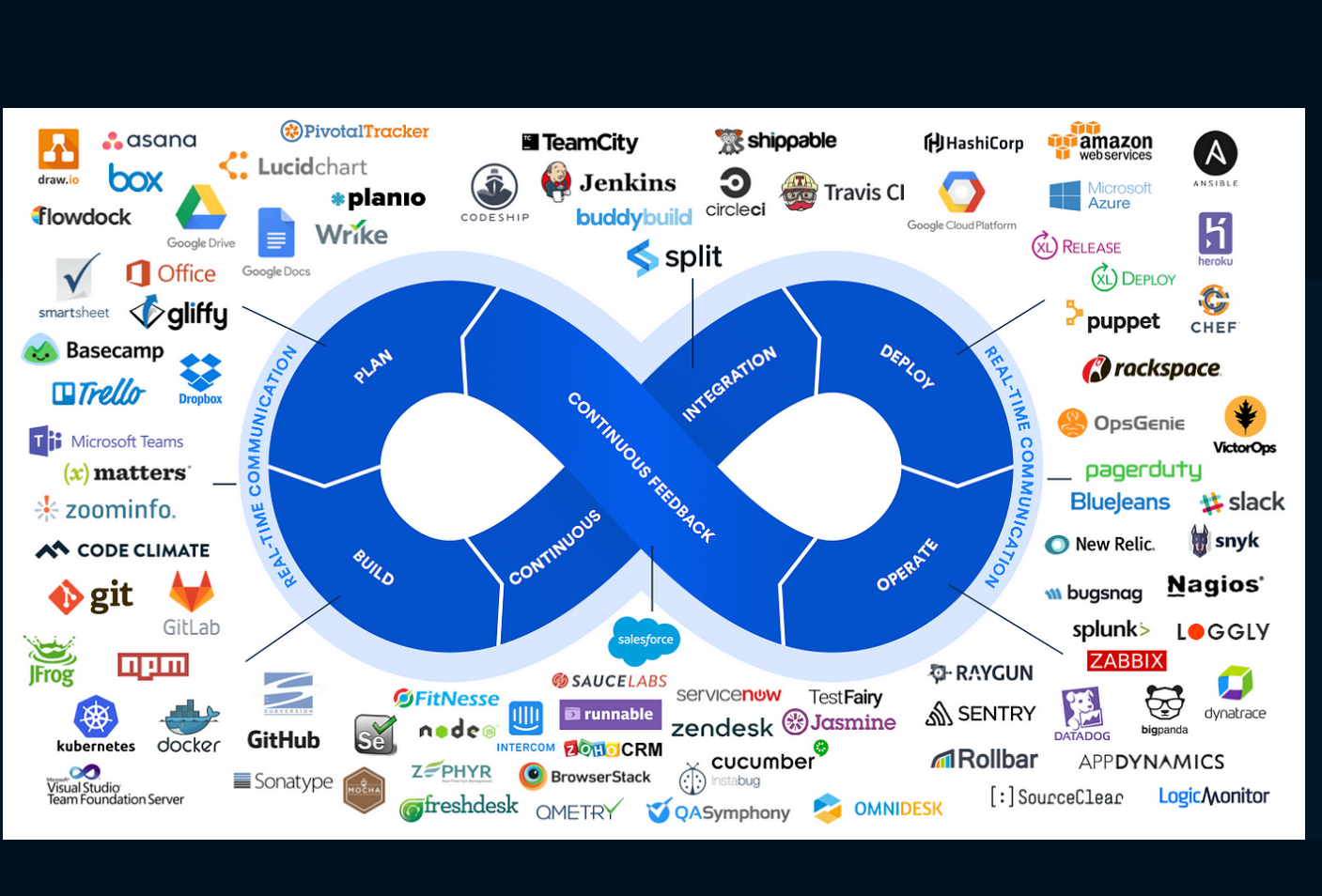
Introduction to DevOps tools

Git & GitHub

GDSC Meetup

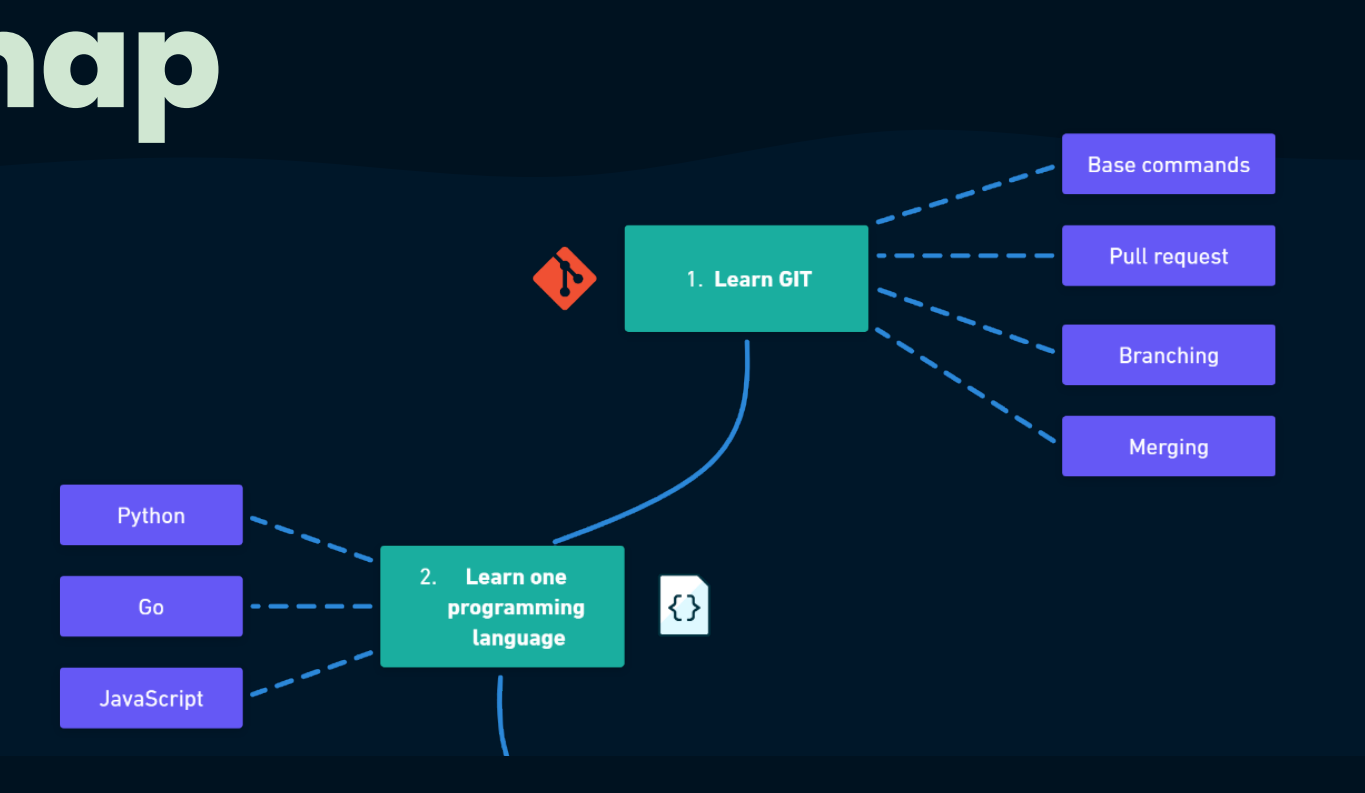
Why do we need git ?

DevOps Tools


PLAN
BUILD
CONTINUOUS INTEGRATION
CONTINUOUS FEEDBACK
DEPLOY
OPERATE
TeamCity
Jenkins
Travis CI
shippable
git
GitLab
GitHub
Trello
Basecamp
Mattermost
zoominfo
Wrike
Lucidchart
asana
box
flowdock
Jira
Office
npm
