



## 05. Require a pull request before merging

⌚ Created	@March 6, 2024 8:15 PM
▼ Class	MAT 630
▼ Type	Seminar
✓ Reviewed	<input type="checkbox"/>

ADD RULE ' pull request before merging '

Add Collaborator

Clone Project into Local System

PUSH THE CHANGES TO GUTHUB

ADD RULE " Require a pull request before merging "

ADD PULL REQUEST AND APPROVALS

PUSH CHANGES TO REMOTE AFTER RULE

CREATE PULL REQUEST

REVIEW THE CHANGES

MERGE INTO MAIN

DELETE BRANCH

SEE THE CHANGES

**ADD RULE ' pull request before merging '**

**Add Collaborator**

First create a project in github named `git_branch_rule` in **js55998 Account**.

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (\*).

Owner *	Repository name *
 js55998	/ Git_Branch Rule
<input checked="" type="checkbox"/> Your new repository will be created as Git_Branch-Rule. The repository name can only contain ASCII letters, digits, and the characters ., -, and _.	

Great repository names are short and memorable. Need inspiration? How about [potential-octo-train](#) ?

Description (optional)

 Public

Anyone on the internet can see this repository. You choose who can commit.

 Private

You choose who can see and commit to this repository.

Initialize this repository with:

Add a README file

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

 .gitignore template: Node

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

 License: GNU General Public License v3.0

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

This will set  main as the default branch. Change the default name in your [settings](#).

 You are creating a public repository in your personal account.

**Create repository**

**Git\_Branch-Rule** (Public)

main 1 Branch 0 Tags

Go to file Add file Code

**About**

No description, website, or topics provided.

Readme

GPL-3.0 license

Activity

0 stars

1 watching

0 forks

**Releases**

No releases published

Create a new release

**Packages**

No packages published

Publish your first package

**Git\_Branch-Rule**

Now Add another github account debasishsahoo account as Collaborator

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

Secrets and variables

Who has access

Add a collaborator to **Git\_Branch-Rule**

debasishsahoo

- Debasish Sahoo (Selected) debasishsahoo • Invite collaborator
- DebasishSahoo14 Invite collaborator
- Debasishsahoo7 Invite collaborator
- Debasishsahoo17 Invite collaborator
- debasishsahoo81 Invite collaborator

Select a collaborator above

## Manage access

[Add people](#)

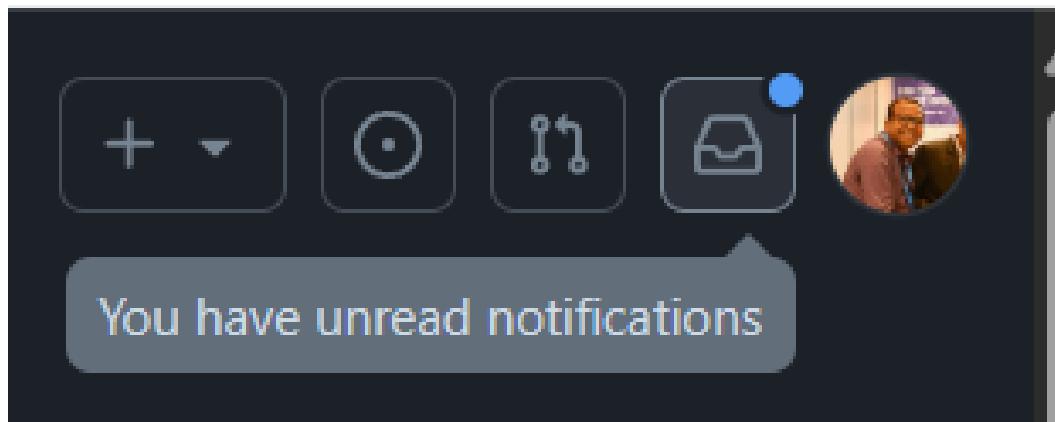
Select all Type ▾

Find a collaborator...

<input type="checkbox"/>  <b>Debasish Sahoo</b> Awaiting debasishahoo's response	Pending Invite <input type="button"/>	<a href="#">Remove</a>
--	---------------------------------------	------------------------

◀ Previous    Next ▶

Now Go to main github account and accept the request.



