

TECHNOLOGY



Caltech | **Center for Technology &
Management Education**

Full Stack Java Developer

TECHNOLOGY



Git

Pull Requests



Learning Objectives

By the end of this lesson, you will be able to:

- 🕒 Create pull requests in GitHub
- 🕒 Learn how to commit once the pull request is created
- 🕒 Discuss the steps to create the pull requests
- 🕒 Learn how to accept a pull request
- 🕒 Categorize the review into different stages
- 🕒 Learn how to reject a pull request



A Day in the Life of a Full Stack Developer

You are working as a full-stack developer in an organization on the application development project. You being the project lead, are responsible to manage the code stack.

To do so, your organization uses Git to manage the versions of the code. Since multiple people are working on the project, you need to verify each commit that is happening on the code.

The members of the team need to understand how to create a pull request to the master branch, which would later be accepted or rejected by you, the admin of the repository.

To understand this, explore more about creating pull, accepting, and managing pull requests.



Creating a Pull Request

What Is a Pull Request?

Pull requests helps to convey the changes made to a GitHub branch.

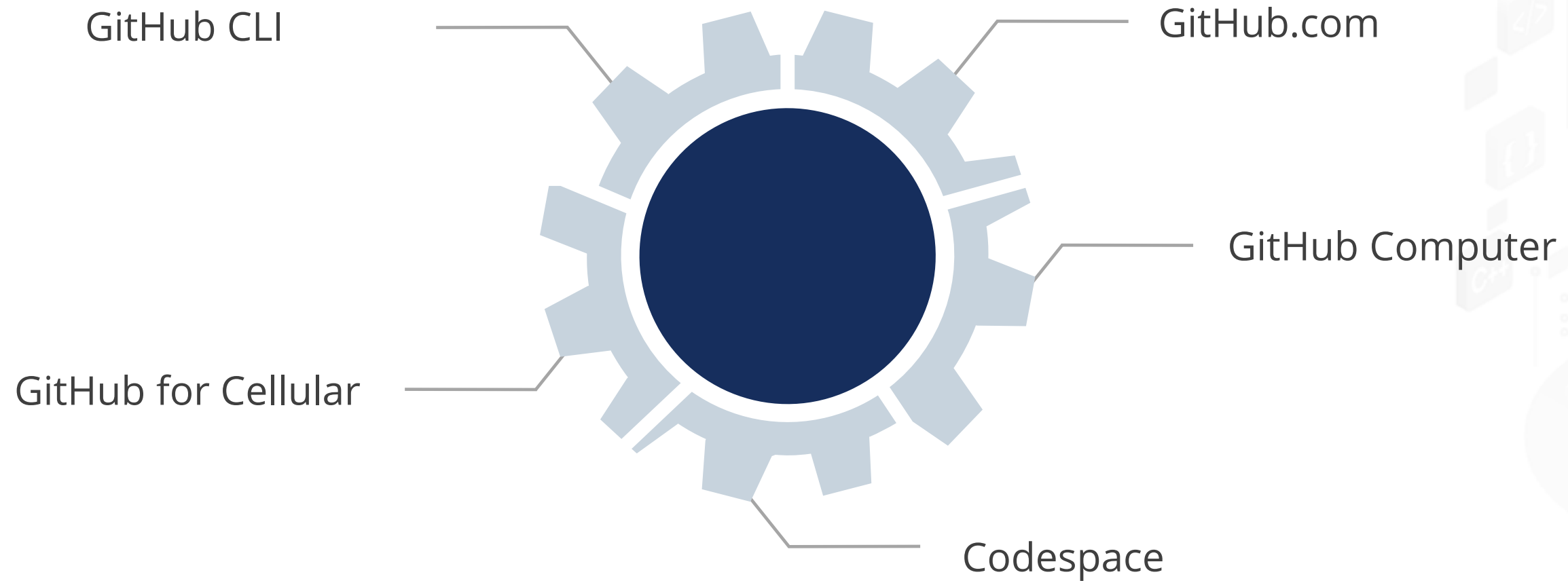
Pull Request Opened

Review Modifications

Submit Follow-ups

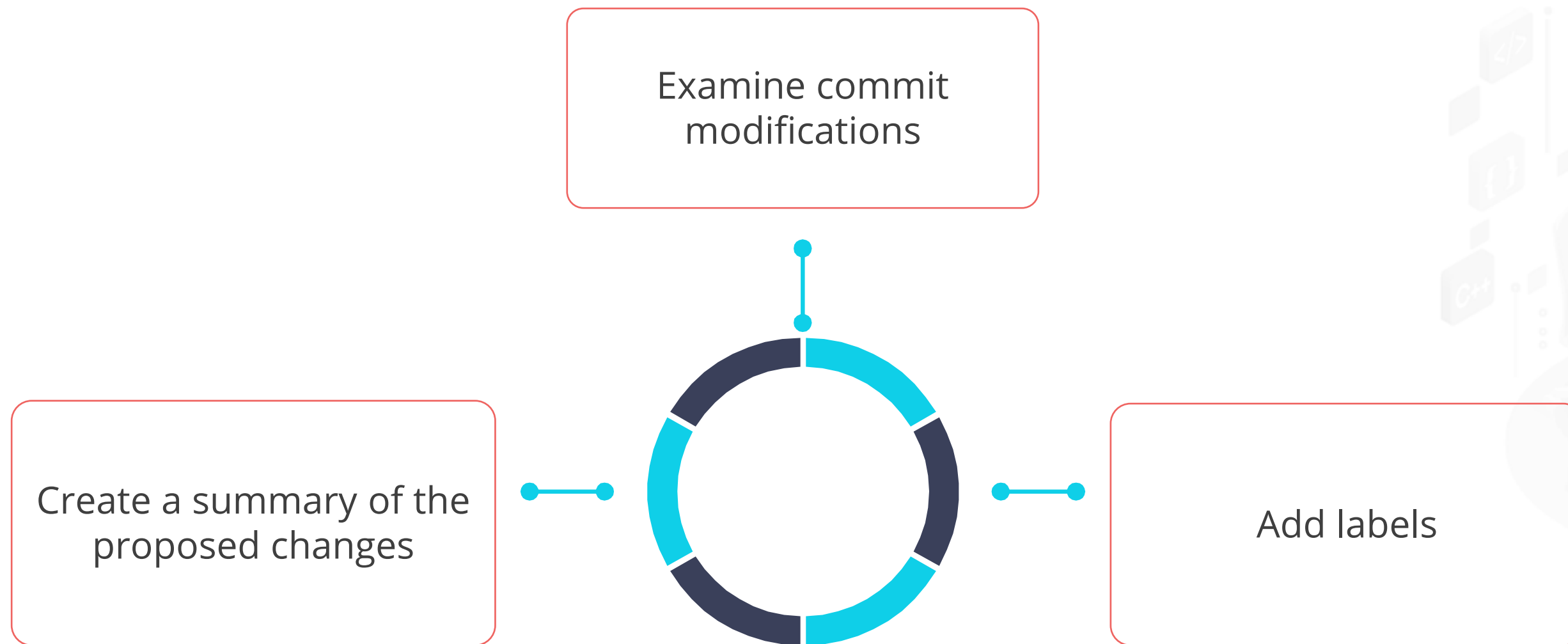
Creating a Pull Request

Pull requests can be created on:



Creating a Pull Request

The review page shows a high-level overview of the differences between the branch and the base branch located in the repository.



Creating a Pull Request

After initializing a pull request, an evaluation of the web page indicates an excessive-stage assessment of the adjustments.

Add a precise of the proposed changes, evaluate the adjustments

Push commits from the topic branch to the existing pull request

Add commits from the topic department to the pull request



Creating a Pull Request

The collaborating team can look at the proposed changes, leave comments, participate in the pull request discussion, and make commits as needed.



Once one is aligned with the proposed changes, one can merge the pull request.

