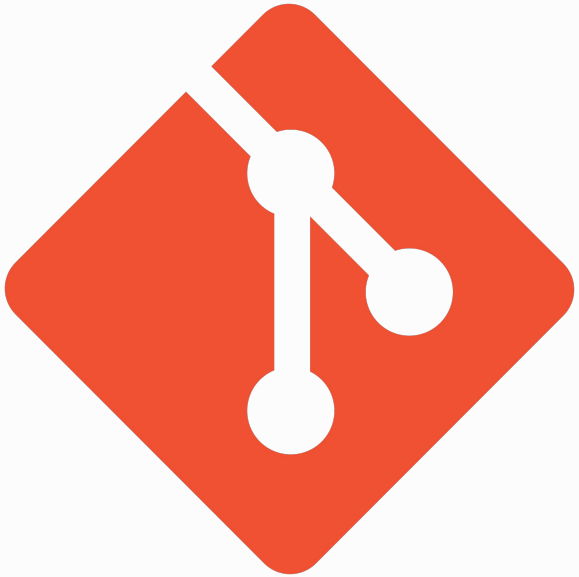


Git 101

About Me

- David Nuon
  - Software Engineer at 2U
  - CSULB Alumni
  - ACM Student Member *(a long time ago)*

This Saturday
March 1st, 2025

11am - 3pm
Wrigley Coffee

Next week: March 6-9, 2025 at the Pasadena Convention Center

socallinuxexpo.org/scale/22x

Use NIX50 for 50% Off

March 6th-7th, 2025 @ Pasadena, CA

at the Southern California Linux Expo (Mar 6th - 9th)

Actually, this is not a git talk

YOU NEED TO LEARN HOW TO DEPLOY SOFTWARE

Even if you’re doing dev

There’s a lot to cover, I’ll post these slides later

Deploying

Source Control

CI/CD

Live Demo

Why Deployment Matters

Software doesn't matter if it people **can't use it**

We write software for people.

Deploying

Source Control

CI/CD

Live Demo

What is source control?

Essentially:

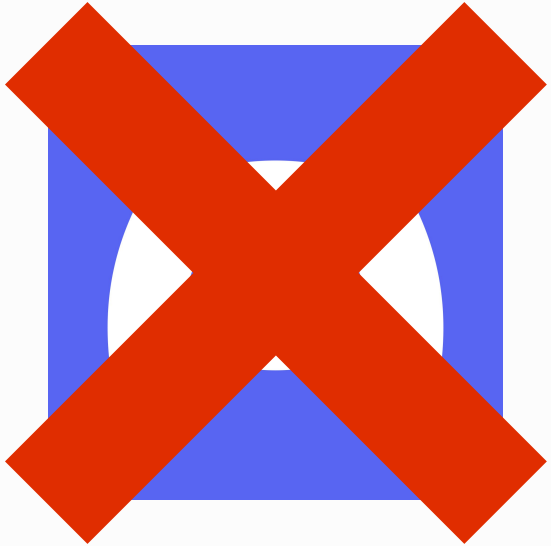
Manage and keep track of source code changes.

