Git Happens

Session 2.0

Collaboration using Git and Github

Let's Recap

Version Control Systems

git config and git init

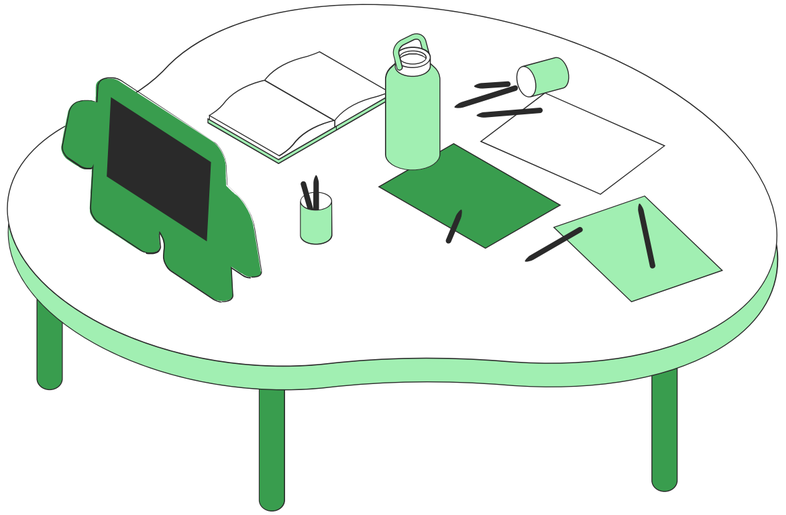
git add and git commit

git status

git branch

git merge and conflicts

But why Git?



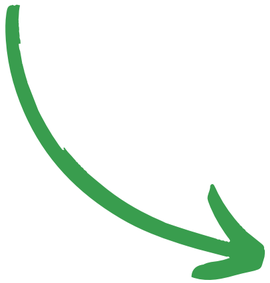
Problems that git solves

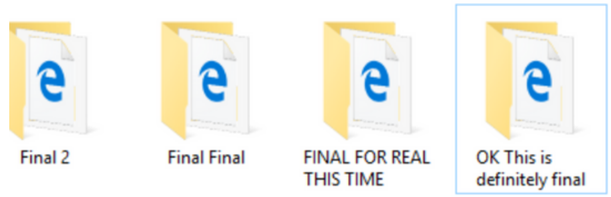
1. Collaboration
2. Version Control
3. Synchronisation

git

SUBVERSION

¯_(ツ)_/¯




Final 2
Final Final
FINAL FOR REAL THIS TIME
OK This is definitely final

I prefer the real version control

I said the *real* version control

Perfection

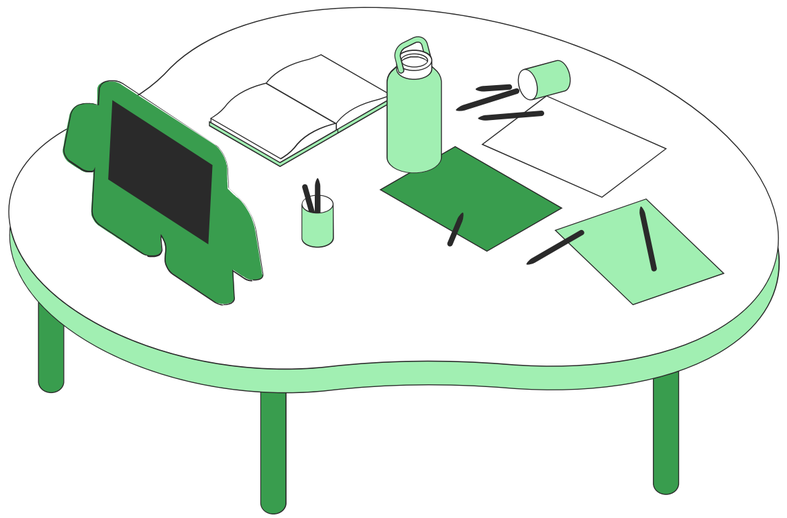
Normie Solutions

- **Copying files over using pendrive**
- **Google Docs**
- **Dropbox / OneDrive**

Best Solution

git

But why Git?

