

# WORKING WITH REMOTES

DAY-2

# Prerequisites



## Day 1

- Install git on computer
- Create a Github account
- Install IDE (vs Code Recommended)



## Set up github-cli

- Authorized to Github from the github-cli.

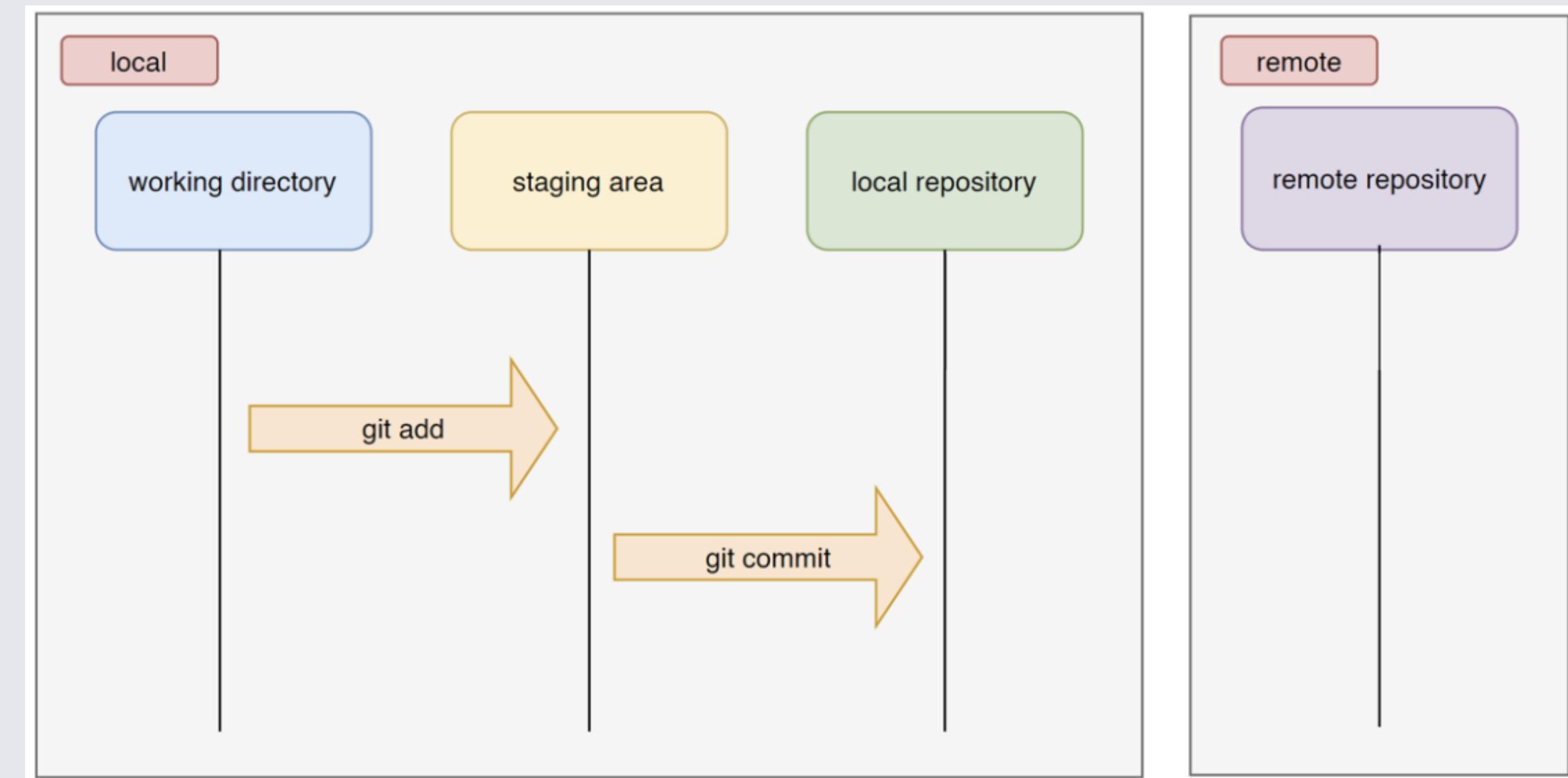