and

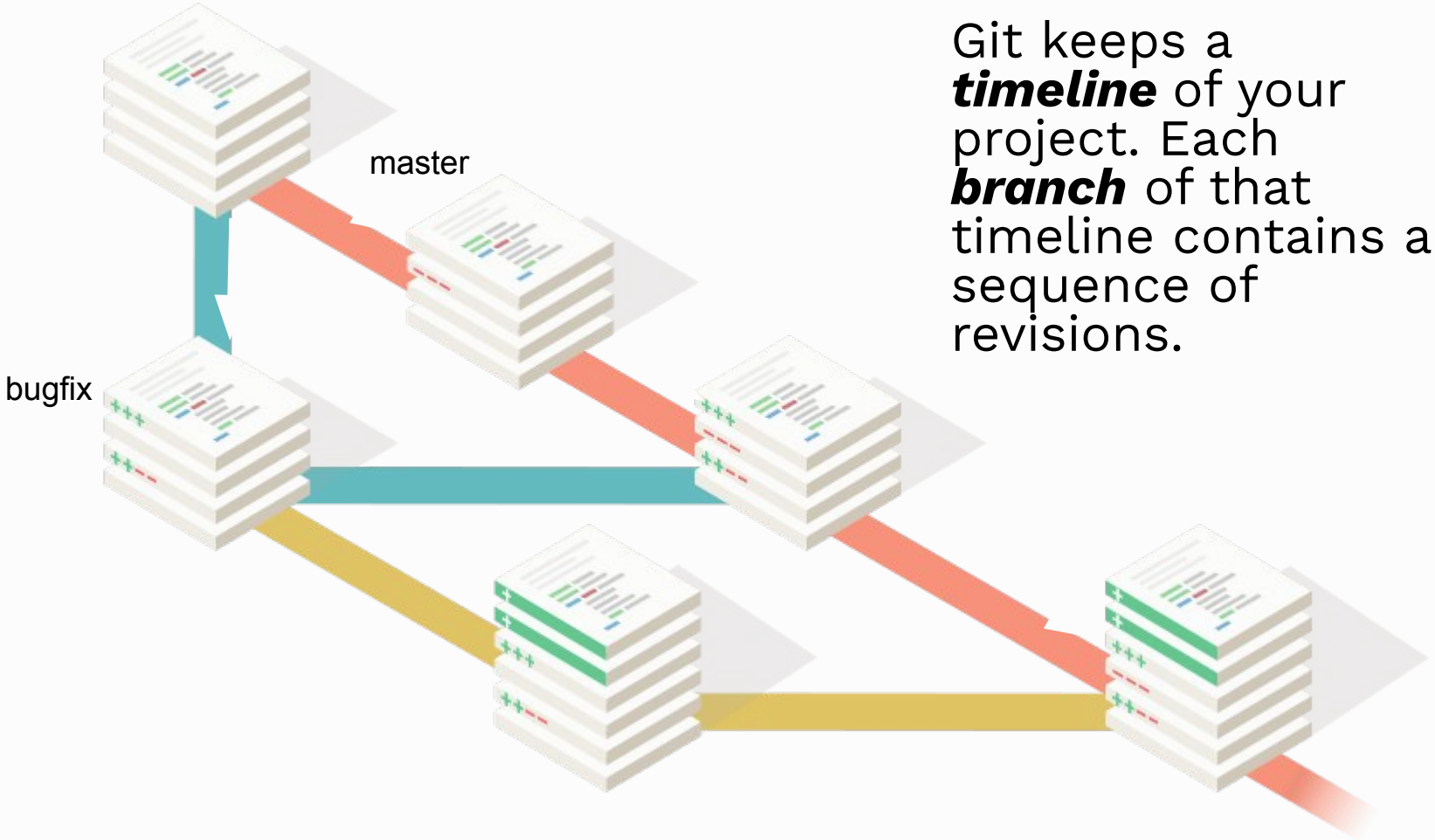
Allow multiple people to edit a file at the same time.

