



# Pulling and Merging with Git

Data Boot Camp

Lesson 7.2



# Class Objectives

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By the end of today's class, you will:



Pull a branch from GitHub.



Merge branches with Git.



Open, review, and merge pull requests.



Continue work on Project 1.

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# Instructor Demonstration

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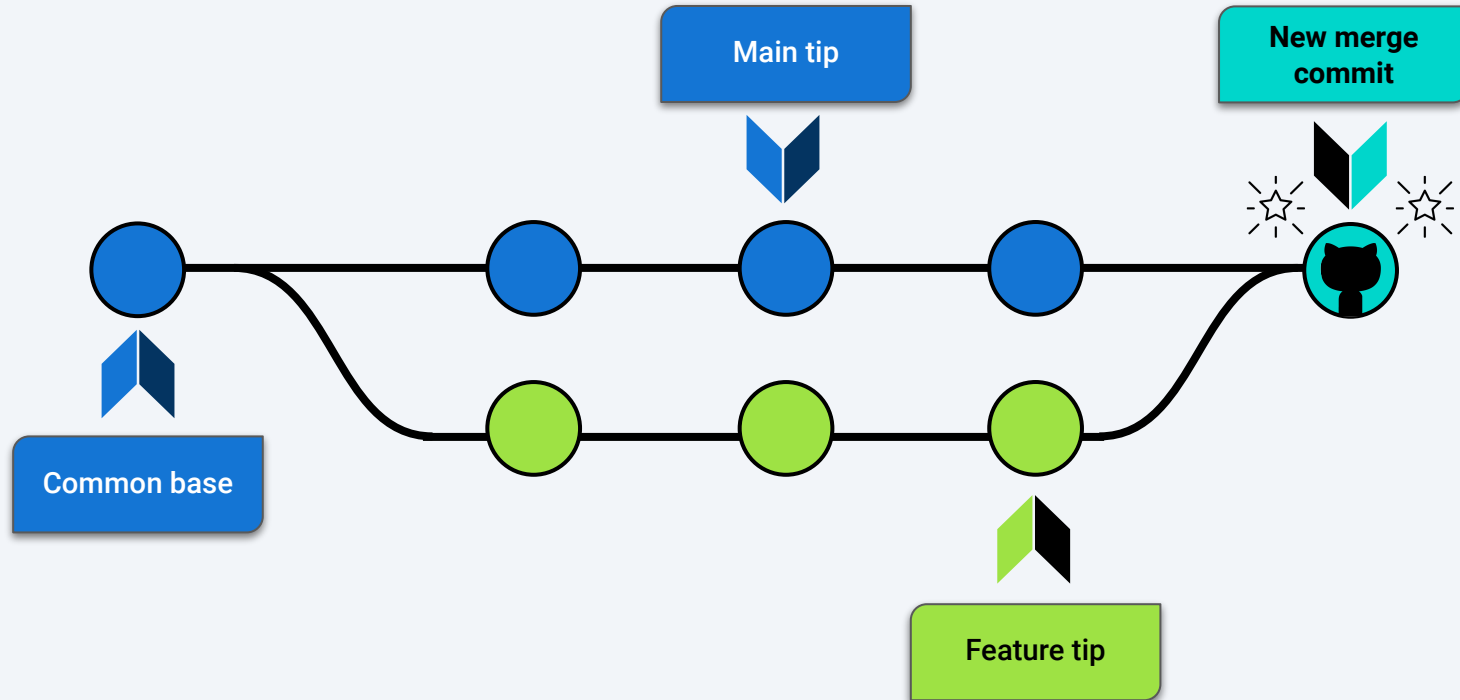
## Merging with Git and GitHub



**What is a branch in Git?**

# Branches in Git

A branch is a timeline and history of changes.



# Branch in Git

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There are many benefits to developing on a separate branch.



Recent commits in `git log` are only your own



Checkout old commits without affecting the `main` branch.



Edit and review changes safely.