# A quick look at Day 1

**git init**

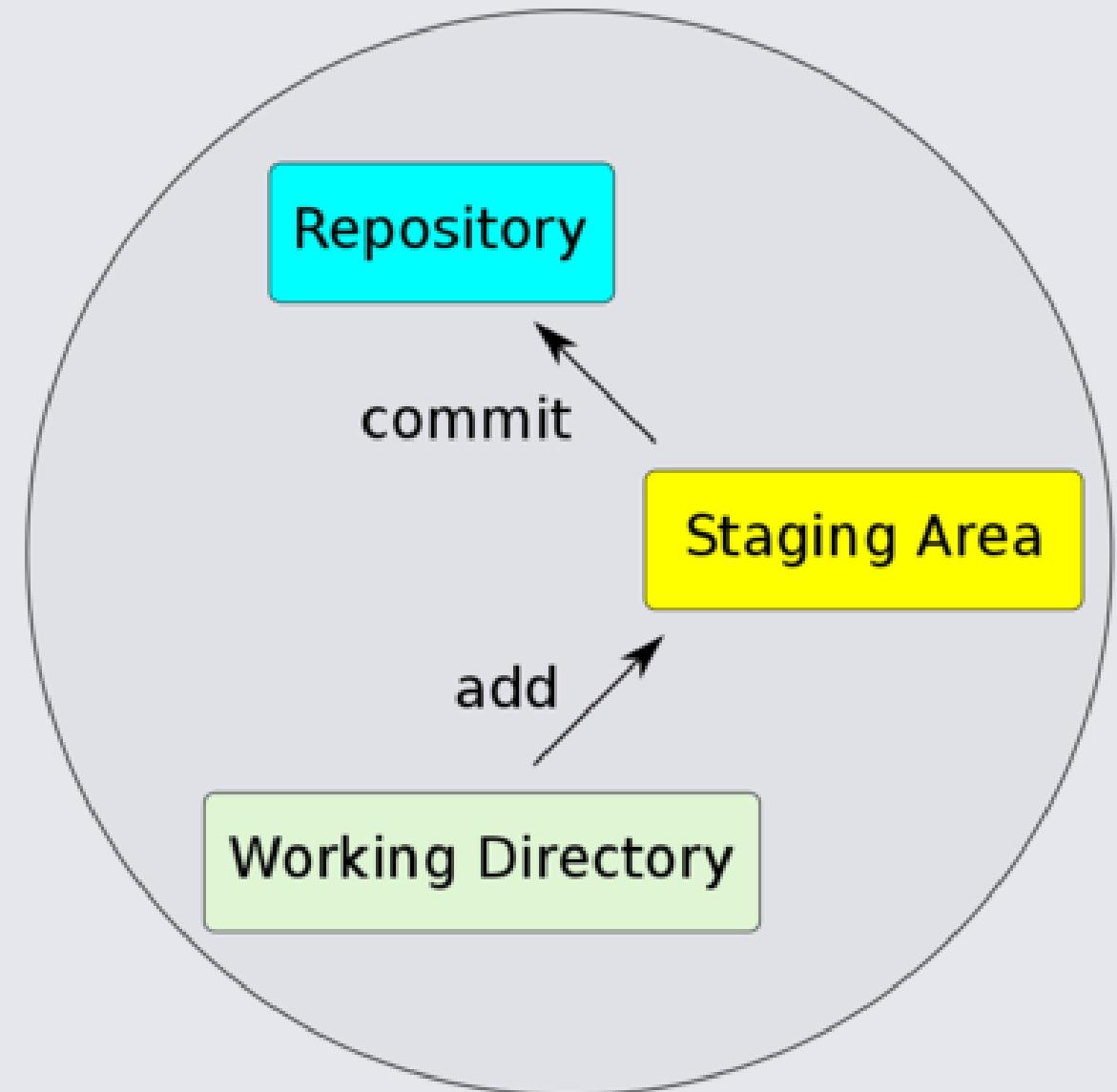
**git add**

**git commit**

**git log**