git

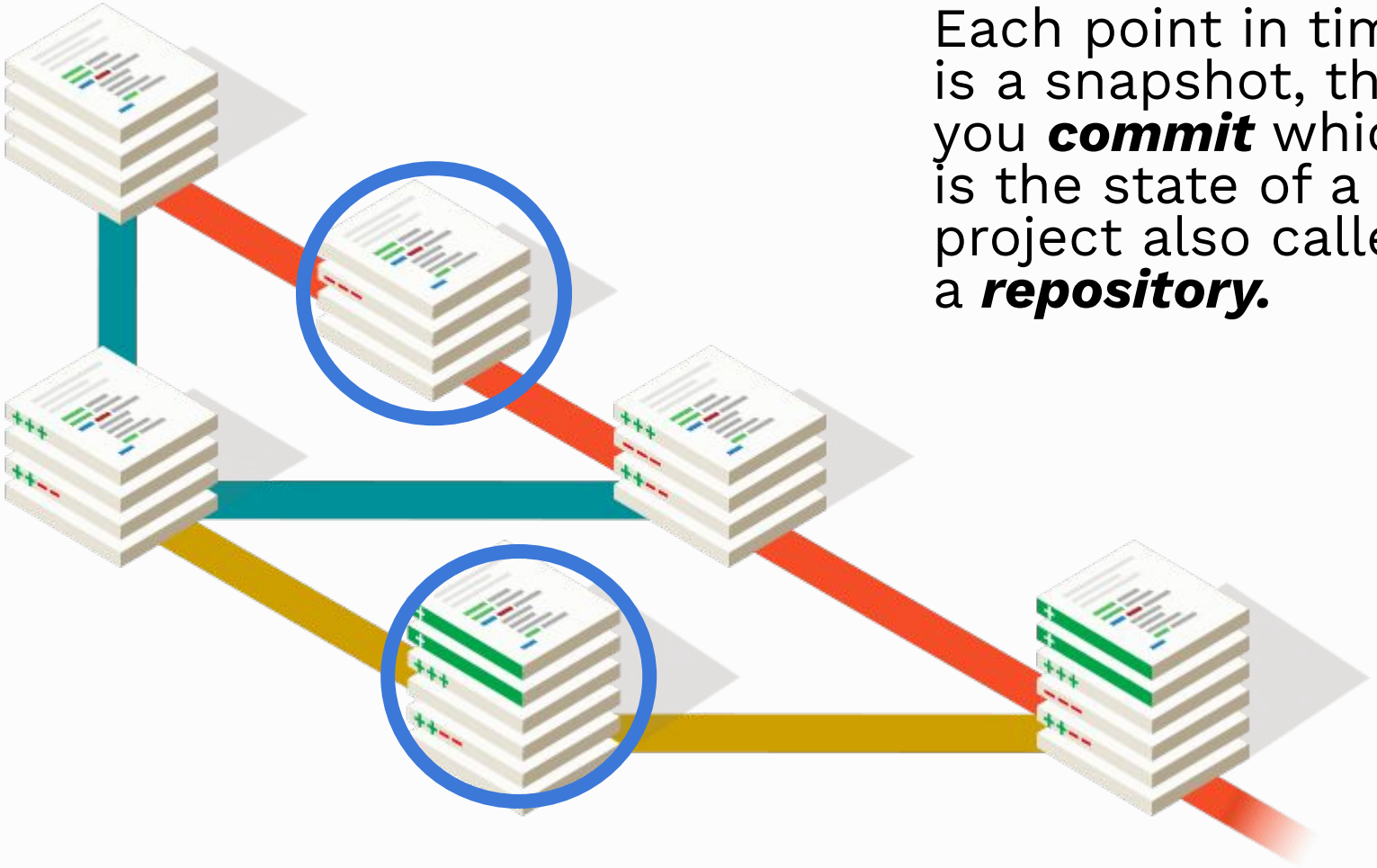
Don’t paste code into Discord



How does Git Work?

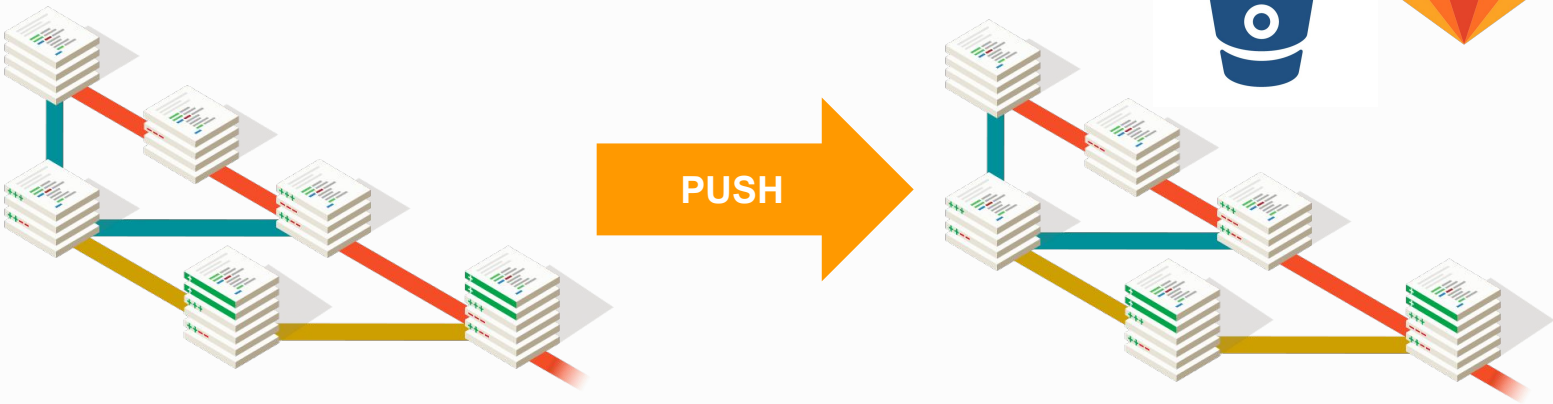


Git keeps a ***timeline*** of your project. Each ***branch*** of that timeline contains a sequence of revisions.



Each point in time is a snapshot, that you ***commit*** which is the state of a project also called a ***repository.***

```
$ git push origin master
```



After committing locally**,** you **push** a branch (like ***master***) to a **remote** typically called ***origin.***

```
git init

git remote add origin git@davidme.de:me/demo.git

git pull origin master

git add code.cc

git commit -m “This is a clear commit”

git push -U origin master
```

Deploying Source Control CI/CD Live Demo

CI/CD

Continuous Integration

Continuous Delivery

Continuous Deployment

Merge in changes quickly

Ship software often

Get it out automatically

Building CI/CD pipelines is a job on its own

But other services do it for you

netlify

Fly.io

Vercel

Automatic processes allow you to run tests and other checks...

...so you can catch them before it goes out to production.

1. Deploy branch
2. Make Pull Request
3. Netlify makes a preview site
4. Review it
    a. Make changes if needed
5. Merge
6. It get deployed

DEMO TIME