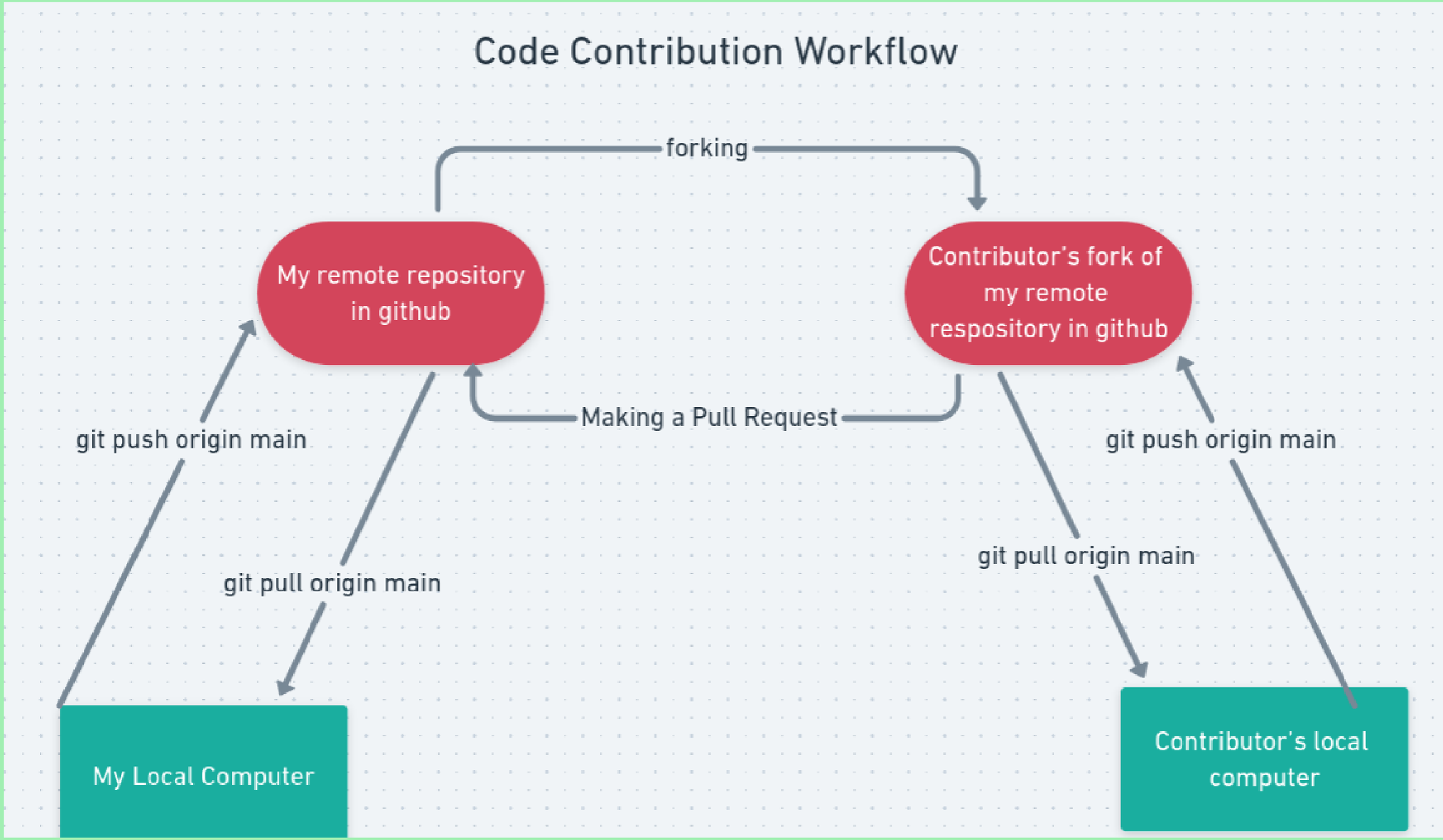


01 **Easy Version Control**

02 **Synchronization of files**

03 **Seamless Collaboration**

Let's solve using Git


Code Contribution Workflow
forking
My remote repository in github
Contributor's fork of my remote respository in github
Making a Pull Request
git push origin main
git pull origin main
git pull origin main
git push origin main
My Local Computer
Contributor's local computer