Creating a Pull Request

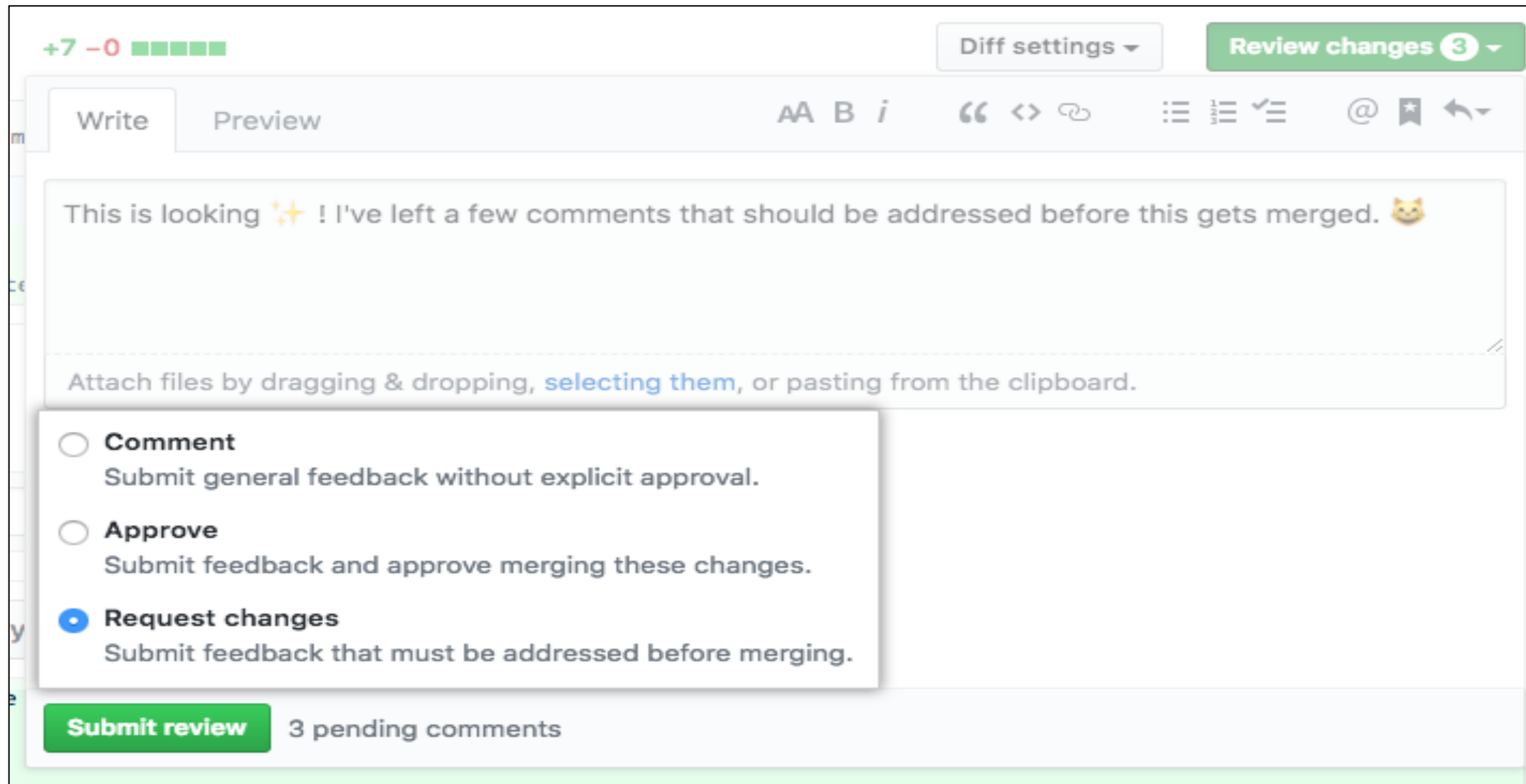
It is crucial to pass the required status checks before merging a branch into another.



If fame tests are required for a repository, the required popularity checks should have passed earlier.

Creating a Pull Request

Step 1: Navigate to the repository's home page on GitHub.com.



The screenshot shows the GitHub Pull Request review interface. At the top, there's a status bar with '+7 -0' and a 'Diff settings' dropdown. A green button labeled 'Review changes' with a '3' indicates three pending comments. Below this is a 'Write' tab and a 'Preview' tab. The main text area contains a comment: 'This is looking ✨ ! I've left a few comments that should be addressed before this gets merged. 🐱'. Below the text area is a dashed line and a prompt: 'Attach files by dragging & dropping, selecting them, or pasting from the clipboard.' A dropdown menu is open, showing three options: 'Comment' (Submit general feedback without explicit approval.), 'Approve' (Submit feedback and approve merging these changes.), and 'Request changes' (Submit feedback that must be addressed before merging.). The 'Request changes' option is selected. At the bottom, there is a green 'Submit review' button and the text '3 pending comments'.

Creating a Pull Request

Step 2: Select the branch that contains your commits from the "**Branch**" menu.

+7 -0 ■■■■■

Diff settings Review changes 3

Write Preview

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This is looking ✨ ! I've left a few comments that should be addressed before this gets merged. 🐱

Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

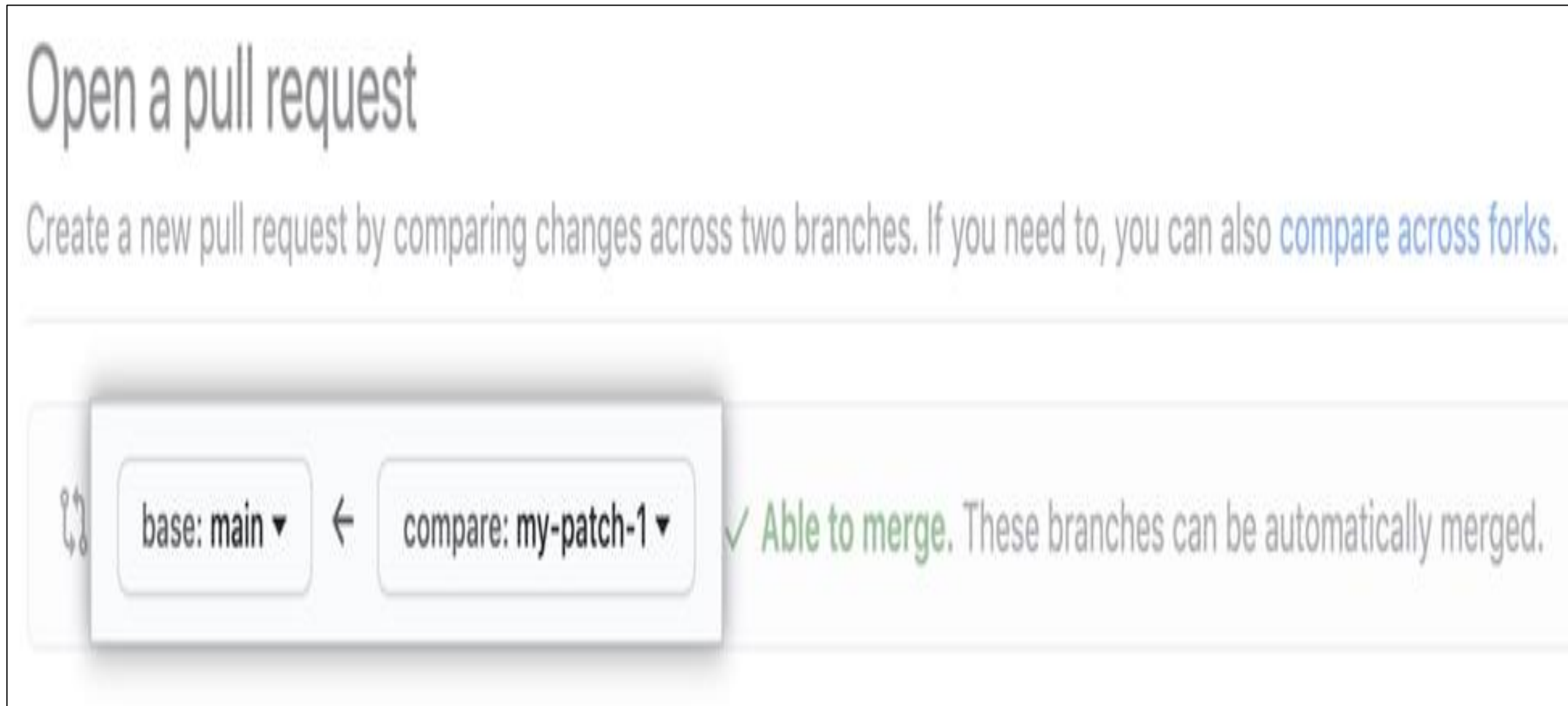
- ☐ **Comment**
Submit general feedback without explicit approval.
- ☐ **Approve**
Submit feedback and approve merging these changes.
- ☒ **Request changes**
Submit feedback that must be addressed before merging.

Submit review 3 pending comments

Step 3: Click **Pull request** on top of the list of files.

Creating a Pull Request


Step 4: Choose the branch to merge on, using the base branch drop-down menu. Then, select the topic branch using the compare branch drop-down option.



Creating a Pull Request

Step 5: Add a title and a description.

Please review the [guidelines for contributing](#) to this repository.



Add CONTRIBUTING.md

Write

Preview

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Let's add a contributing file, so we can work better, together!

Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

Labels


None yet

Milestones

No milestones

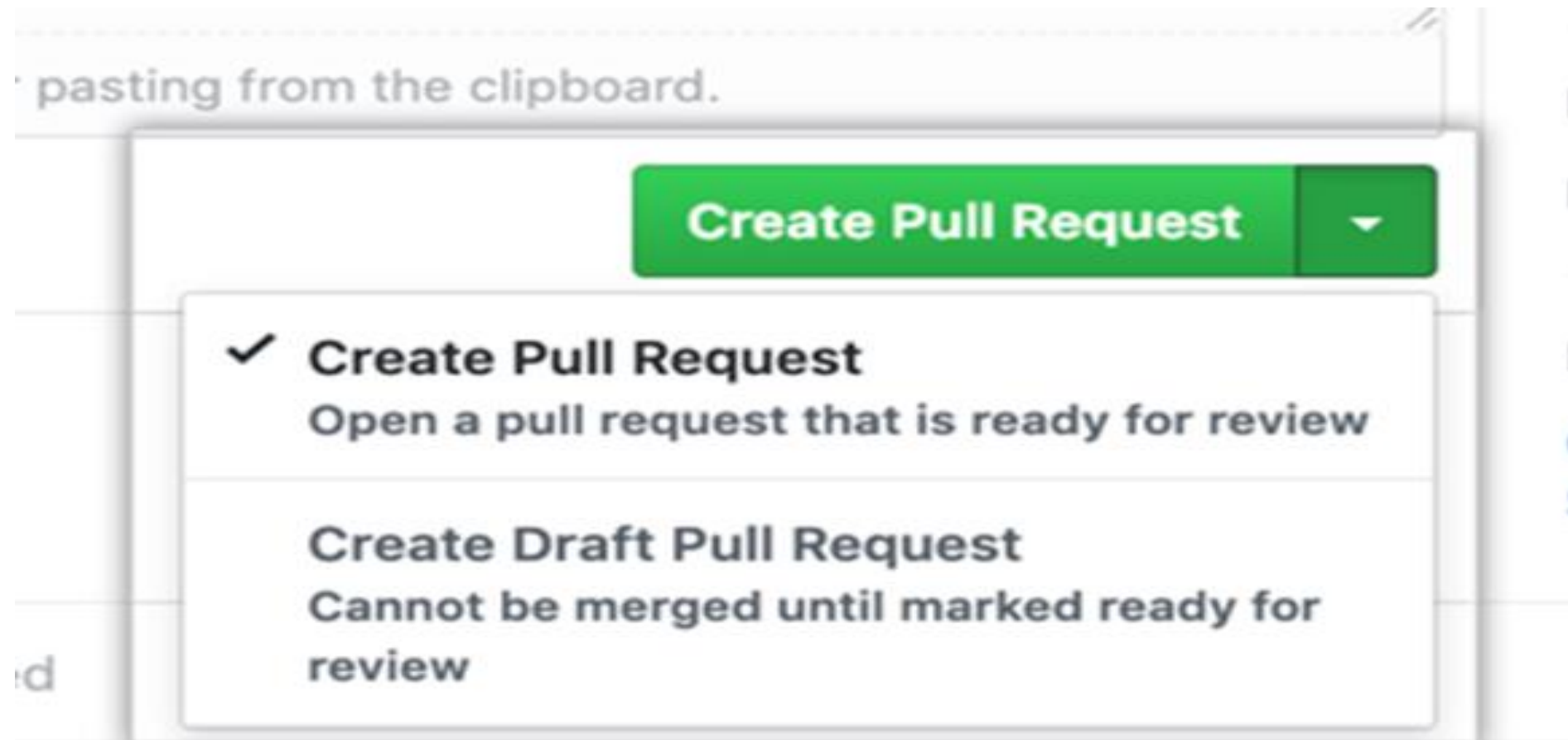
Assignees

No one assigned



Creating a Pull Request

Step 6: Click on Create Pull Request. To make a draught pull request, select Create Draft Pull Request from the drop-down menu, then click Draft Pull Request.