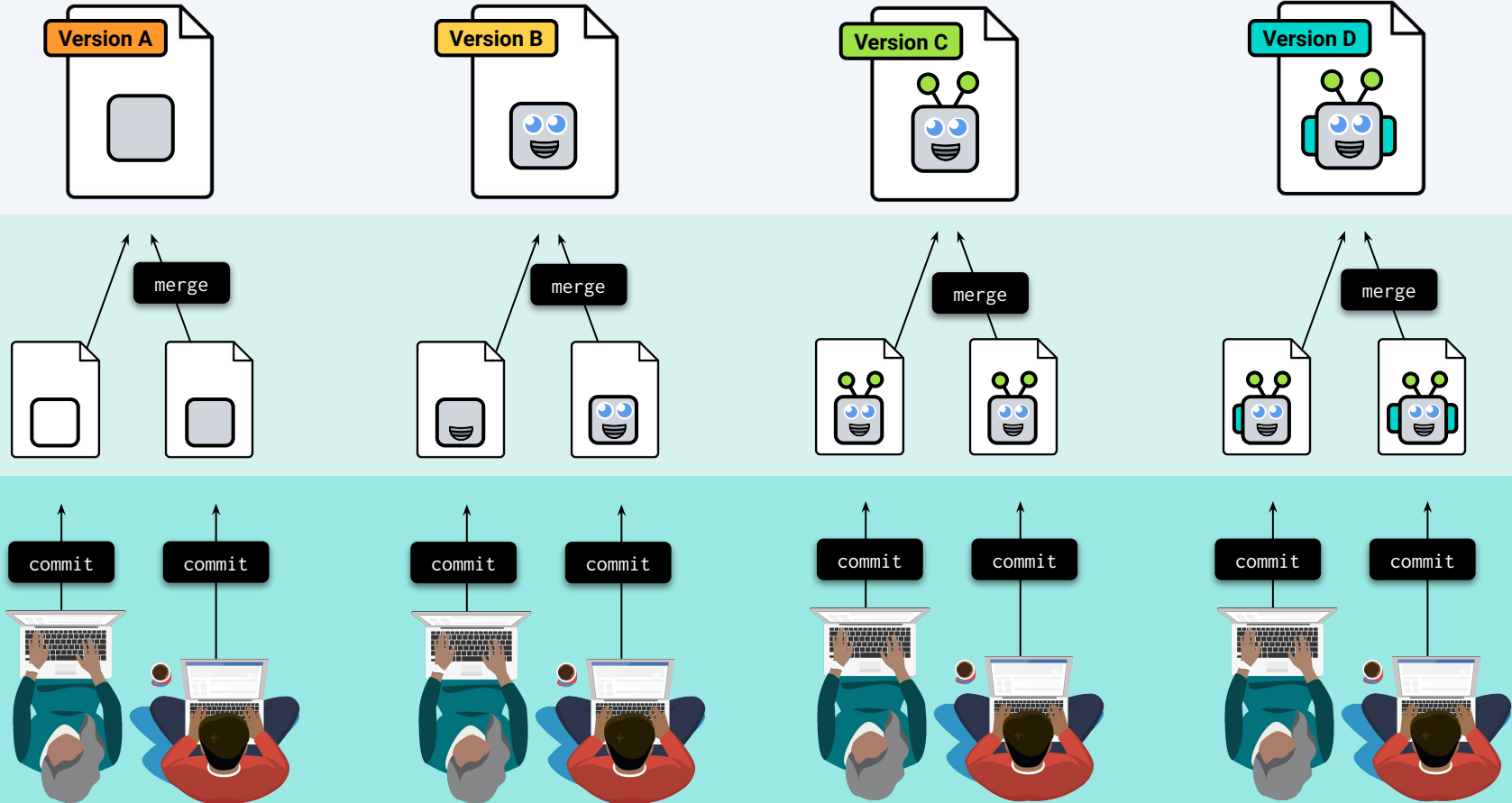
Organize your development efforts.

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**What does it mean to merge a branch?**