  Notifications Type ↕ to search Dismiss Get started

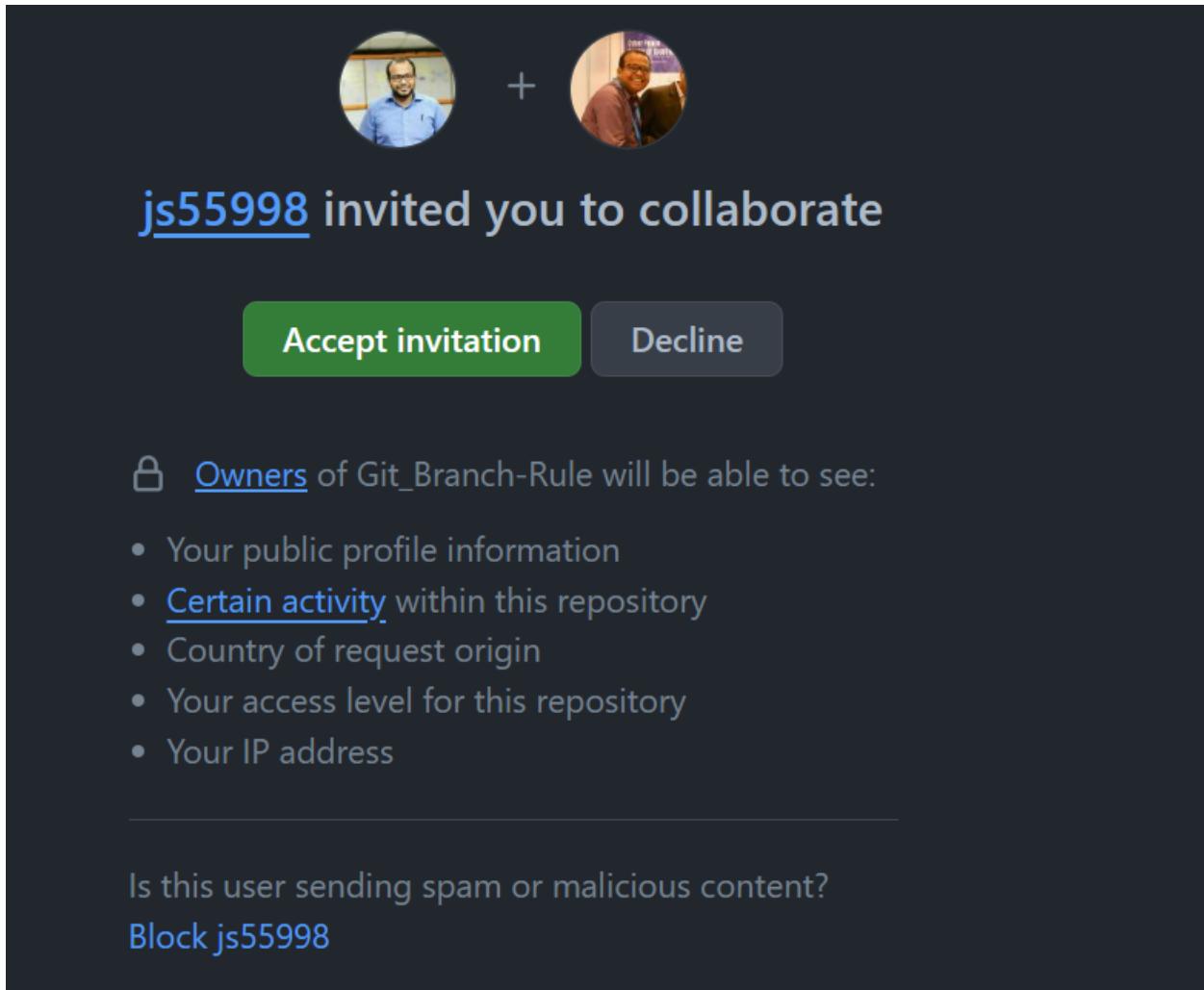
Inbox 1 All Unread Filter notifications Group by: Date ▾

Saved Clear out the clutter. Get the most out of your new inbox by quickly and easily marking all of your previously read notifications as done. Dismiss Get started

Done

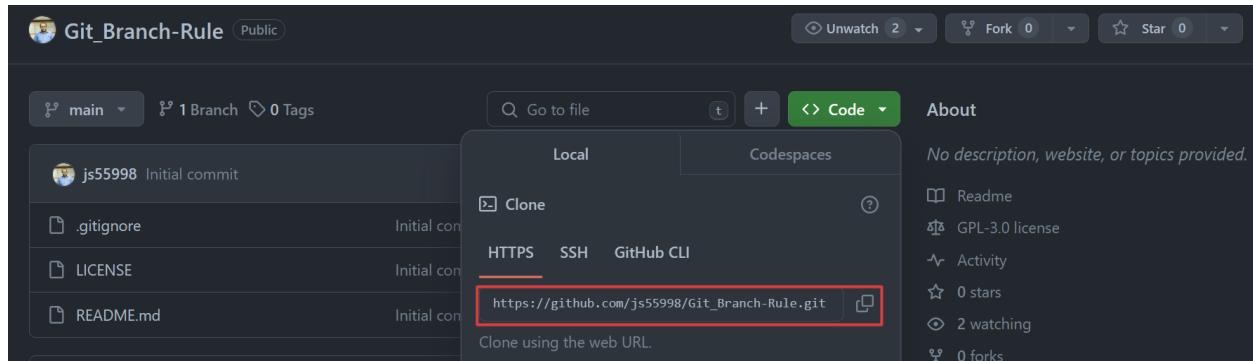
**Filters** Assigned Participating Mentioned Team mentioned Review requested

<input type="checkbox"/> Select all			
<input checked="" type="checkbox"/>  js55998/Git_Branch-Rule	Invitation to join js55998/Git_Branch-Rule from js55998	subscribed	 1 minute ago
<input type="checkbox"/>  practical-tutorials/project-based-learning #529	Update README.md - Add: Building the Flappy Bird A.I. without LIBRARIES	subscribed	 yesterday
<input type="checkbox"/>  practical-tutorials/project-based-learning #346	PR for solving issues #259 and #140	subscribed	 3 days ago
<input type="checkbox"/>  practical-tutorials/project-based-learning #466			



A screenshot of a GitHub repository page for "js55998 / Git\_Branch-Rule". The page includes a header with navigation links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, and Insights. A search bar is at the top right. Below the header, a message says "You now have push access to the js55998/Git\_Branch-Rule repository." The main content area shows the repository details: "Git\_Branch-Rule" (Public), 2 watchers, 0 forks, 0 stars, and 1 commit. The commit list shows four files: ".gitignore", "LICENSE", and "README.md" all with initial commits from "js55998" 5 minutes ago. On the right side, there is an "About" section with the note "No description, website, or topics provided." and links for Readme, GPL-3.0 license, Activity, 0 stars, and 2 watching.