docker
Kubernetes
Bugsnag
Splunk
Nagios
Rollbar
SENTRY
AppDynamics
pagerduty
Bluejeans
slack
New Relic
cucumber
zendesk
Sonatype
split
puppet
CHEF
rackspace
OpsGenie
LOGGLY

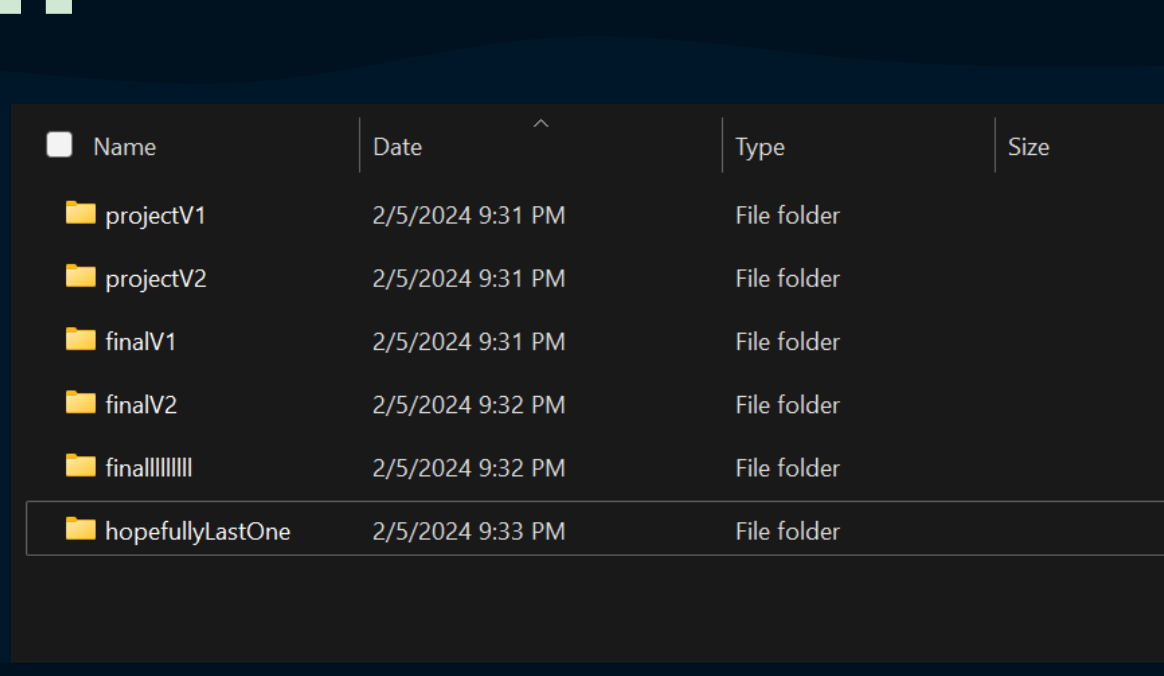
Why do we need git ?

DevOps Roadmap


1. Learn GIT
Base commands
Pull request
Branching
Merging
2. Learn one programming language
Python
Go
JavaScript

Why do we need git ?

