



Pulling and Merging with Git

Data Boot Camp

Lesson 7.2



Class Objectives

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.



Instructor Demonstration

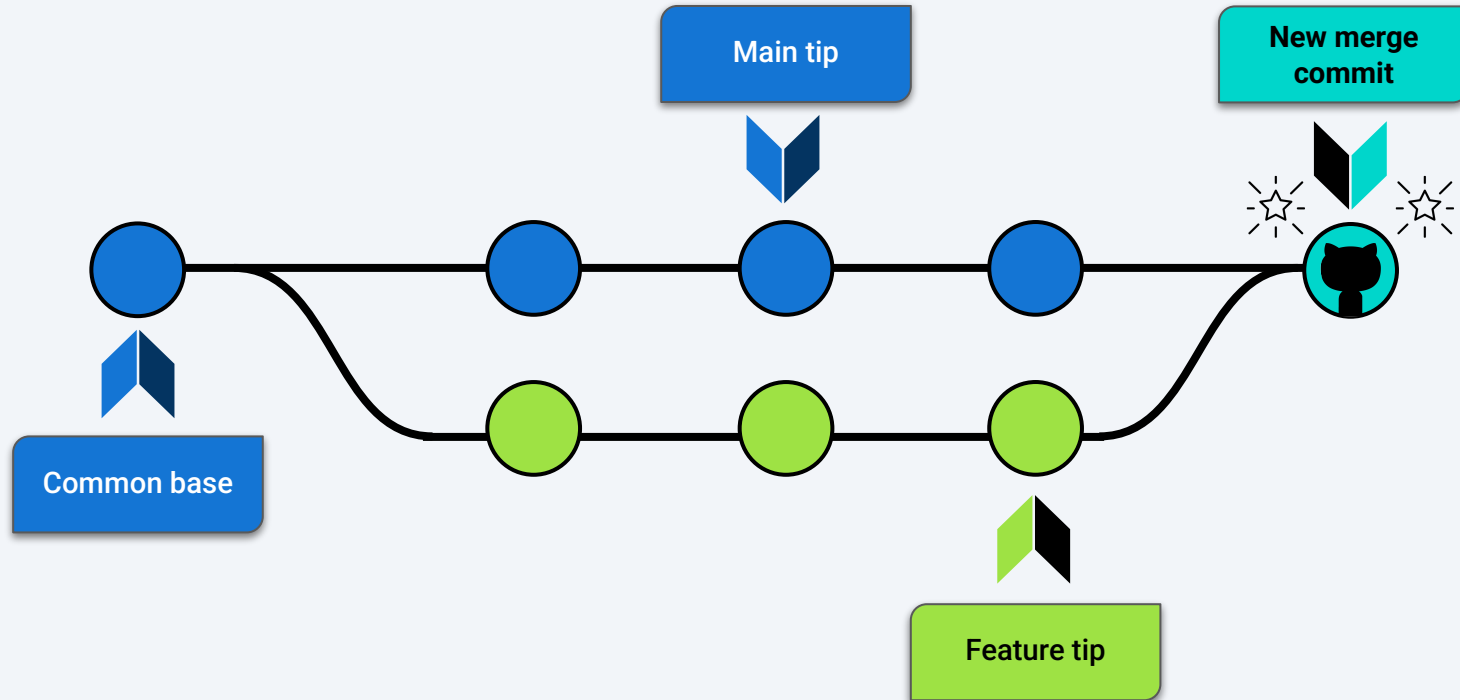
Merging with Git and GitHub



What is a branch in Git?

Branches in Git

A branch is a timeline and history of changes.



Branch in Git

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.