## Clone Project into Local System



```
debas ➤ D:\Development\GITHUB ➤ 00:54 ➤ git clone https://github.com/js55998/Git_Branch-Rule.git
Cloning into 'Git_Branch-Rule'...
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (5/5), 13.70 KiB | 2.74 MiB/s, done.
```

## PUSH THE CHANGES TO GUTHUB

Now do some changes , commit it and push it.

```
debas ➤ D:\Development\GITHUB ➤ 00:55 ➤ cd Git_Branch_Rule
Git_Branch-Rule

debas ➤ ...\\Git_Branch-Rule ➤ main ➤ 00:55 ➤ ls -la
total 45
drwxr-xr-x 1 debas 197609 0 Mar 6 00:54 .
drwxr-xr-x 1 debas 197609 0 Mar 6 00:54 ..
drwxr-xr-x 1 debas 197609 0 Mar 6 00:55 .git
-rw-r--r-- 1 debas 197609 2047 Mar 6 00:54 .gitignore
-rw-r--r-- 1 debas 197609 35149 Mar 6 00:54 LICENSE
-rw-r--r-- 1 debas 197609 17 Mar 6 00:54 README.md

debas ➤ ...\\Git_Branch-Rule ➤ main ➤ 00:55 ➤ echo "This is README FILE" >> README.md
debas ➤ ...\\Git_Branch-Rule ➤ main ! ➤ 00:56 ➤ echo "This is a Text File" > index.txt
```

```

debas > ..\Git_Branch-Rule > ⚡ main !? ➤ ❤ 00:58 ➤ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file> ..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   README.md

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

no changes added to commit (use "git add" and/or "git commit -a")

debas > ..\Git_Branch-Rule > ⚡ main !? ➤ ❤ 00:58 ➤ git add .

debas > ..\Git_Branch-Rule > ⚡ main + ➤ ❤ 00:58 ➤ git commit -m "Commit #2 from Local"
[main 08a24df] Commit #2 from Local
 2 files changed, 2 insertions(+), 1 deletion(-)
 create mode 100644 index.txt

debas > ..\Git_Branch-Rule > ⚡ main ↑ ➤ ❤ 00:58 ➤ |

```

```

debas > ..\Git_Branch-Rule > ⚡ main ↑ ➤ ❤ 00:58 ➤ git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 412 bytes | 412.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/js55998/Git_Branch-Rule.git
  204b603..08a24df main → main
branch 'main' set up to track 'origin/main'.

debas > ..\Git_Branch-Rule > ⚡ main ➤ ❤ 00:59 ➤ |

```

## **ADD RULE “ Require a pull request before merging ”**

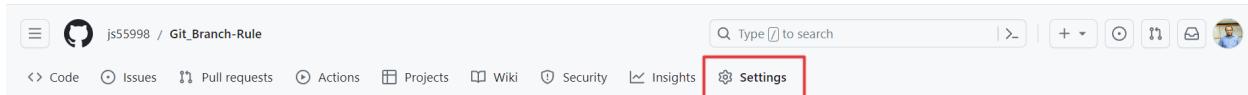
**Now We see from [previous](#) process that our Collaborator is able to [push](#)**

**Direct to [main](#) branch.**

**To Prevent that we have to apply rule [Require a pull request before merging](#)**

**First go to [main](#) project at [js55998](#) .**

**Then go to [settings](#) → [Branch](#) → [Add branch protection rule](#) .**



A screenshot of the 'Branch protection rule' configuration page. The top navigation bar and sidebar are identical to the previous screenshot. The main content area is titled 'Branch protection rule' and contains a section titled 'Protect your most important branches'. It explains what branch protection rules are and mentions that a GitHub Free plan only enforces rules on public repositories. Below this is a form field labeled 'Branch name pattern \*' with a placeholder 'Target Branch Name need to put here' and a red arrow pointing to it. Further down is a section titled 'Protect matching branches' with a checkbox for 'Require a pull request before merging' which is also highlighted with a red box.

## ADD PULL REQUEST AND APPROVALS

Branch name pattern \*

Traget Branch Name

Protect matching branches

**Require a pull request before merging**  
When enabled, all commits must be made to a non-protected branch and submitted via a pull request before they can be merged into a branch that matches this rule.

**Require approvals**  
When enabled, pull requests targeting a matching branch require a number of approvals and no changes requested before they can be merged.  
Required number of approvals before merging: 1 ▾

## After Apply rule

Branch protection rule created. X

<span style="font-size: 1.2em;">⚙️</span> General Access <span style="font-size: 0.8em;">👤</span> Collaborators <span style="font-size: 0.8em;">💬</span> Moderation options <span style="float: right;">▼</span>	<b>Branch protection rules</b> <ul style="list-style-type: none"> <li><span style="border: 1px solid #ccc; padding: 2px;">main</span> Currently applies to 1 branch <span style="float: right;"><span style="border: 1px solid #ccc; padding: 2px 5px;">Edit</span> <span style="border: 1px solid #ccc; padding: 2px 5px;">Delete</span></span></li> </ul>	<span style="border: 1px solid #ccc; padding: 2px 10px;">Add rule</span>
---	---	--

Code and automation

Branches

## PUSH CHANGES TO REMOTE AFTER RULE

```
debash ➜ ...\\Git_Branch-Rule ➜ p main ➜ ❤ 00:59 ➜ echo "This is another Change" >> index.txt
```

```
debas > ...\\Git_Branch-Rule > p main ! ➤ 01:25 ➤ git commit -am "Commit #3 from Local"  
[main ac25127] Commit #3 from Local  
1 file changed, 1 insertion(+)
```

```
debas > ...\\Git_Branch-Rule > p main ↑ ➤ 01:25 ➤ git push -u origin main  
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Delta compression using up to 16 threads  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (3/3), 296 bytes | 296.00 KiB/s, done.  
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0  
remote: Resolving deltas: 100% (1/1), completed with 1 local object.  
remote: error: GH006: Protected branch update failed for refs/heads/main.  
remote: error: Changes must be made through a pull request.  
To https://github.com/js55998/Git_Branch-Rule.git  
! [remote rejected] main → main (protected branch hook declined)  
error: failed to push some refs to 'https://github.com/js55998/Git_Branch-Rule.git'
```

```
debas > ...\\Git_Branch-Rule > p main ↑ ➤ 01:25 ➤ |
```