Pull Requests



Problem Statement:

Work with Pull Requests and compare the changes that you have pushed to a branch in a repository on GitHub

ASSISTED PRACTICE

Assisted Practice: Guidelines

Steps to pull requests are:

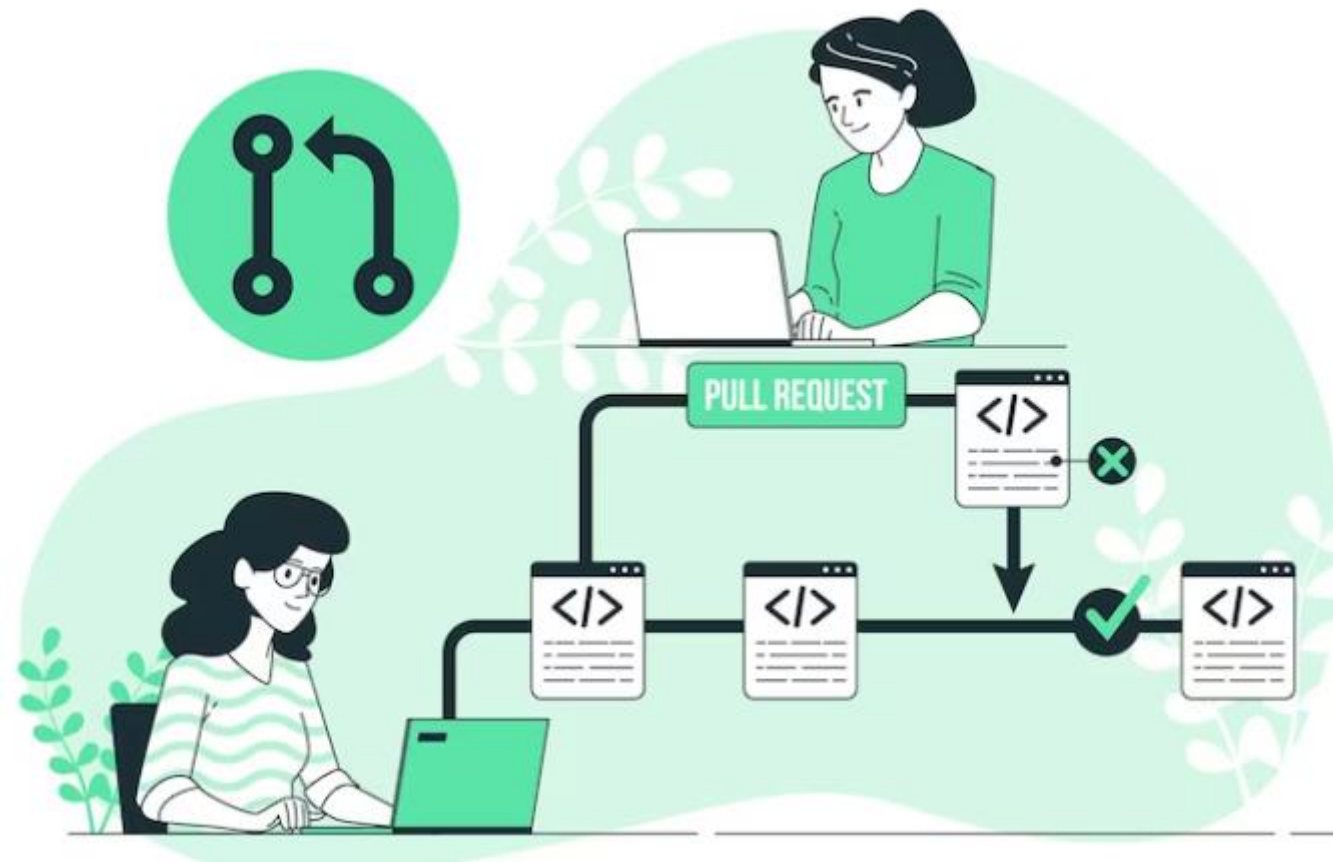
1. Create a branch
2. Create a pull request