Notes and walkthrough of our session

Git commands for collaboration

1. git remote add origin <url>
    a. Used for connecting a github repository to your local folder
2. git push origin main
    a. To push the changes in your local folder to github repository
3. git pull origin main
    a. To pull in changes from the remote repository in github
4. git clone <url>
    a. To completely clone all the code and commit history from a remote repository in github to your local machine

Steps to push your local repository to github

1. Create a new folder and initialise git

[Open the document here]

The Origins of Git

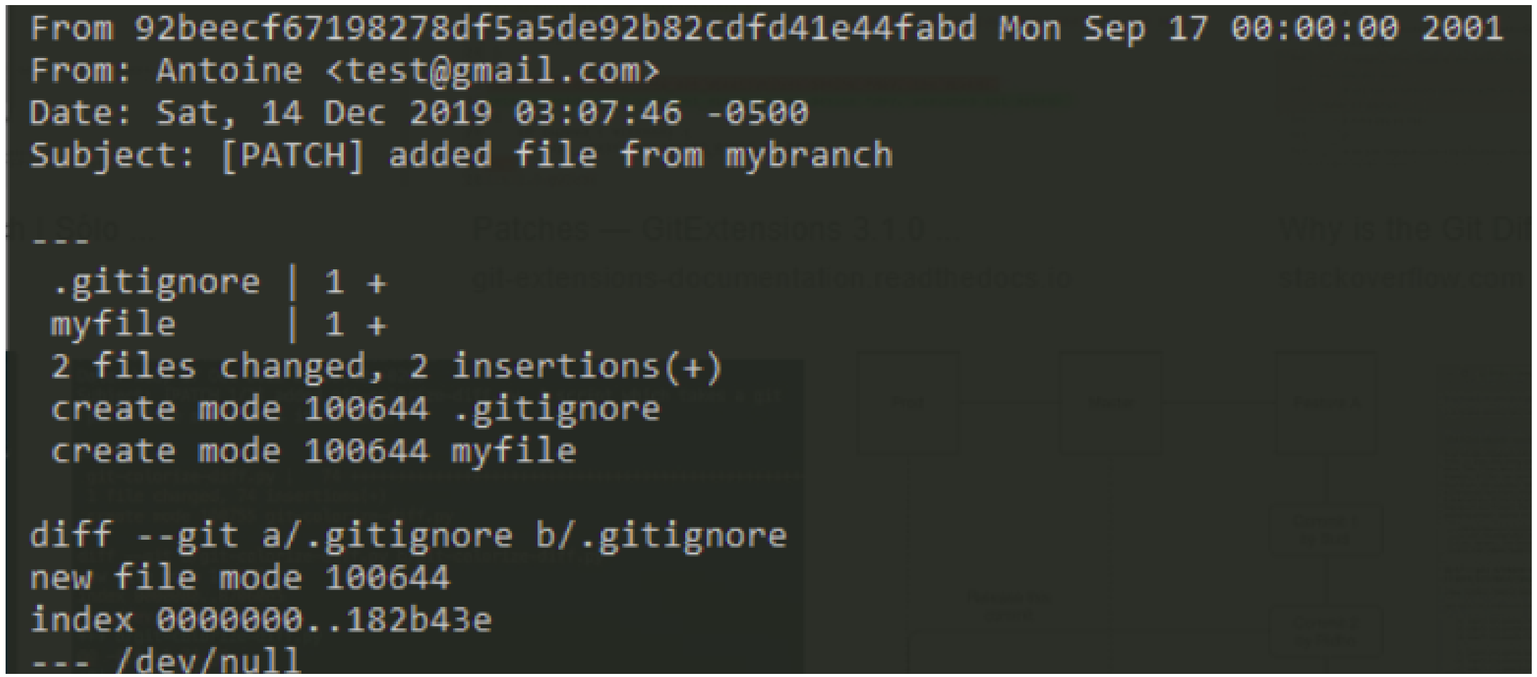
Git was developed by Linus Torvalds in 2005 for development of the Linux kernel, with other kernel developers contributing to its initial development