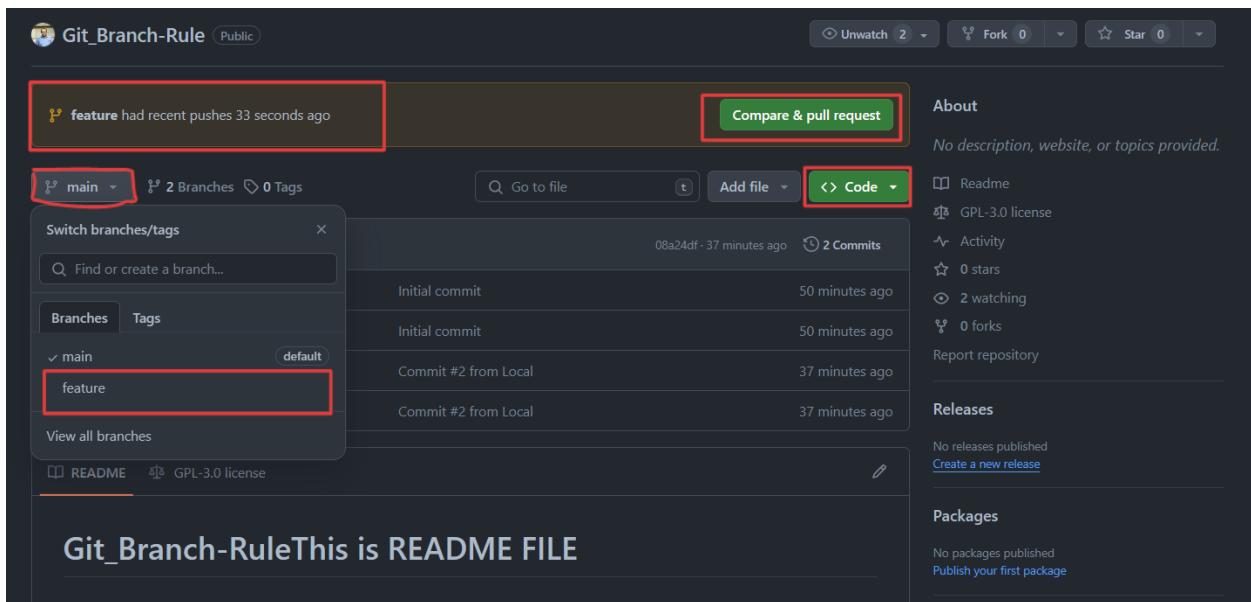
Now push to main is failed

Because without pull request no commit is push to main branch, according to RULE

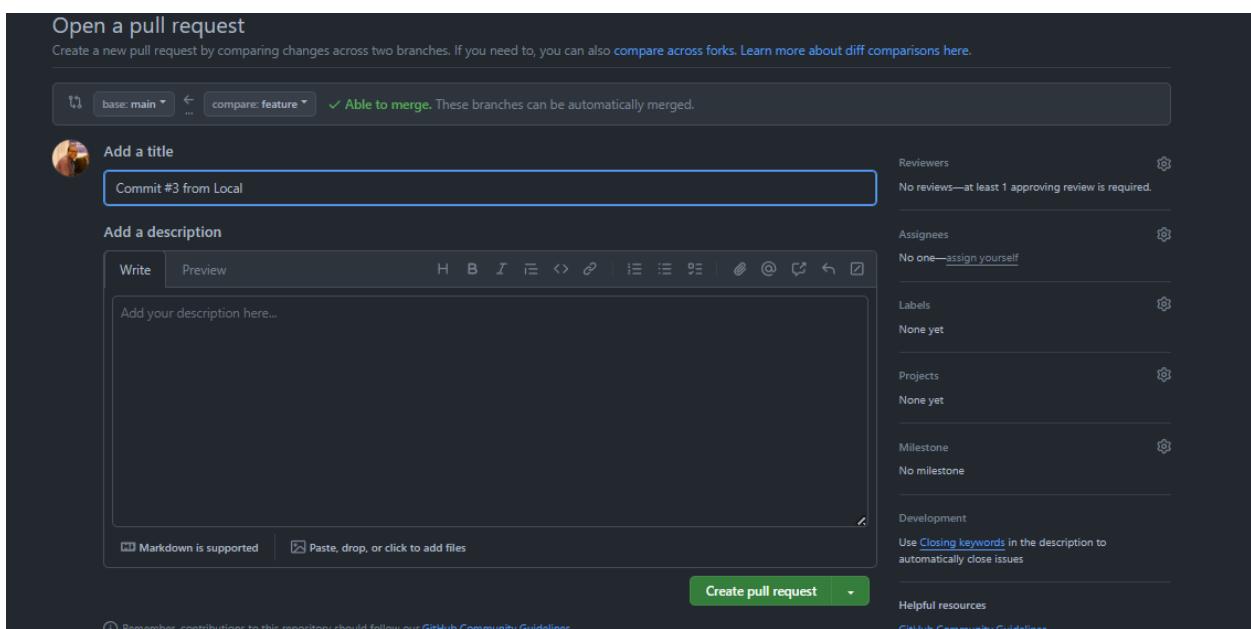
## CREATE PULL REQUEST

Now Create a new Branch named feature in local system and push it to github.

```
debas > ...\\Git_Branch-Rule > p main ↑ ➤ 01:33 ➤ git checkout -b feature  
Switched to a new branch 'feature'  
  
debas > ...\\Git_Branch-Rule > p feature ➤ 01:34 ➤ git push -u origin feature  
Enumerating objects: 5, done.  
Counting objects: 100% (5/5), done.  
Delta compression using up to 16 threads  
Compressing objects: 100% (2/2), done.  
Writing objects: 100% (3/3), 296 bytes | 296.00 KiB/s, done.  
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0  
remote: Resolving deltas: 100% (1/1), completed with 1 local object.  
remote:  
remote: Create a pull request for 'feature' on GitHub by visiting:  
remote:     https://github.com/js55998/Git_Branch-Rule/pull/new/feature  
remote:  
To https://github.com/js55998/Git_Branch-Rule.git  
 * [new branch]      feature → feature  
branch 'feature' set up to track 'origin/feature'.
```



## create pull request



**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: main ▾ compare: feature ▾ ✓ Able to merge. These branches can be automatically merged.