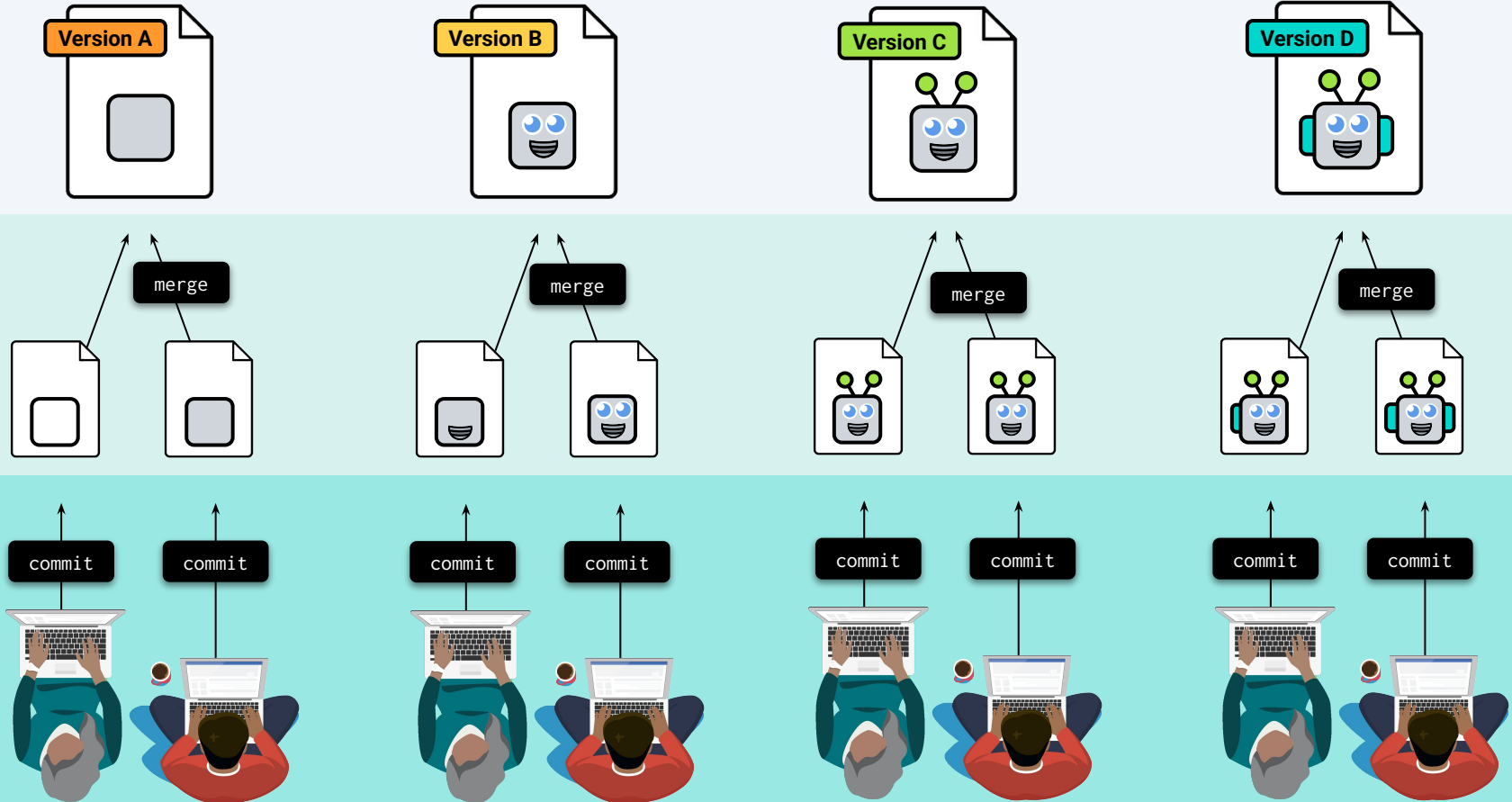


Organize your development efforts.



What does it mean to merge a branch?

Merging Combines Two Branches



Merging Combines Two Branches



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 starts from the bottom right of this rectangle, loops around, and ends with a teal arrow pointing left. On the right, an orange rounded rectangle contains text about working on separate branches and merging back. An orange line starts from the bottom left of this rectangle, loops around, and ends with an orange arrow pointing left. The two lines are connected by two small grey circles in the center, representing the merge point.

- 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

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.

A close-up, high-angle shot of a computer keyboard. The central focus is a large, white, rectangular key with rounded corners. On this key, there is a dark blue icon of a coffee cup with three wavy lines above it representing steam. Below the icon, the word "Break" is printed in a dark blue, serif font. The key is set against a light-colored, textured keyboard surface. Surrounding the main key are other keys, including one with a double quote symbol to the left and one with a dash/slash symbol to the right, all slightly out of focus.

Break



Project Work

Remainder of Class