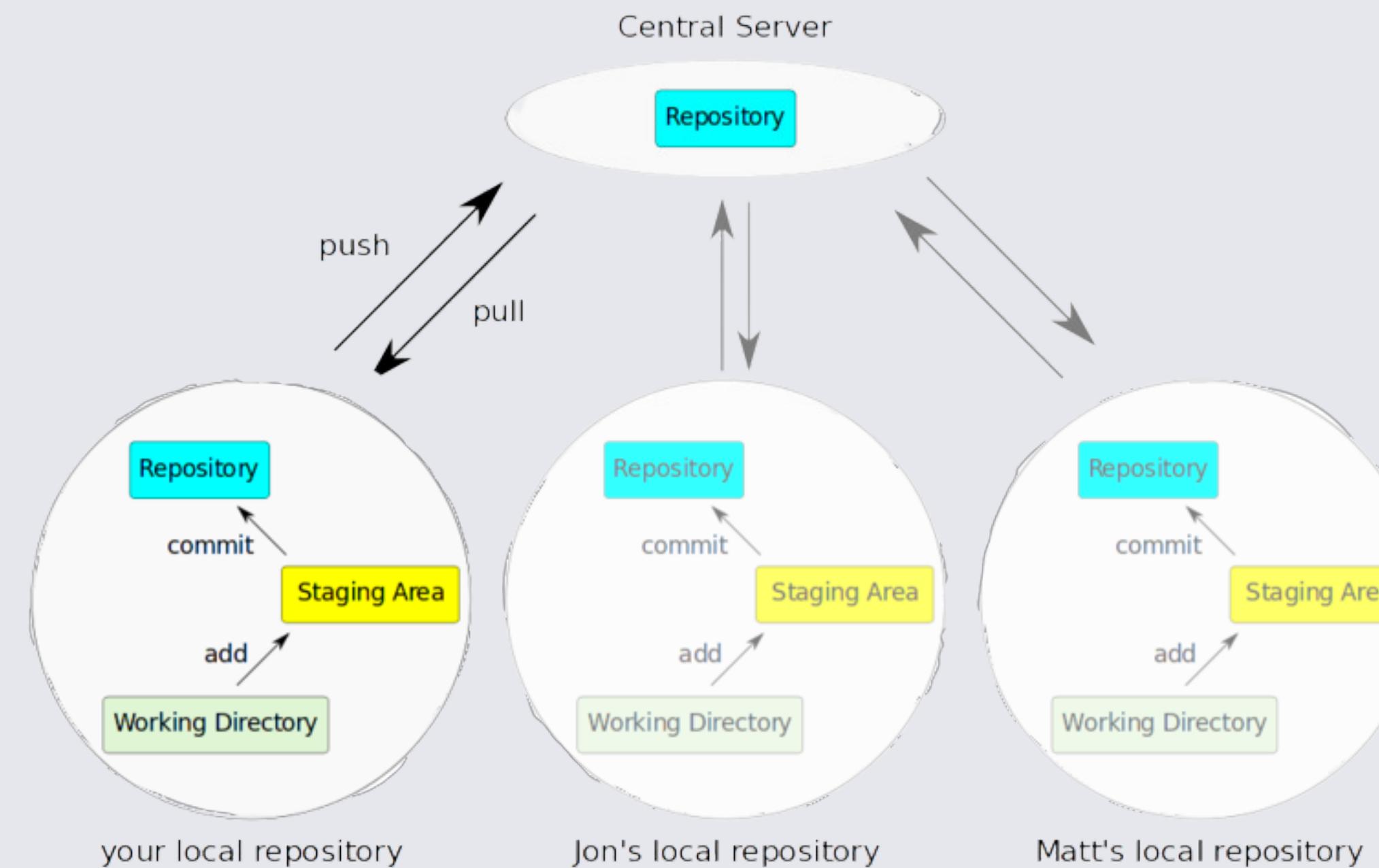
# Single Git Repo



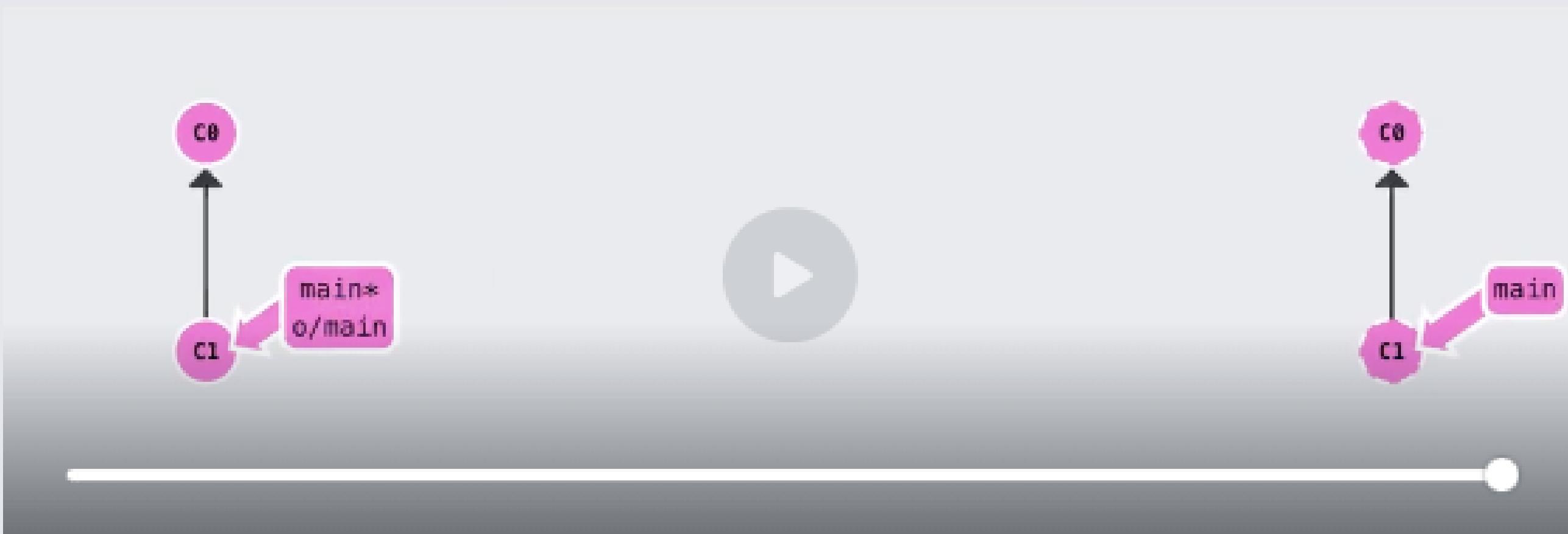
# Collaboration, How?