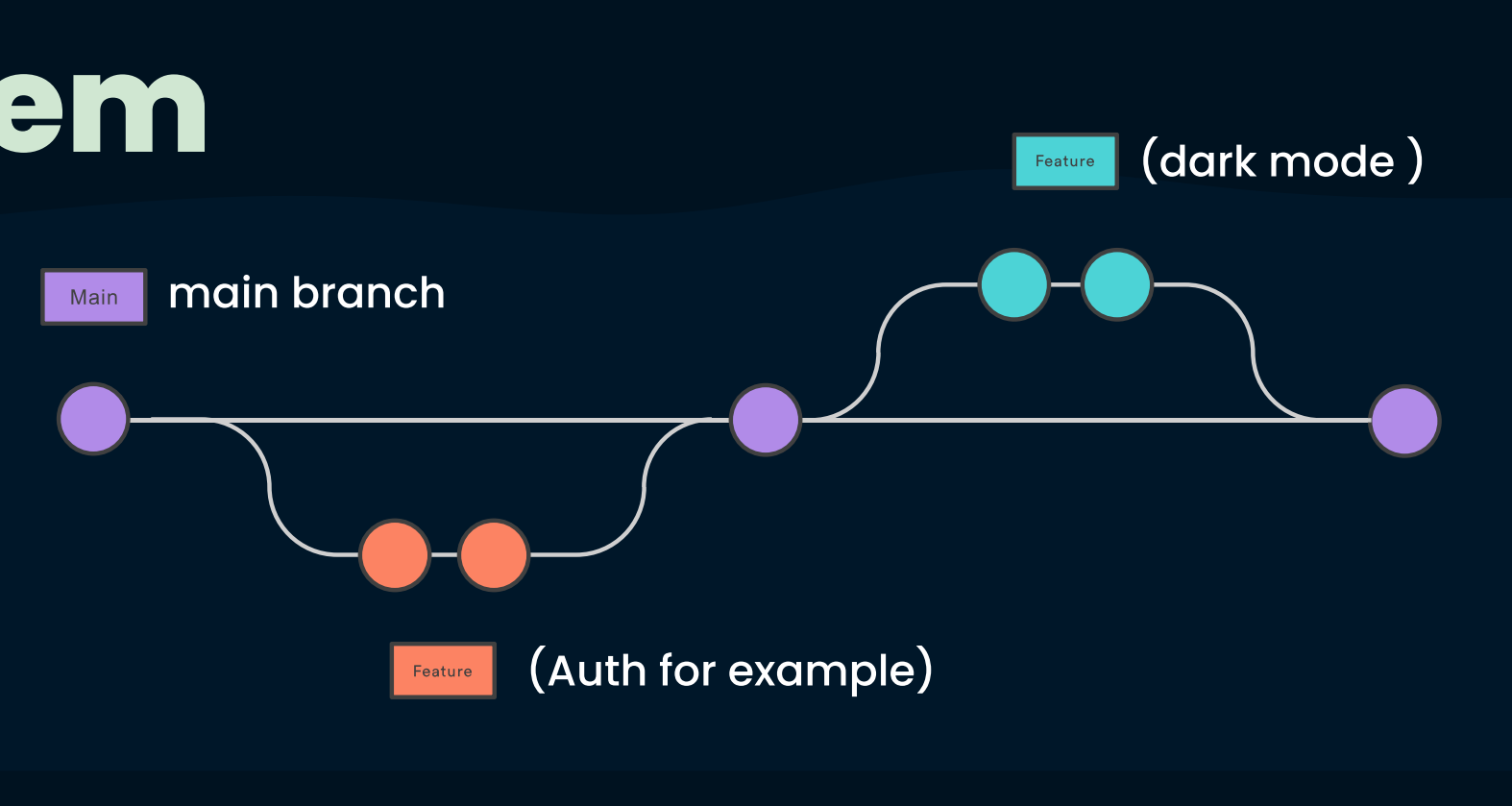
Understand The problem



Name	Date	Type	Size
projectV1	2/5/2024 9:31 PM	File folder	
projectV2	2/5/2024 9:31 PM	File folder	
finalV1	2/5/2024 9:31 PM	File folder	
finalV2	2/5/2024 9:32 PM	File folder	
finalllllllll	2/5/2024 9:32 PM	File folder	
hopefullyLastOne	2/5/2024 9:33 PM	File folder	