How they did it back in the day

```
$ git format-patch master

0001-My-feature-commit-1.patch
0002-My-feature-commit-2.patch
```

Awesome!



Git

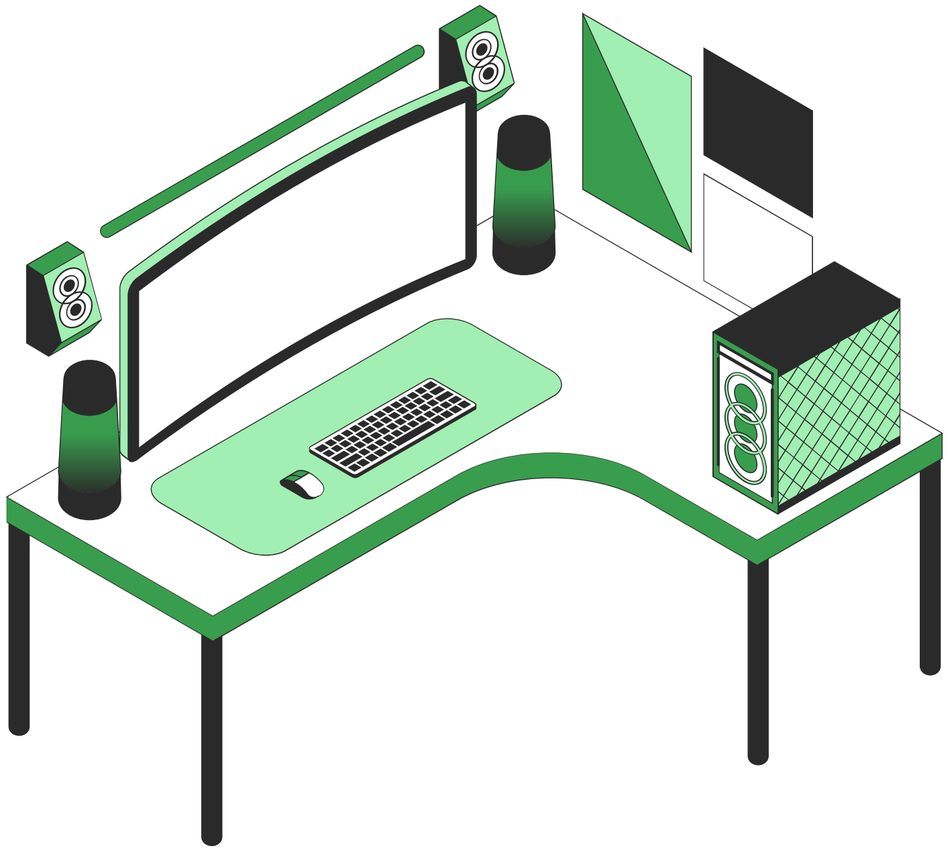
- Git is a version control system
- Git runs locally on the user's computer
- Git is maintained by the Linux community

GitHub

- GitHub is a web-based hosting service for Git repositories
- GitHub is hosted on the web
- GitHub is maintained by Microsoft

A few Cool resources

- Ted talk by Linus Torvalds on Linux and Git
- GitLens extension for VSCode
- Common Git commands explained in a hilarious manner
- The Ultimate Git Cheatsheet
- Making a PR - Our Workflow



That's it folks! Do you have any questions?

Let's **git** going!!