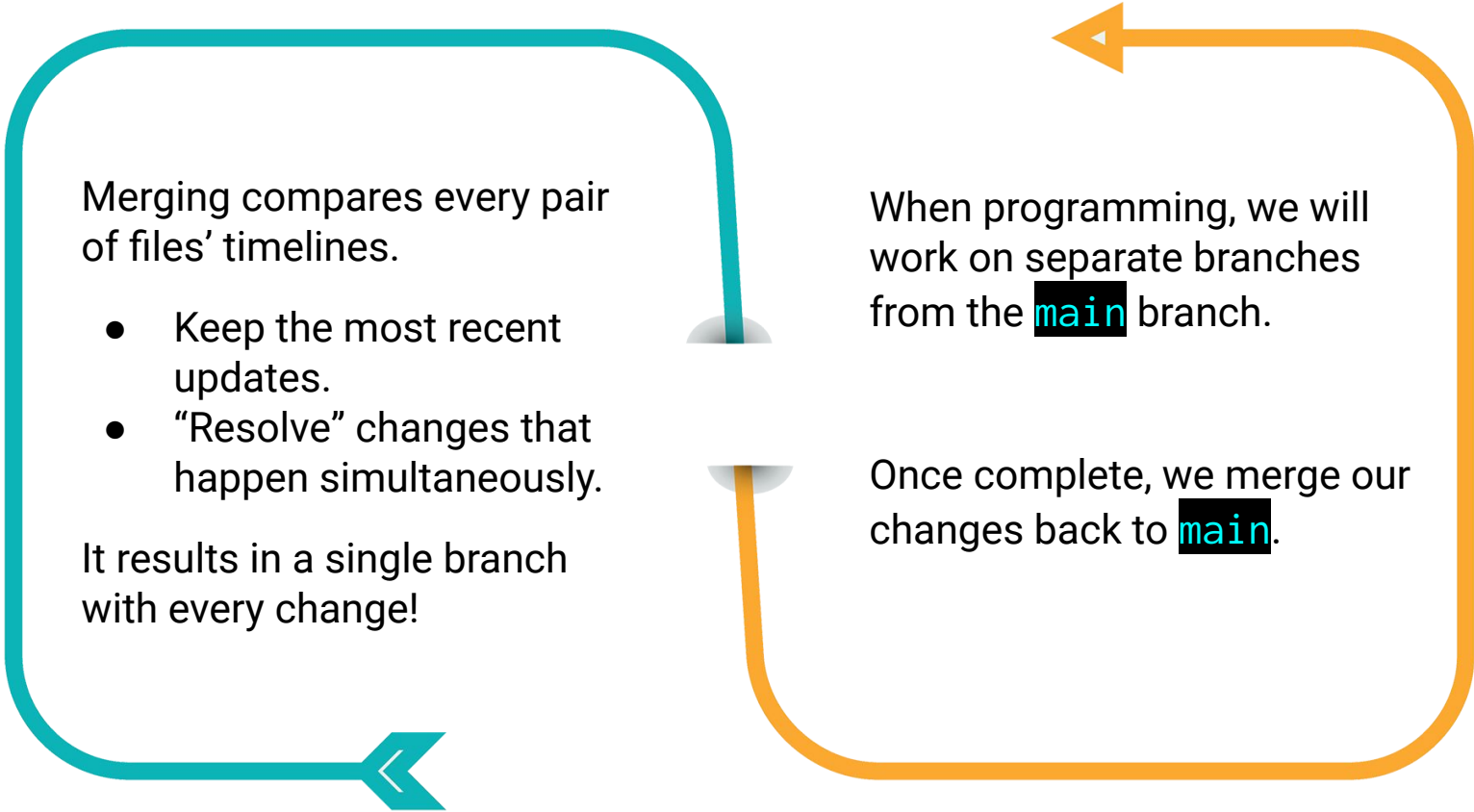
# Merging Combines Two Branches





# Merging Combines Two Branches

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Merging compares every pair of files' timelines.

The diagram illustrates the merging process. On the left, a teal rounded rectangle contains text about merging. A teal line with an arrow at the bottom points from this box to the right. On the right, an orange rounded rectangle contains text about working on separate branches and merging back. An orange line with an arrow at the top points from this box back to the left, completing a cycle. The word 'main' is highlighted in a black box in both text blocks.

- Keep the most recent updates.
- “Resolve” changes that happen simultaneously.

It results in a single branch with every change!

When programming, we will work on separate branches from the `main` branch.

Once complete, we merge our changes back to `main`.



**We can merge branches by using  
our local repository or GitHub!**



Time to <code>

# Merging Branches

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Before you merge branches, make sure that the local branch is up to date with the remote branch.



Use `git pull origin <branch name>`.



Then `git checkout <merge branch>` and `git merge`.

Does the remote branch have new and exciting content, bug fixes, or improvements? Are you not ready to merge branches?



Use `git pull origin <branch name>` to pull down changes at any time.

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Break



# Project Work

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Remainder of Class