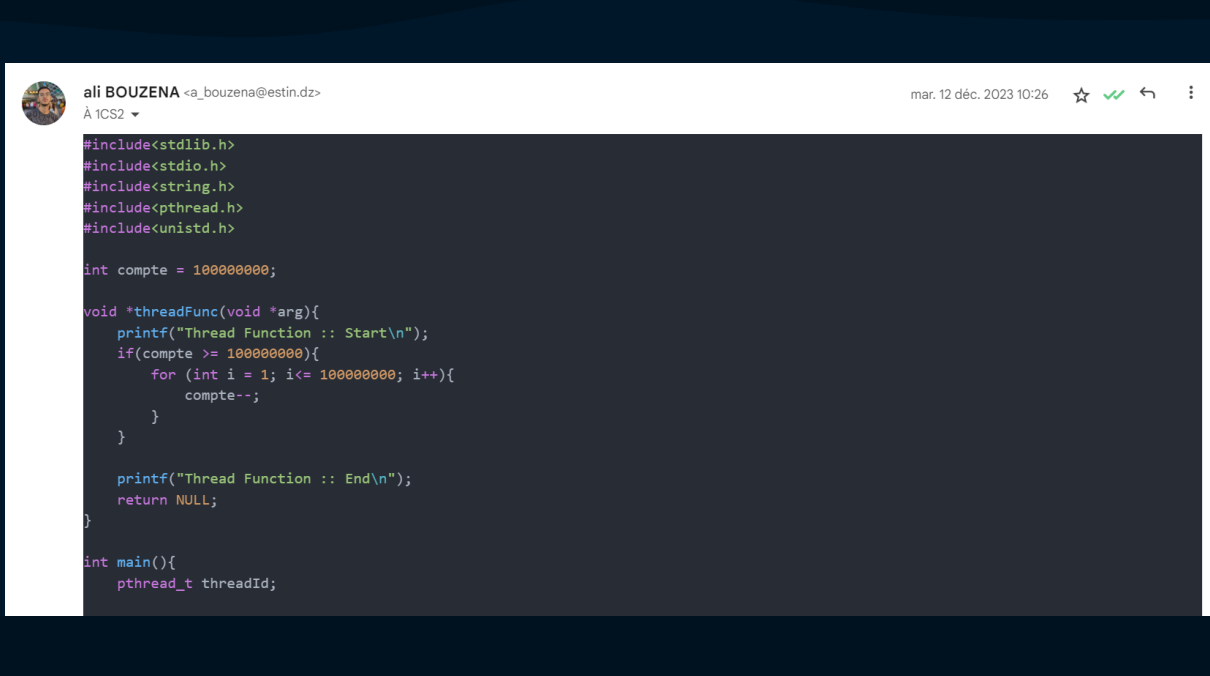
What is git ?

VCS System


Main
main branch
Feature
(dark mode)
Feature
(Auth for example)

Why do we need gitHub ?

Understand The problem

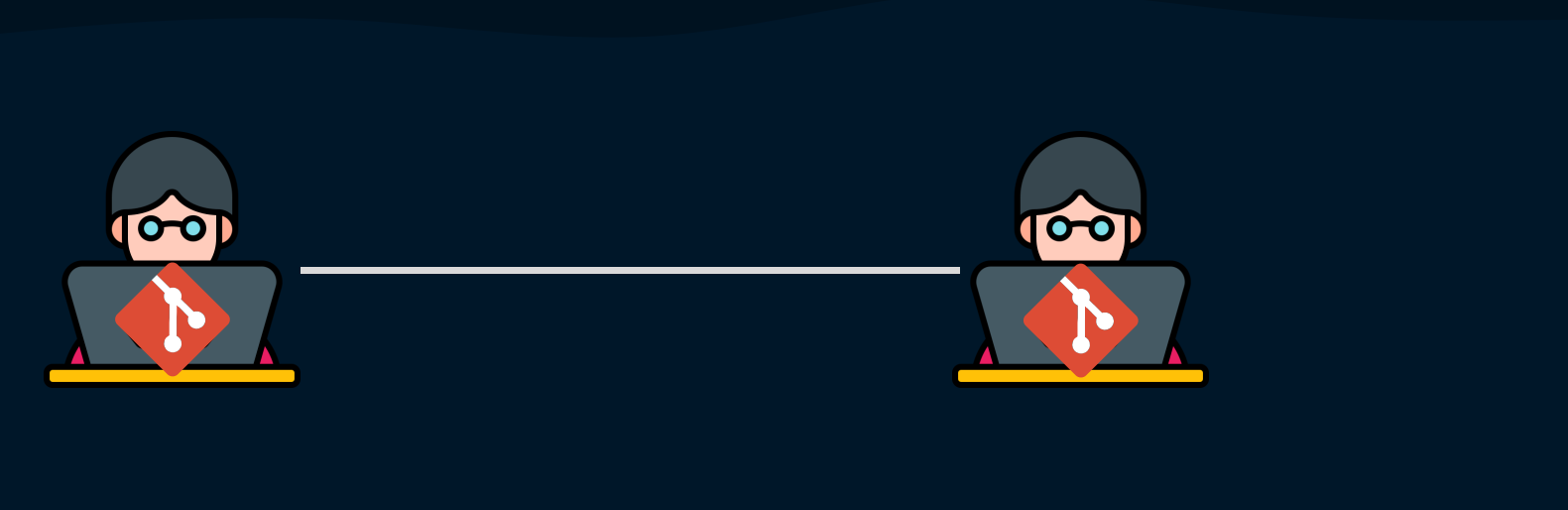


ali BOUZENA <a_bouzena@estin.dz>
À 1CS2
mar. 12 déc. 2023 10:26

```
#include<stdlib.h>
#include<stdio.h>
#include<string.h>
#include<pthread.h>
#include<unistd.h>

int compte = 100000000;

void *threadFunc(void *arg){
    printf("Thread Function :: Start\n");
    if(compte >= 100000000){
        for (int i = 1; i<= 100000000; i++){
            compte--;
        }
    }

    printf("Thread Function :: End\n");
    return NULL;
}

int main(){
    pthread_t threadId;
```