Accepting a Pull Request

Accepting a Pull Request

The team collaborating on the project can comment on the modifications proposed in a pull request before merging it.



Accepting a Pull Request

Repository admins can demand that all pull requests be authorized before they are merged.

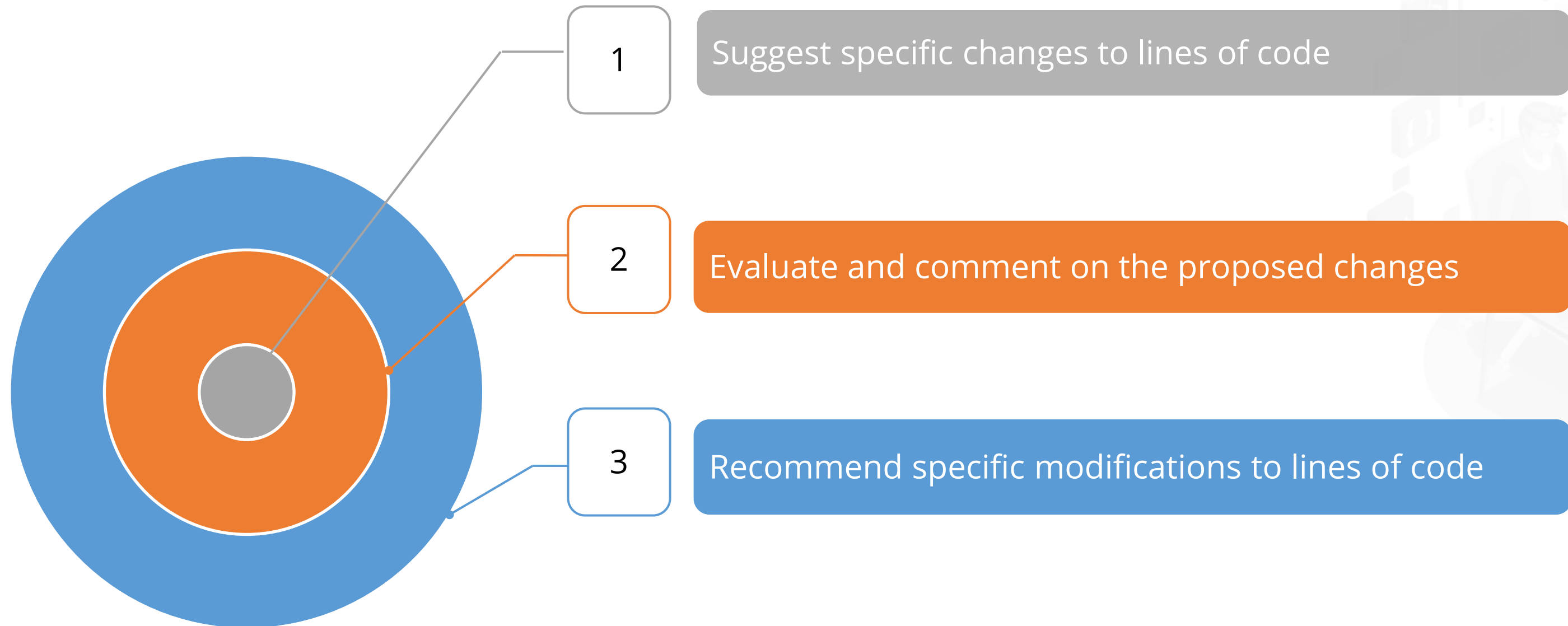
Collaborators
Comment

Approve the Changes

Request more
Changes

Accepting a Pull Request

Anyone with read access can review and comment on the changes proposed by a pull request after it is opened.