# Remote?



# Remote?



# Remote Servers



# Adding Remote Repo

```
$ git remote add <alias> <url>
```

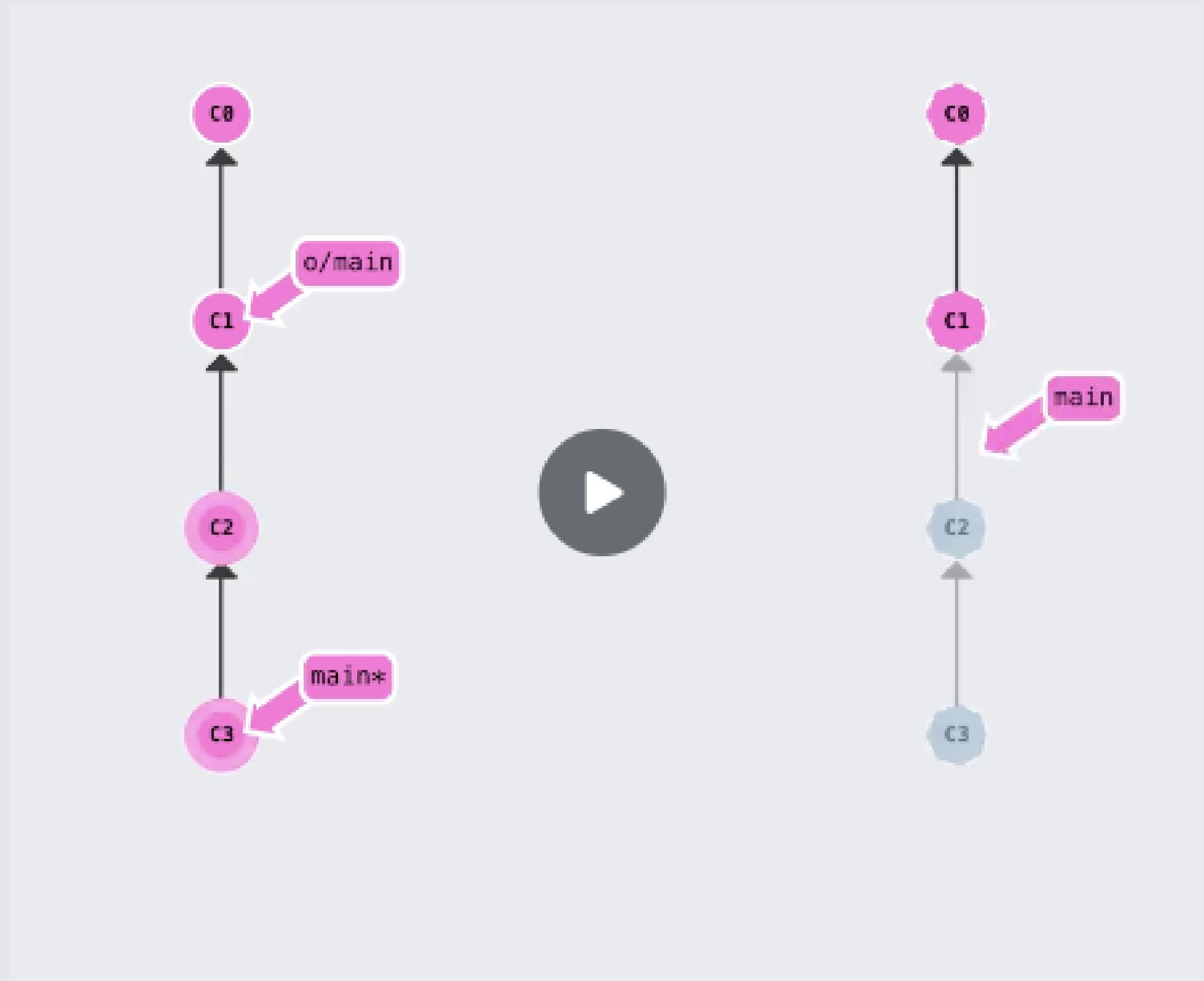
```
[aavashchhetri@0x00ac remote-url % git remote add dev1 https://github.com/A-atmos]
/alias1.git
[aavashchhetri@0x00ac remote-url % git remote -v
dev1    https://github.com/A-atmos/alias1.git (fetch)
dev1    https://github.com/A-atmos/alias1.git (push)
[aavashchhetri@0x00ac remote-url % git remote add dev2 https://github.com/A-atmos]
/alias1.git
[aavashchhetri@0x00ac remote-url % git remote -v
dev1    https://github.com/A-atmos/alias1.git (fetch)
dev1    https://github.com/A-atmos/alias1.git (push)
dev2    https://github.com/A-atmos/alias1.git (fetch)
dev2    https://github.com/A-atmos/alias1.git (push)
```

# Remote URLs

```
$ git remote rename <old> <new>
```

```
$ git remote remove <alias-name>
```

# Git Push



# Git Push

**\$ git push <alias> <branch>**

```
● aavashchhetri@0x00ac demo % git push origin main
  Enumerating objects: 4, done.
  Counting objects: 100% (4/4), done.
  Delta compression using up to 8 threads
  Compressing objects: 100% (3/3), done.
  Writing objects: 100% (3/3), 3.80 KiB | 3.80 MiB/s, done.
  Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
  remote: Resolving deltas: 100% (1/1), completed with 1 local object.
  To https://github.com/A-atmos/git-workshop-.git
    4dbb621..7522f8c  main -> main
```

# Git Push



# Fetching a Remote Repo

```
$ git fetch <remote-repo>
```

After fetching, merging is done.

# Git Pull

```
$ git pull <alias-name> <branch>
```

**pull = fetch + merge**

# Git Clone

```
$ git clone <remote-url>
```

Makes a copy of the repo  
locally.

# Forking

**A personal copy of a Repository**

**Changes made on your fork won't affect the original project**

# Mastering Pull Requests

- **Suggesting changes to an existing repository**
- **Fork, make changes to it, then make a pull request**