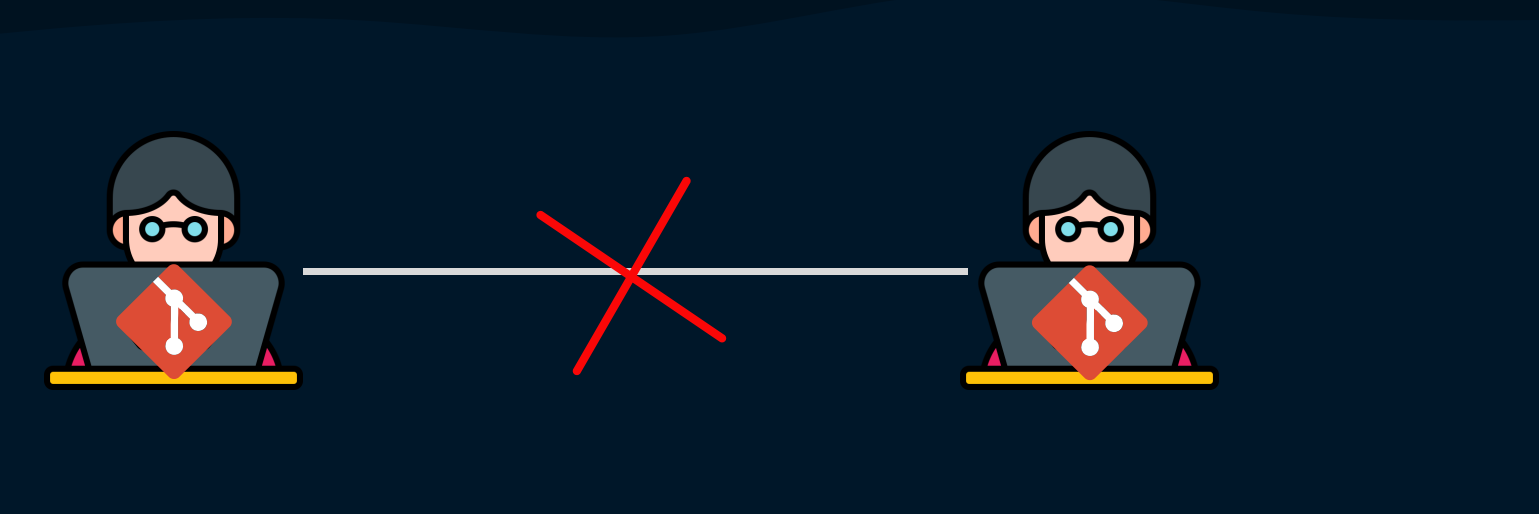
Why do we need gitHub ?

Understand The problem



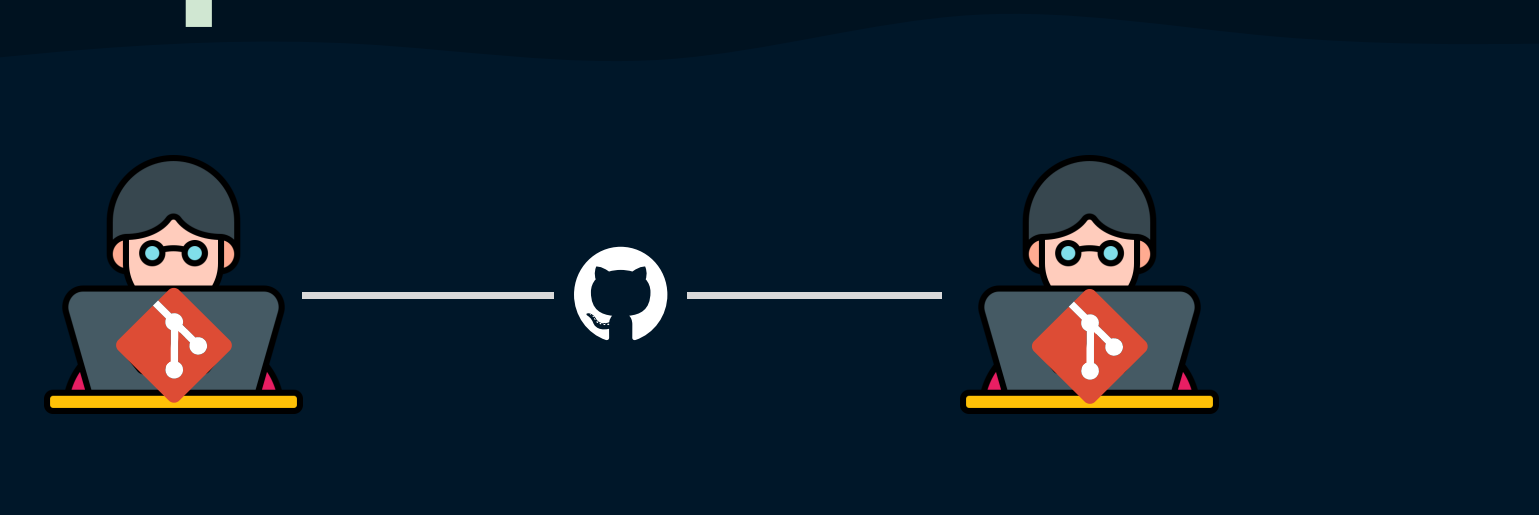
Why do we need gitHub ?