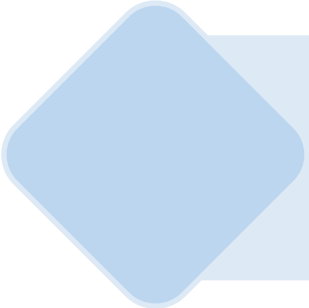
Accepting a Pull Request



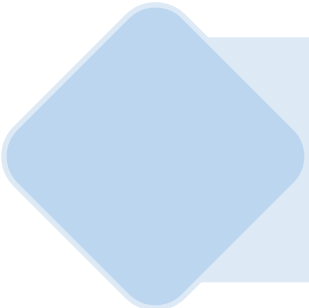
Pull requests can also be assigned to someone individually by repository owners and contributors.



Members of an organization can also request that a pull request be reviewed by a team with read access to the repository.



Repository admins and the team can ask for a specific person to review a pull request.



Members of an organization can also ask a team with read access to the repository to review a pull request.

Accepting a Pull Request

01

Enable discussion of proposed changes



02

Ensure that they comply with the repository's contributing guidelines

Accepting a Pull Request

Comment

It refers to general feedback without asking for more changes.

Approve

It is given as feedback and approves merging the pull request's proposed changes.

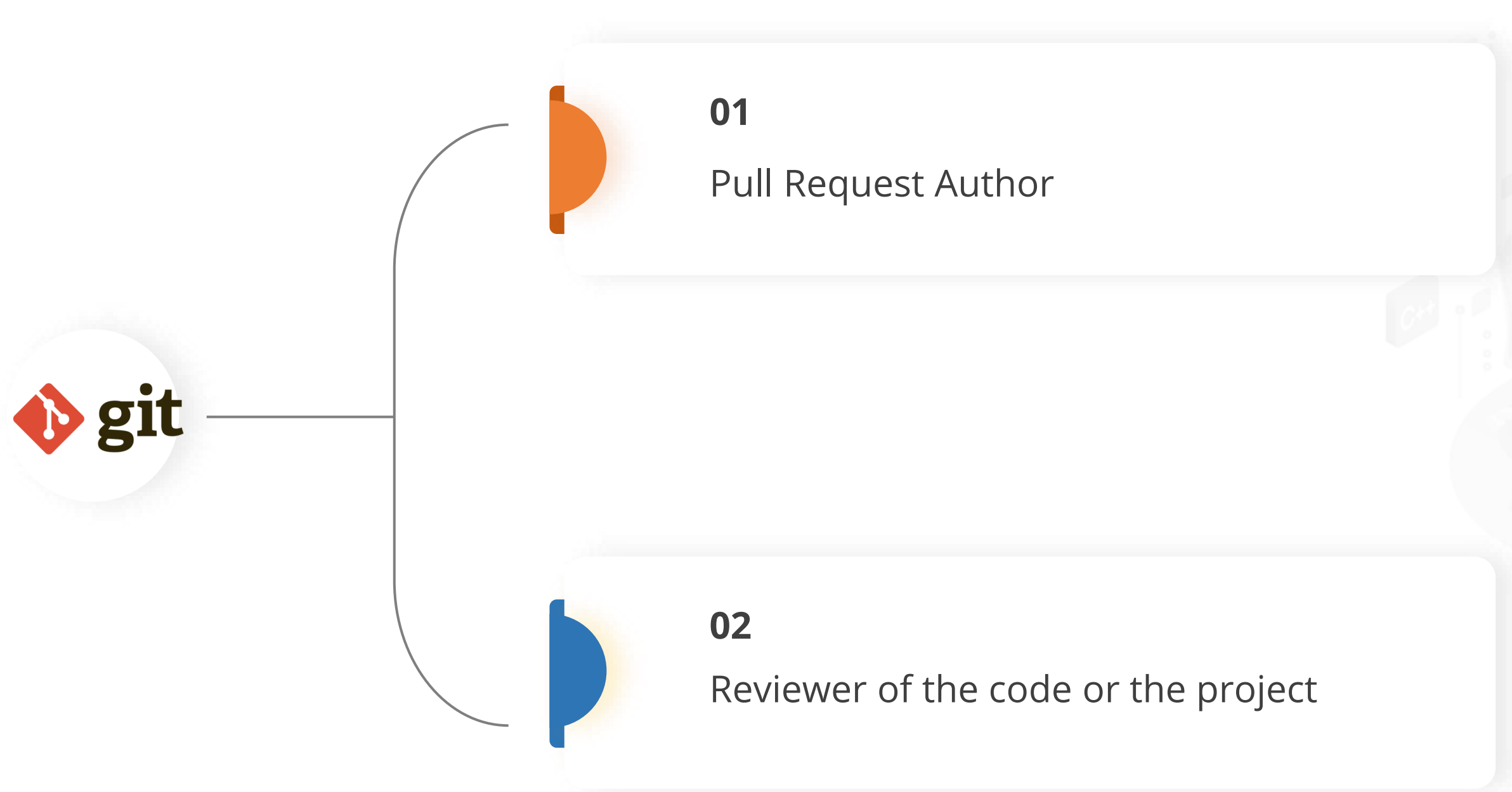
Request Change

It is shared as feedback that needs to be addressed before merging the pull request.