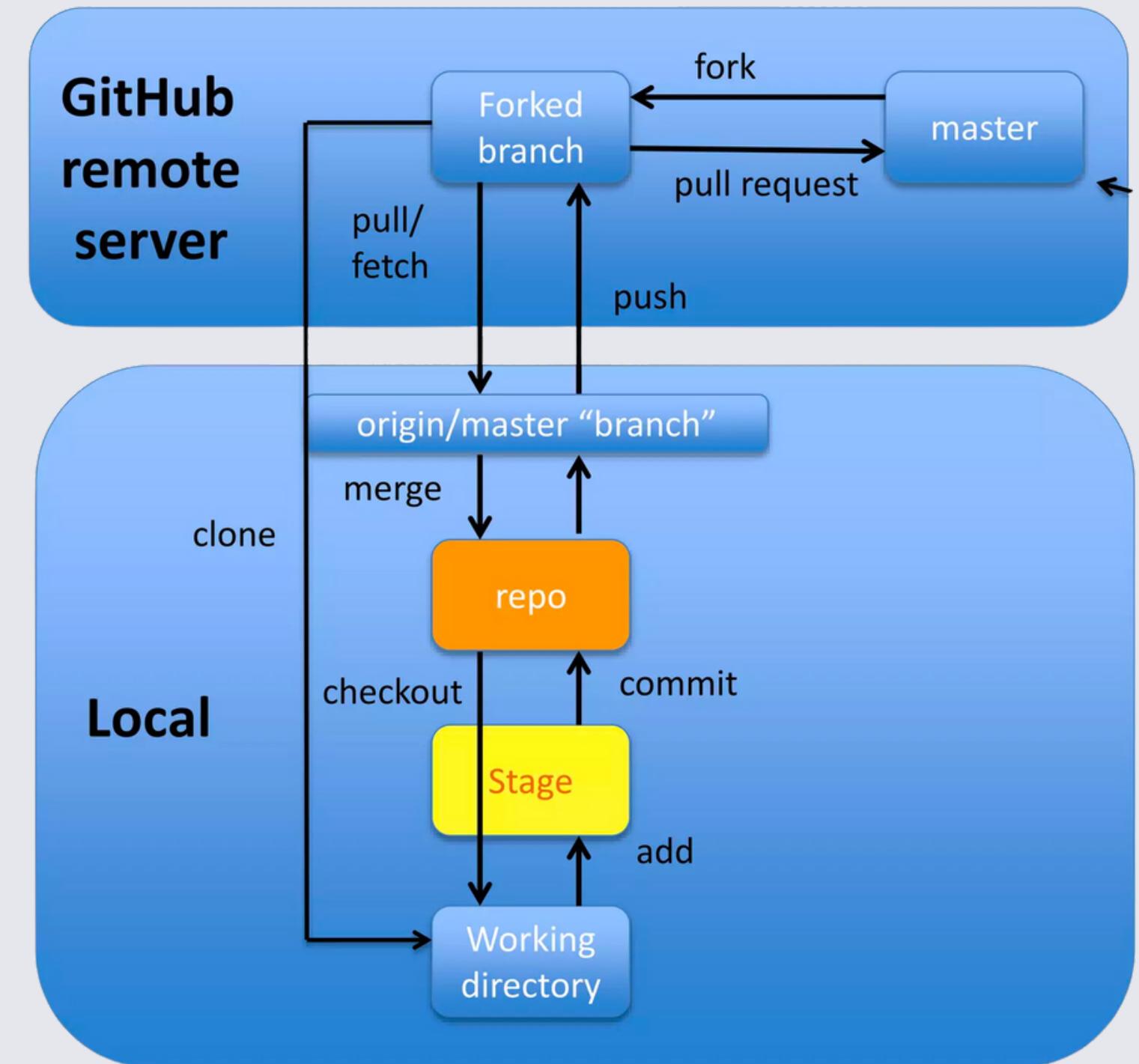
# Merging Pull Request



# Workflow

- Fork the project from the repository
- Clone your fork locally
- Make your new branch
- Make changes to the code and Commit
- Push changes to your forked Repository
- Create a pull request

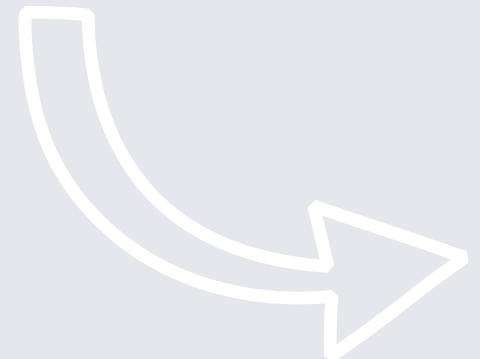
# Overview



# Git stash

- Allows you to save your changes without committing them.
- Useful for temporarily storing unfinished work or when you need to switch to another task(branch) quickly.
- *Oh shit, I accidentally committed to the wrong branch!*
- Switch branches without losing your changes or causing conflicts.
- ***git stash*** to stash the changes and ***git stash apply*** or ***git stash pop*** to apply stashed changes.