Add a title  
Feature is Complete: MERGE CODE

Add a description

Write Preview

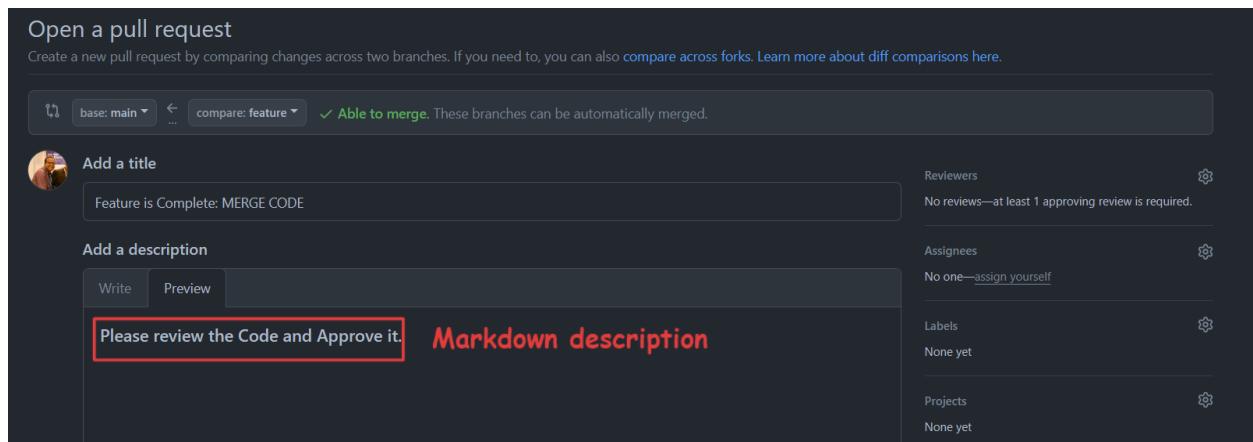
Please review the Code and Approve it. **Markdown description**

Reviewers  
No reviews—at least 1 approving review is required.

Assignees  
No one—assign yourself

Labels  
None yet

Projects  
None yet



## REVIEW THE CHANGES

**Feature is Complete: MERGE CODE #1**

1 Open debasishsahoo wants to merge 1 commit into `main` from `feature` ↗

Conversation 0 Commits 1 Checks 0 Files changed 1

debasishsahoo commented 1 minute ago

Please review the Code and Approve it.

Commit #3 from Local ac25127

+1 -0 0

Reviewers  
No reviews—at least 1 approving review is required.  
Still in progress? Convert to draft

