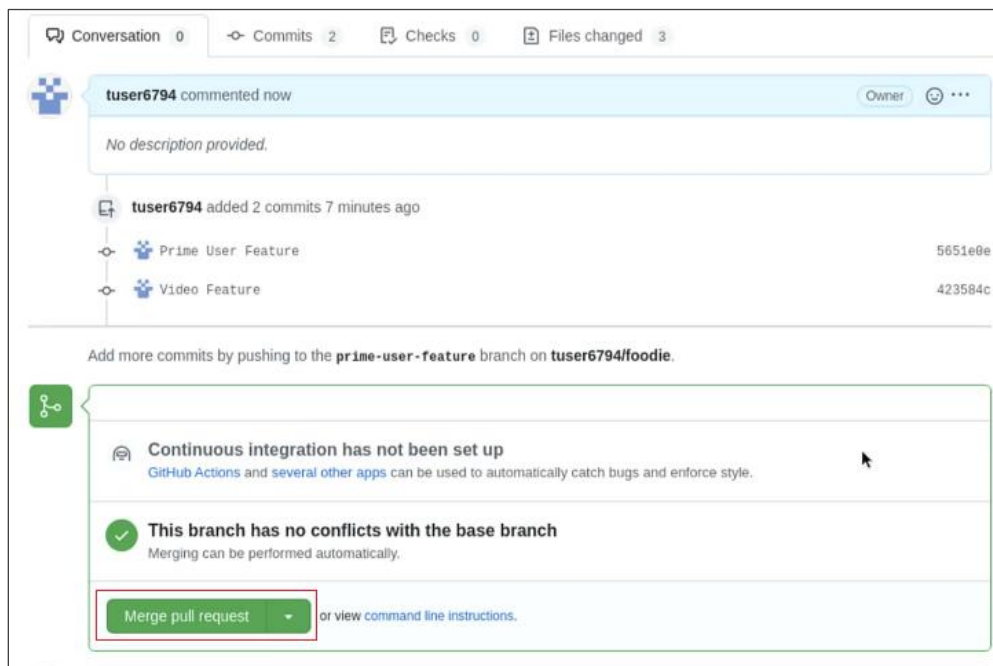


## 12.3 Click on **Create pull request**





## 12.4 Click on Merge pull request



## 12.5 Click on Confirm merge