# Github issues

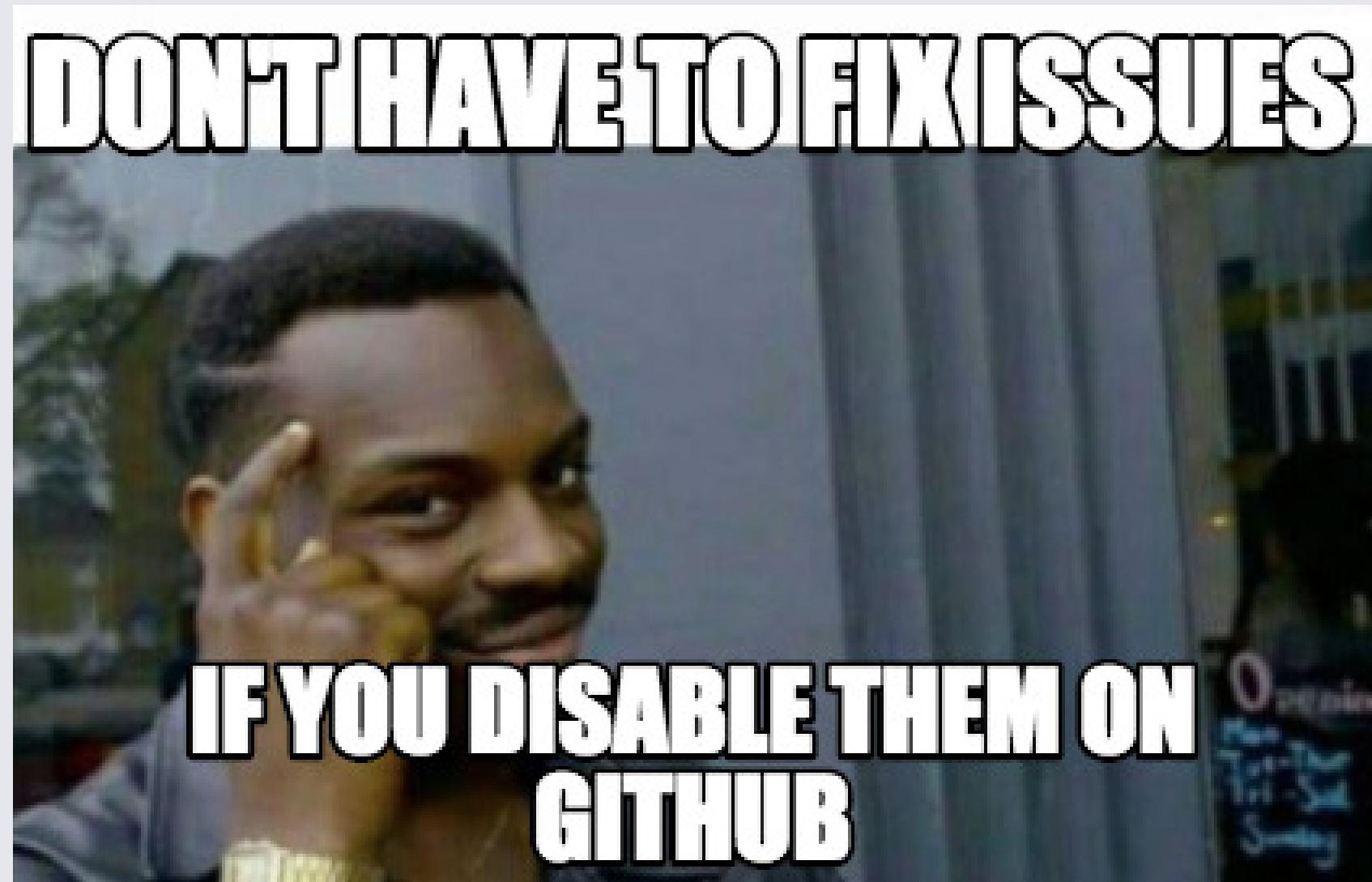


## Why Github issues?

**Bug Tracking:** Report and track software bugs and resolve issues efficiently

**Request features:** Collaborators can suggest new features or improvements

**Task Management:** Assign tasks to team members and monitor the progress



Well, that's not how you do it!