Assignees  
No one—assign yourself

Labels  
None yet

Projects  
None yet

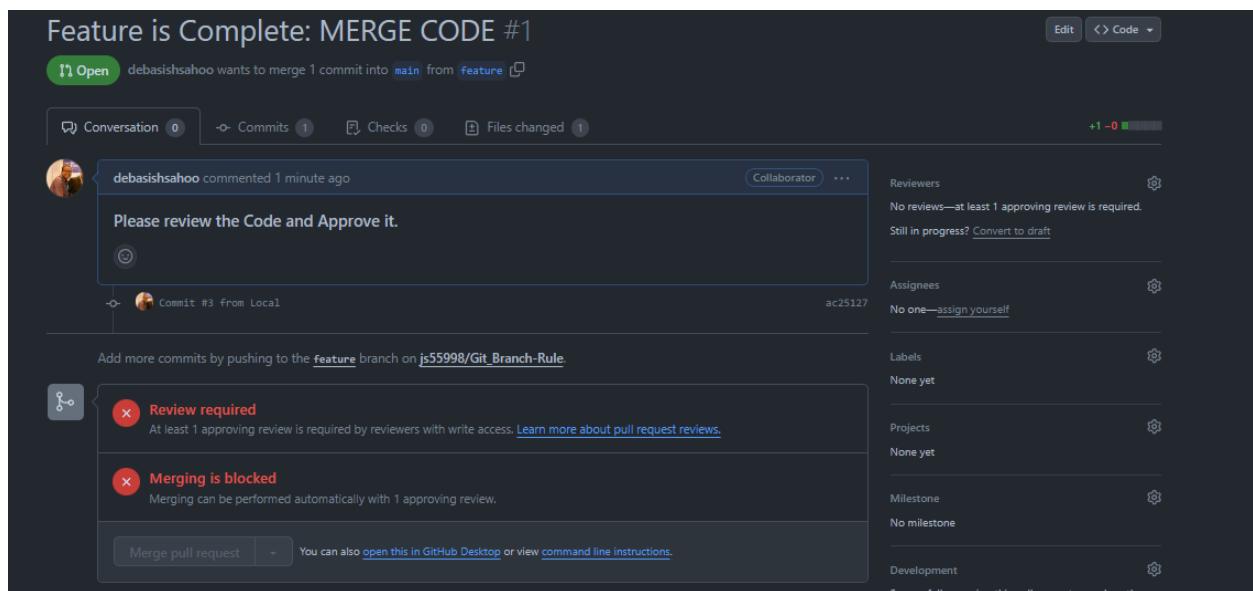
Milestone  
No milestone

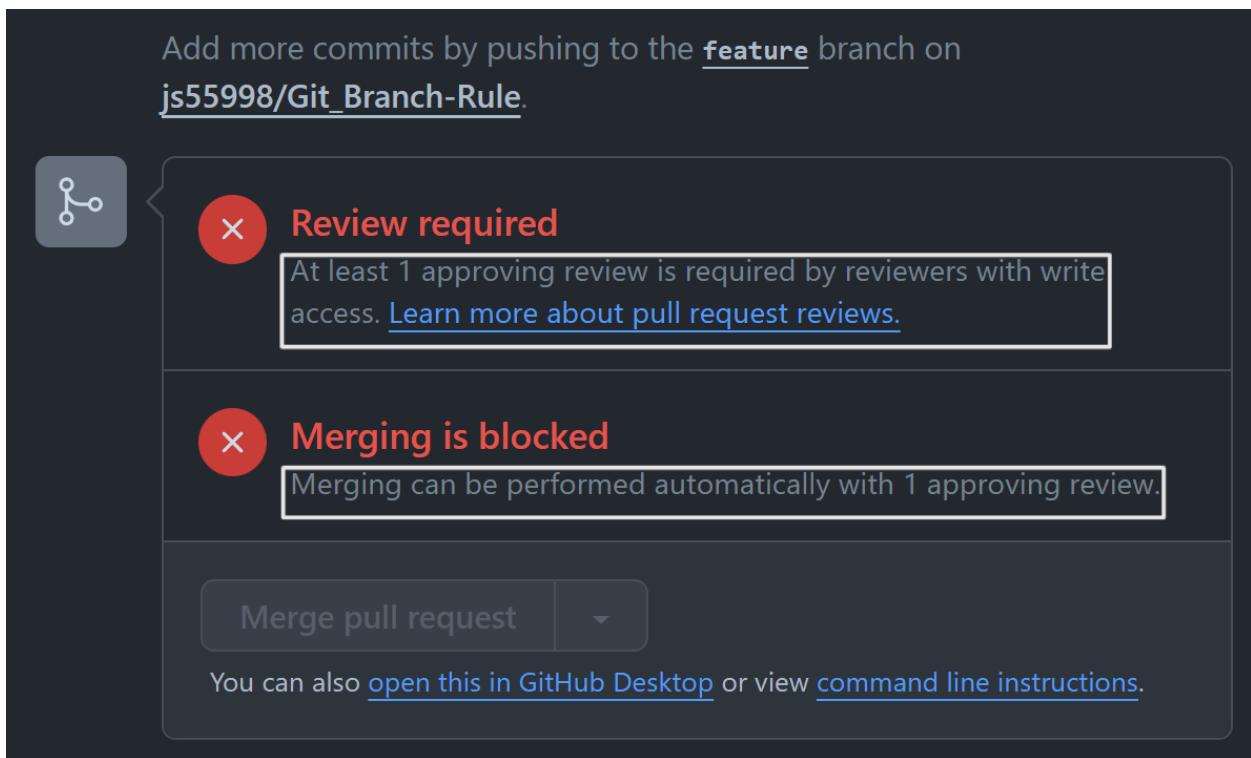
Development  
Successfully merging this pull request may close these

**Review required**  
At least 1 approving review is required by reviewers with write access. [Learn more about pull request reviews](#).

**Merging is blocked**  
Merging can be performed automatically with 1 approving review.

Merge pull request You can also [open this in GitHub Desktop](#) or view [command line instructions](#).





To Review the code we need to go to the main github repository and go to pull request.

The screenshot shows the GitHub repository homepage for "js55998 / Git\_Branch-Rule". The navigation bar includes "Code", "Issues", "Pull requests" (which is highlighted with a red border), and "Actions". Below the navigation, there are filters: "Filters", "is:pr is:open", "Labels 9", "Milestones 0", and a "New pull request" button. The "Pull requests" section shows 1 open pull request: "#1 Feature is Complete: MERGE CODE", which was opened 10 minutes ago by debasishsahoo with a "Review required" label. A "ProTip!" link is at the bottom.

go to specific PR(pull request)

Add more commits by pushing to the [feature](#) branch on [js55998/Git\\_Branch-Rule](#).

**Review required**  
At least 1 approving review is required by reviewers with write access.  
[Learn more about pull request reviews.](#)

**Merging is blocked**  
Merging can be performed automatically with 1 approving review.

**Merge without waiting for requirements to be met (bypass branch protections)**

[Merge pull request](#) ▾

You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

**Labels**: None yet

**Projects**: None yet

**Milestone**: No milestone

**Development**: Successfully merging this pull request may close these issues.

None yet

## Feature is Complete: MERGE CODE #1

[Open](#) debasisahoo wants to merge 1 commit into [main](#) from [feature](#)

Conversation 0 Commits 1 Checks 0 Files changed 1

Changes from all commits ▾ File filter ▾ Conversations ▾ Jump to ▾

0 / 1 files viewed Review in codespace [Review changes](#) ▾

index.txt

```
@@ -1 +1,2 @@
1   This is a Text File
2 + This is another Change
```

## Feature is Complete: MERGE CODE #1

[Open](#) debasisahoo wants to merge 1 commit into [main](#) from [feature](#)

Conversation 0 Commits 1 Checks 0 Files changed

Changes from all commits ▾ File filter ▾ Conversations ▾ Jump to ▾

index.txt

```
@@ -1 +1,2 @@
1   This is a Text File
2 + This is another Change
```

**Finish your review**

Write Preview

**This is Comment**

**Comment** → Only For Comment  
Submit general feedback without explicit approval.

**Approve** → Approve Only  
Submit feedback and approve merging these changes.

**Request changes**  
Submit feedback that must be addressed before merging.

[Submit review](#)

A screenshot of a GitHub pull request page. The title is "Feature is Complete: MERGE CODE #1". The review interface shows a comment: "This is Comment". Below the comment, there are three options: "Comment", "Approve", and "Request changes". The "Approve" option is selected and highlighted with a red box. A "Submit review" button is at the bottom right of the review panel. The main code view shows a single file "index.txt" with two commits. The first commit adds a line "This is a Text File" and the second adds "This is another Change".

## Code Approved

A screenshot of a GitHub pull request merge interface. It shows a summary of the pull request: "Changes approved" (1 approval), "Continuous integration has not been set up" (GitHub Actions and several other apps can be used to automatically catch bugs and enforce style), and "This branch has no conflicts with the base branch" (Merging can be performed automatically). A large red box highlights the "Merge pull request" button. Below it, a note says "You can also open this in GitHub Desktop or view command line instructions." At the bottom left, there's a "Add a comment" button.