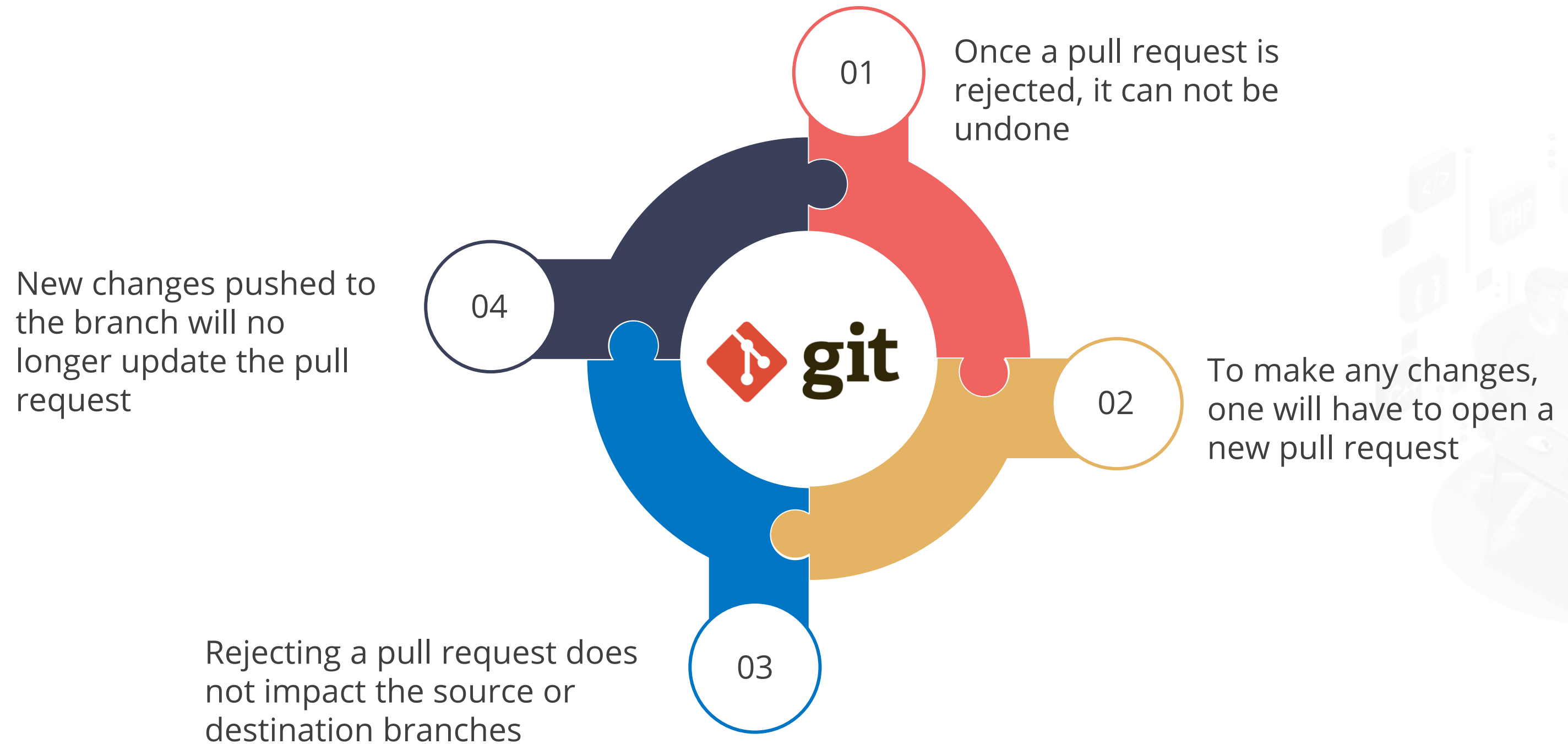
Rejecting a Pull Request

Rejecting a Pull Request

It can be declined when one does not want to merge the changes in that pull request in the existing state.



Rejecting a Pull Request



Key Takeaways

- Pull requests help to convey the changes the users have made to a GitHub branch.
- It is crucial to pass the required status checks before merging a branch into another.
- Repository admins can demand that all pull requests be authorized before they are merged.
- Pull requests can be assigned to someone individually by repository owners and contributors.
- Once a pull request is rejected, it can not be undone.



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Thank You