Understand The problem



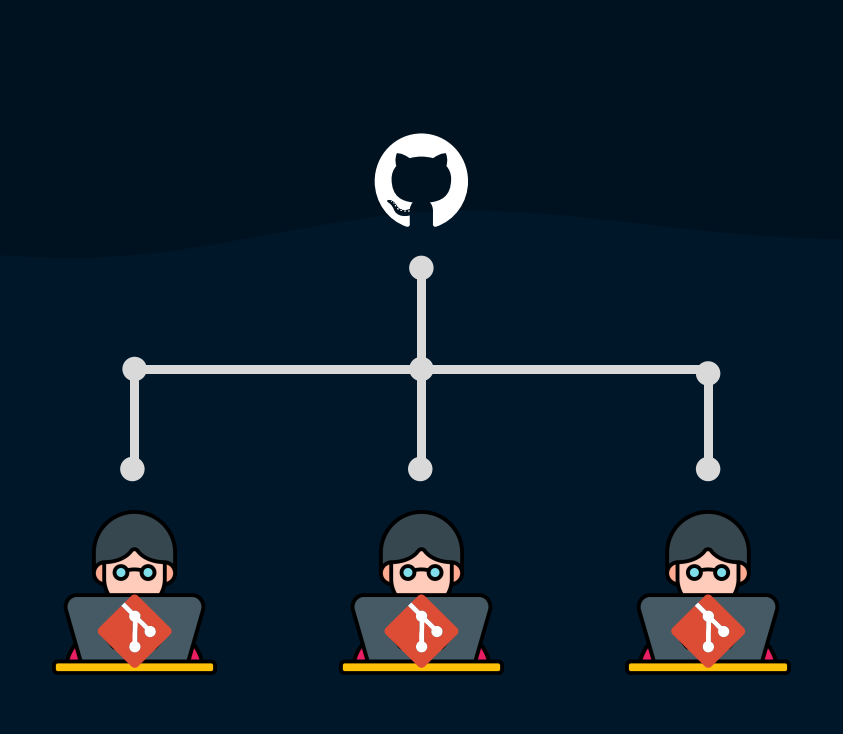
What is gitHub ?

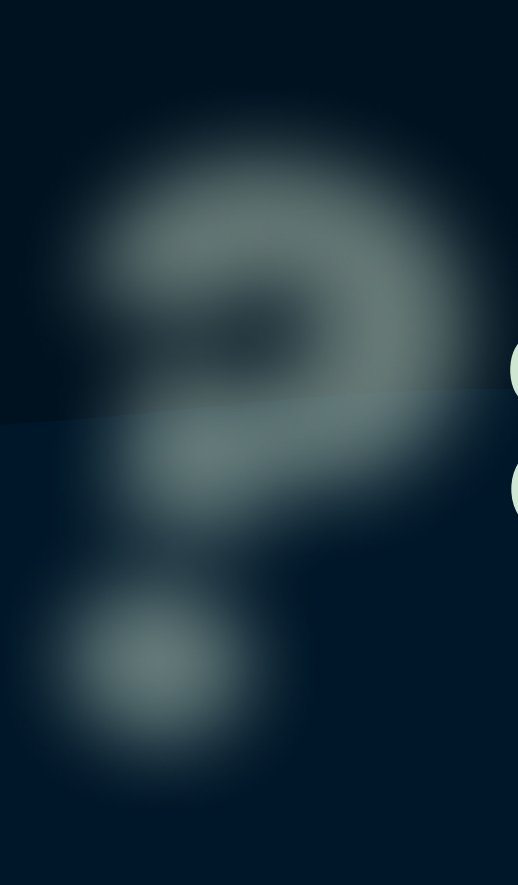
a Hub for all git repos



What is gitHub ?

a Hub for all git repos





any Questions ?

What is Git ?

Git Basics

Repos Commits Branches

What is Git ?

Git Basics

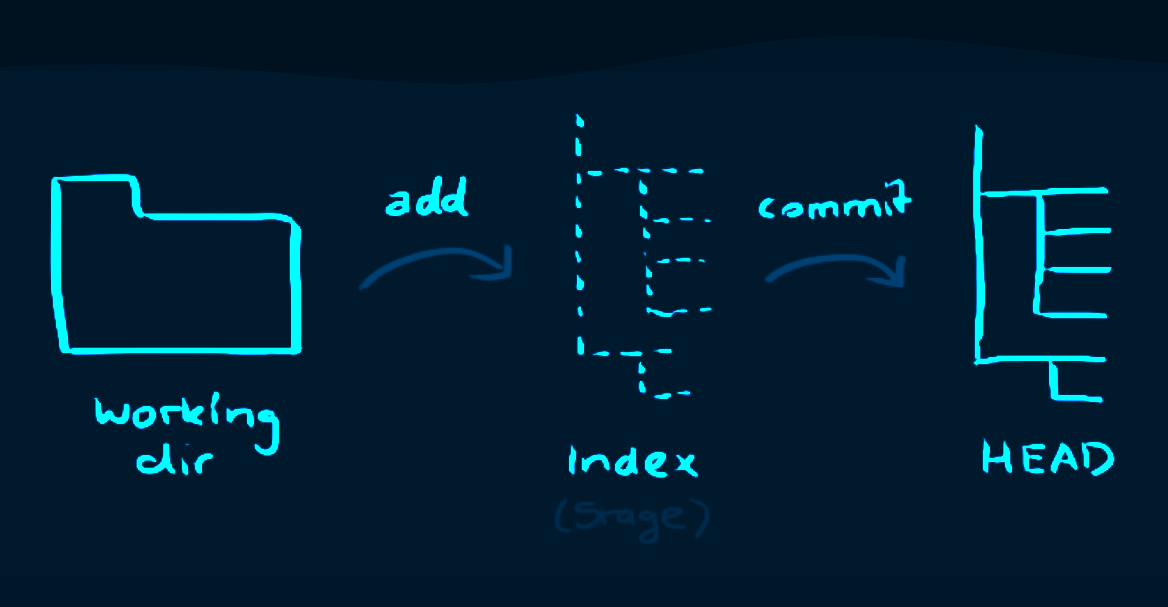
Repos

just a folder + (.git)

What is Git ?

