GitHub Pull Requests from Start to Finish

WHAT IS A PULL REQUEST?



Lisa Walkosz-Migliacio
SOFTWARE ENGINEER

@MissFacetious www.evilisa.com

Overview



So, what is a Pull Request?

- A process
- Analogy
- Why it matters

Tools

Administration

Demo

- Show the entire process of a Pull Request



Before We Begin



Have some knowledge about git:

how to commit and push from your computer.

Have a GitHub account:

ready to start executing git commands.



What Is a Pull Request

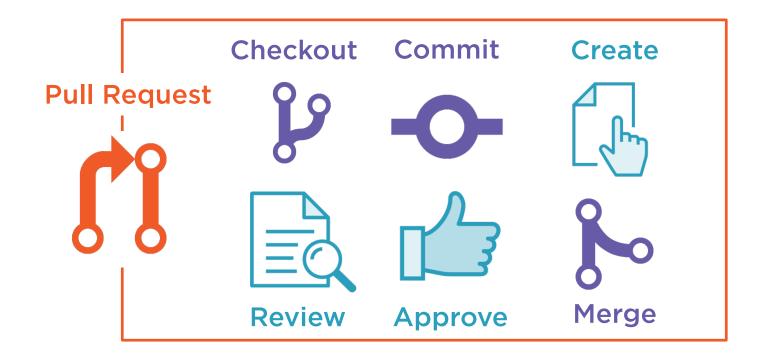


A Pull Request

Pull requests let you tell others about changes you've pushed to a branch in a repository on GitHub. Once a pull request is opened, you can discuss and review the potential changes with collaborators and add follow-up commits before your changes are merged into the base branch.

Source: https://help.github.com/en/github/collaborating-with-issues-and-pull-requests/about-pull-requests





Merge Request?







Checkout

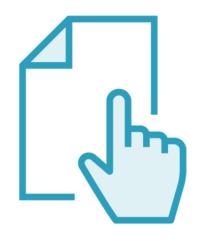
Create a new branch to start adding your files.



Commit

Commit your own files to the branch you created.







First create a Pull Request on GitHub.



Review

Comment on the code and execute the code yourself to review its quality.



Approve

When everything looks good, approve so the code can be put into the codebase.





Move the files in that branch back into the master branch.



Let's Analogize



But Why?



Providing checks and balances! Accountability for the person writing the code, and the rest of the team.



Educate! Line by line code reviews can help the team align to a standard of code formatting. They also show the rest of the team your work.



Keep the master branch clean. No one wants a broken build.



Tools You Need for Pull Requests



Get the Right Tools First



GitHub itself. You'll need an account at http://www.github.com



Git installed on your machine

Use the command line tool, or use GitHub Desktop



A text editor, Atom is a good one, from the people who brought you GitHub

Have your command line tool or GitHub desktop setup before you proceed

Administration



Repo Permissions

	Read	Triage	Write	Maintain	Admin
Close, reopen, and assign pull requests		X	X	X	X
Submit reviews on pull requests	X	X	X	X	X
Request pull request reviews		X	X	X	X
Submit reviews that affect a pull request's mergeability			X	X	X

Source: https://help.github.com/en/github/setting-up-and-managing-organizations-and-teams/repository-permission-levels-for-an-organization





Create a repo with collaborators and branch rule: Require Pull Request



The Pull Request from Start to Finish



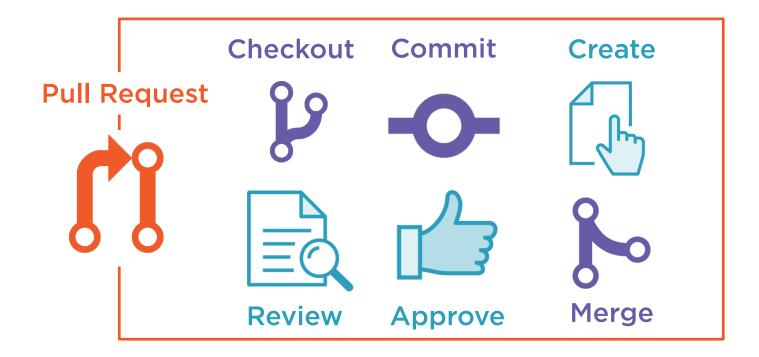
The Whole Pull Request



We'll be creating an entire pull request for this demo.

Our next modules will have only Viewing and then only Creating Pull Requests in depth.







Add Code to Our Branch





Clone a repo

Create a branch

Add and commit code



Open a Pull Request





Open a Pull Request





Describe the Pull Request





Add a reviewer and assignee



View the Pull Request





View a GitHub Pull Request at https://github.com/pulls



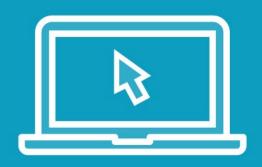


Review a Pull Request



Approve and Merge





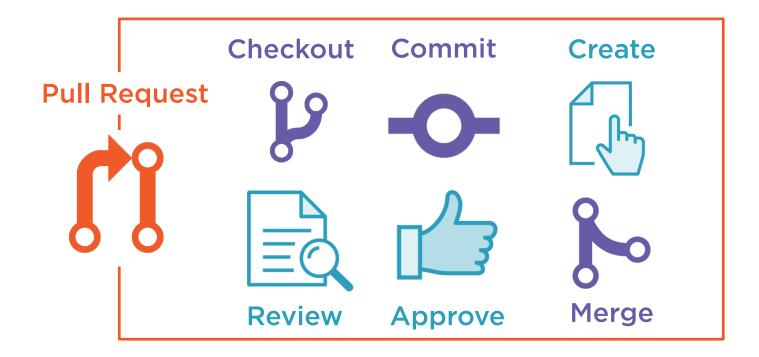
Approve a Pull Request





Merge a Pull Request







Summary



A Pull Request is a process Why use them?

- Keep your build clean
- Educate
- Be accountable

Tools Used

- GitHub
- Git
- code editors

Everyone needs the right access

Demo

- Showed the entire process of a Pull Request