In the main github debasishsahoo account

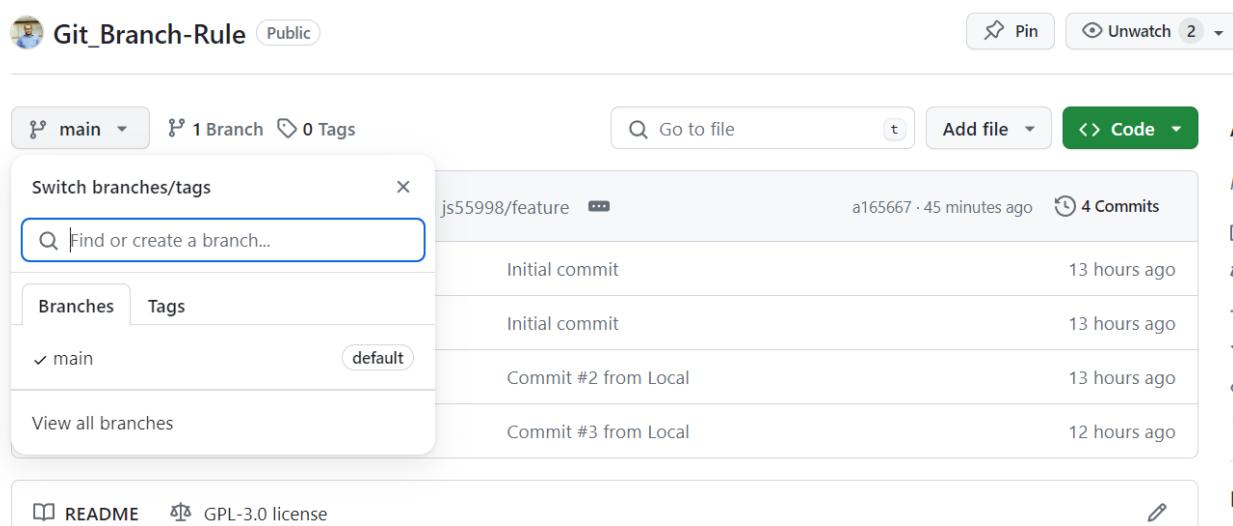
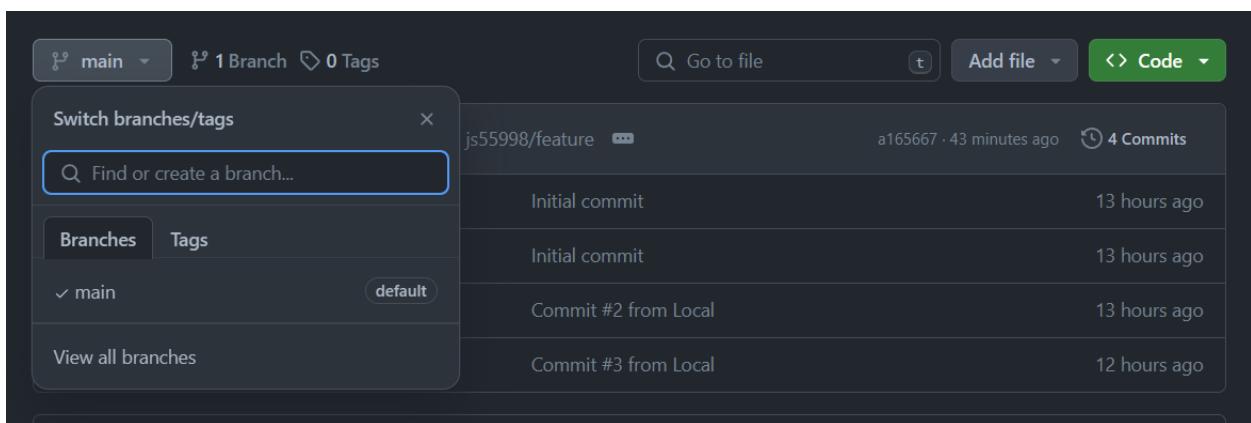
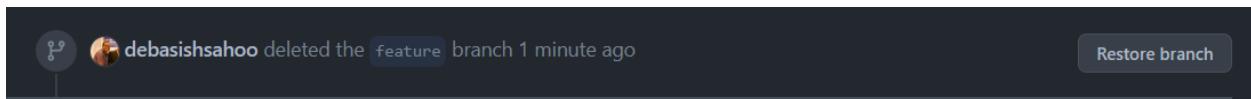
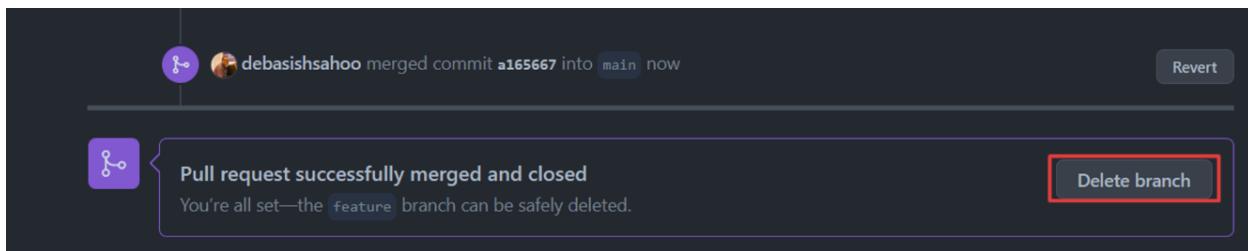
A screenshot of a GitHub pull request page. At the top, a green button says "Open" and the title "Feature is Complete: MERGE CODE #1" is shown. Below the title, it says "debasishsahoo wants to merge 1 commit into `main` from `feature`". A red box highlights a comment by user "js55998" which reads "This is Comment". Another red box highlights the review status: "Changes approved" with "1 approval", and "This branch has no conflicts with the base branch". On the right side, there are sections for Labels, Projects, Milestone, Development, and Notifications.