Git Basics

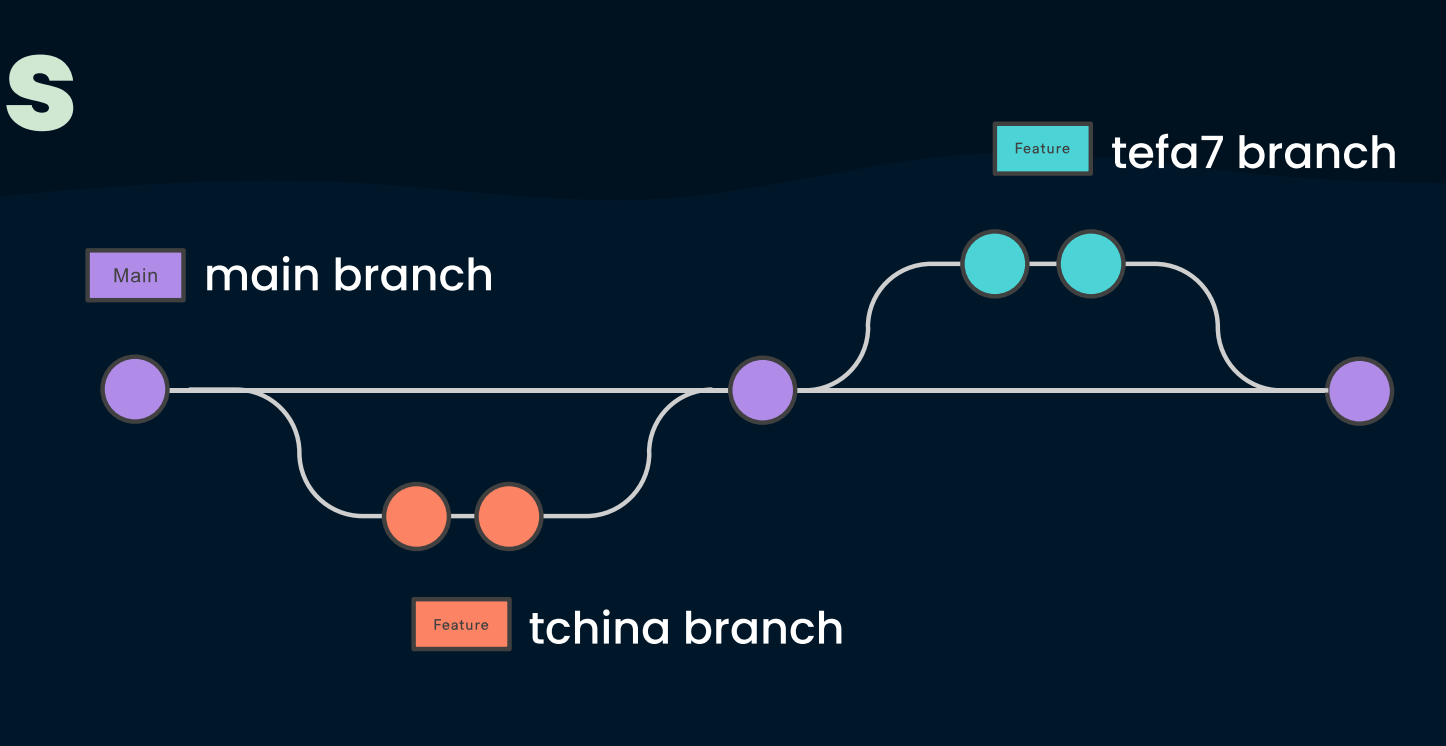
Commits


working dir
add
Index
commit
HEAD

What is Git ?

Git Basics

Branches


Main
main branch
Feature
tefa7 branch
Feature
tchina branch

---

any Questions ?

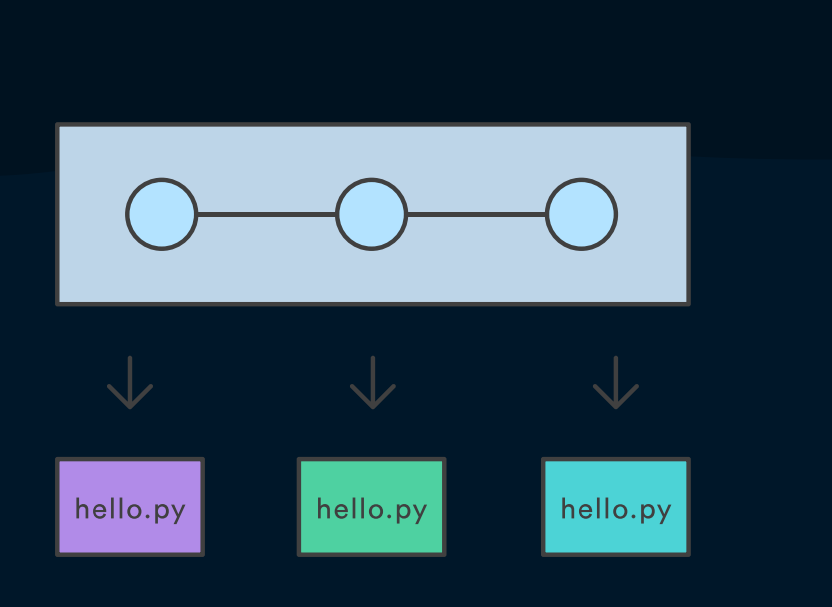
What is Git ?