# Navigating Github issues

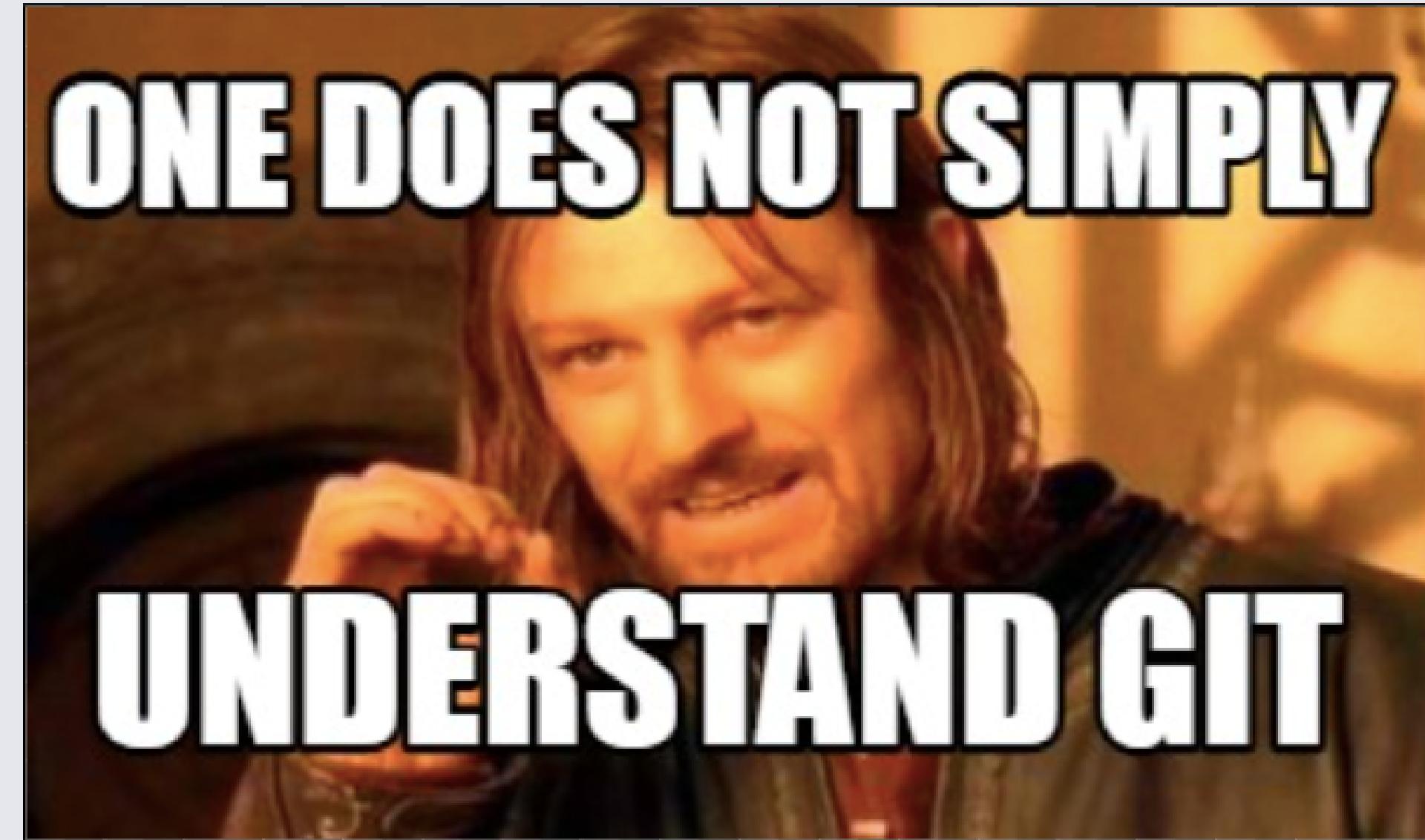
- Create an Issue
- Label the Issue with labels like ***bug, enhancement, documentation.***
- Distribute tasks by assigning the issue to responsible team members.
- Use Markdown: Format the description with Markdown for clarity and visual appeal
- Collaborate by engaging in discussions through comments.
- Close resolved issues with references to relevant commits or pull requests.

# Contributing to open source projects

- Why Contribute?
- Finding the Right Project
- Create Pull Request : **fork**, **branch** and **push**
- Wait for your PR approval to have your contribution merged.

When you contribute 2 lines  
to an open source project:





You need to GIT it!

# THANK YOU