## MERGE INTO MAIN

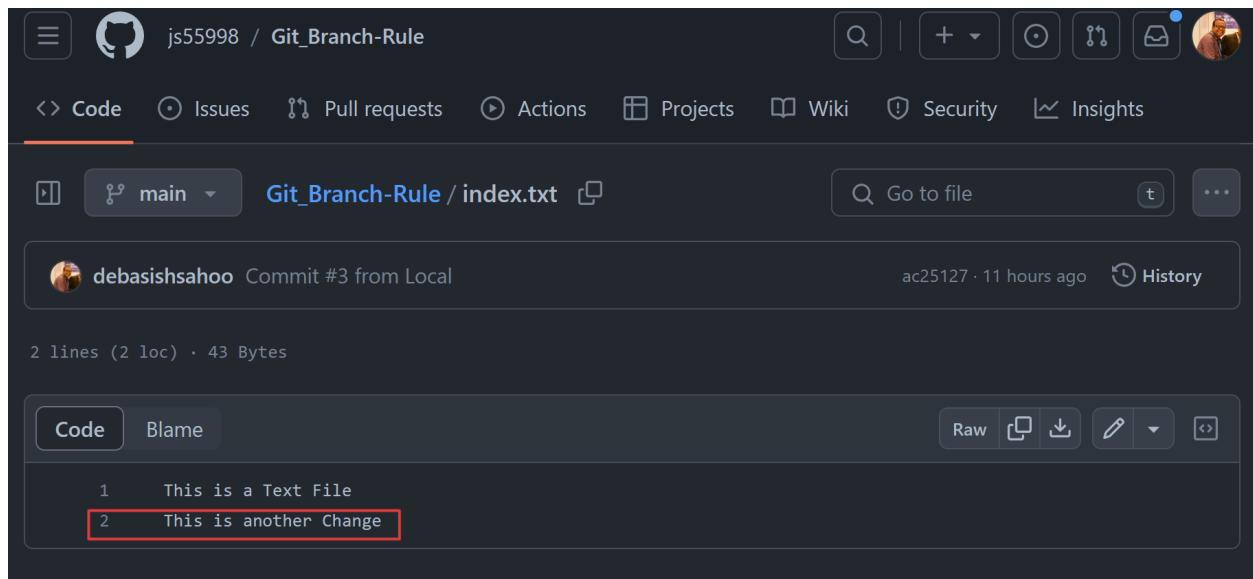
A screenshot of the GitHub merge dialog. It shows the message "Merge pull request #1 from js55998/feature" and "Feature is Complete: MERGE CODE". It also includes the note "This commit will be authored by debasish.sahoo96@gmail.com" and two buttons: "Confirm merge" (green) and "Cancel". Below the dialog, there is a link to "Add a comment".

A screenshot of the GitHub merge confirmation screen. It shows the message "debasishsahoo merged commit `a165667` into `main` now" and a purple revert button. Below this, a purple box contains the message "Pull request successfully merged and closed" and the note "You're all set—the `feature` branch can be safely deleted.". A "Delete branch" button is located in the bottom right corner.

## DELETE BRANCH



## SEE THE CHANGES



js55998 / Git\_Branch-Rule

<> Code Issues Pull requests Actions Projects Wiki Security Insights

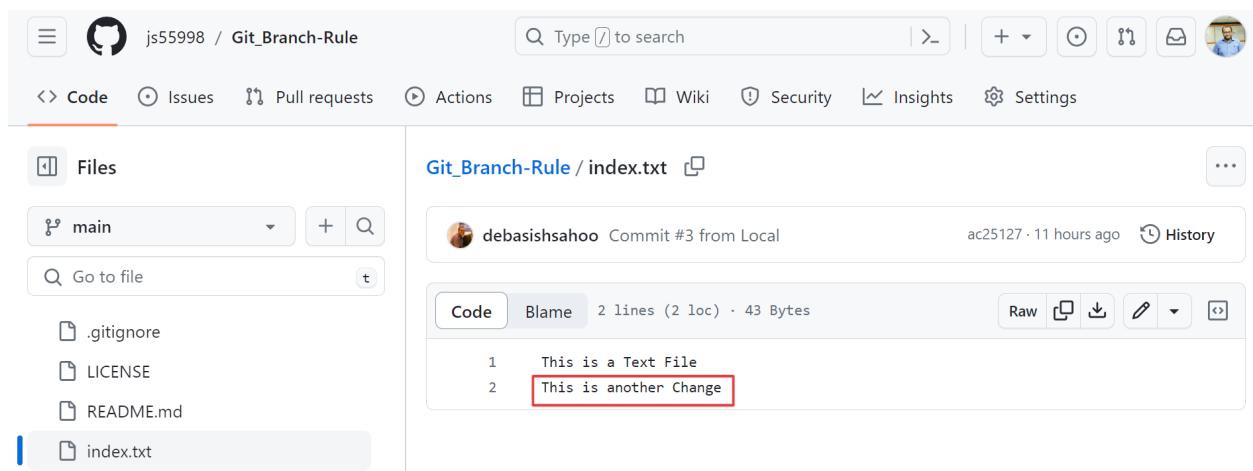
main ➔ Git\_Branch-Rule / index.txt

debasishsahoo Commit #3 from Local ac25127 · 11 hours ago History

2 lines (2 loc) · 43 Bytes

Code Blame Raw ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
1 This is a Text File
2 This is another Change
```



js55998 / Git\_Branch-Rule

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Files main ➔ Go to file

Git\_Branch-Rule / index.txt

debasishsahoo Commit #3 from Local ac25127 · 11 hours ago History

Code Blame 2 lines (2 loc) · 43 Bytes Raw ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ ⌂ ⌂

```
1 This is a Text File
2 This is another Change
```