Git Basics

Commiting

```
git add hello.py
```

```
git commit
```


hello.py
hello.py
hello.py

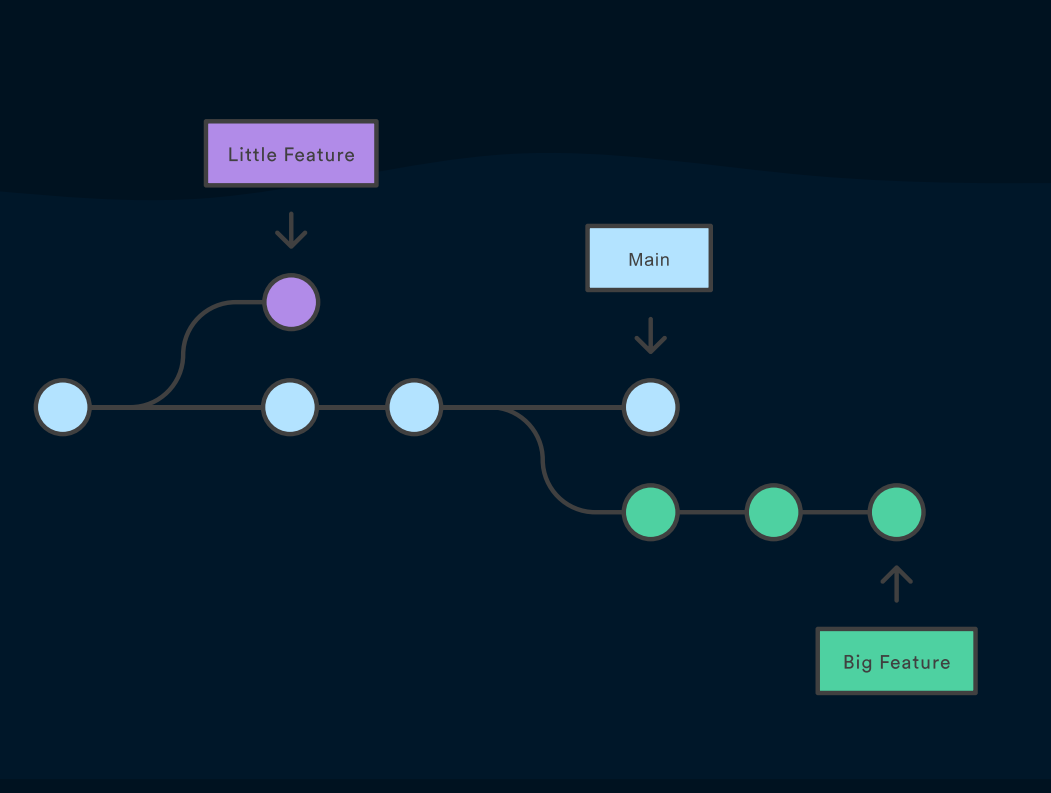
What is Git ?

Git Basics

Branching

```
git branch <branch>
```

```
git checkout <branchname>
```

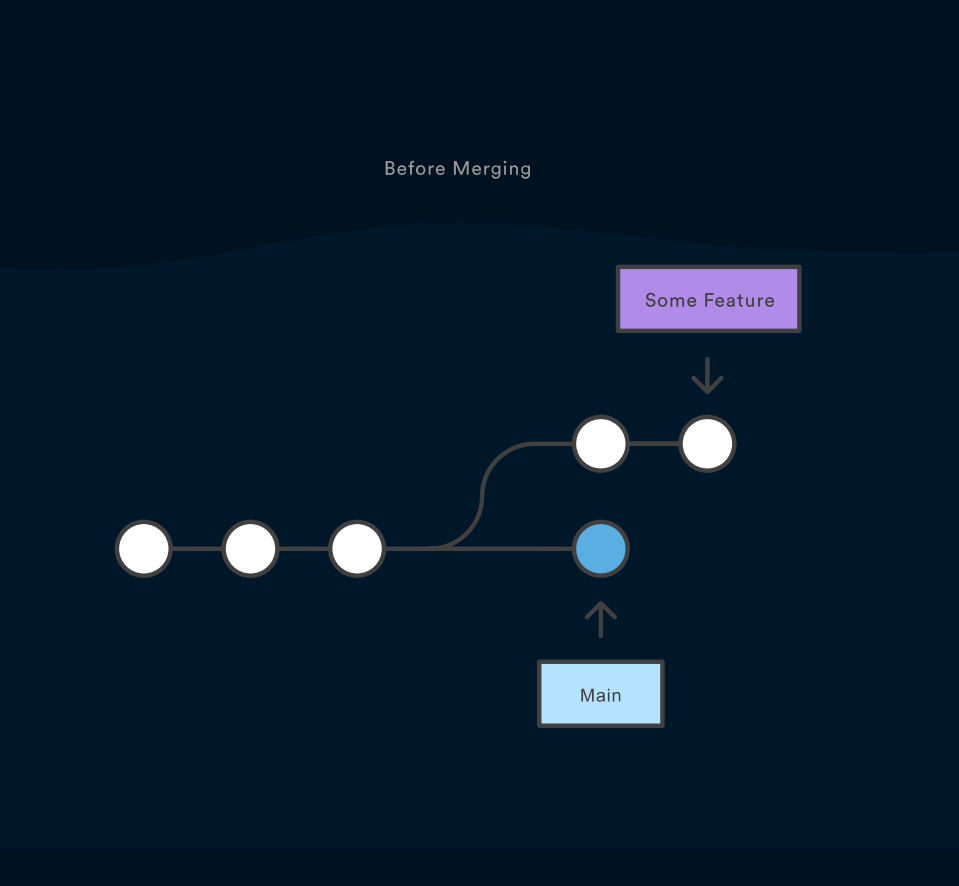

Little Feature
Main
Big Feature

What is Git ?

Git Basics

Merging

```
# Merge in the new-feature branch
git merge new-feature
git branch -d new-feature
```

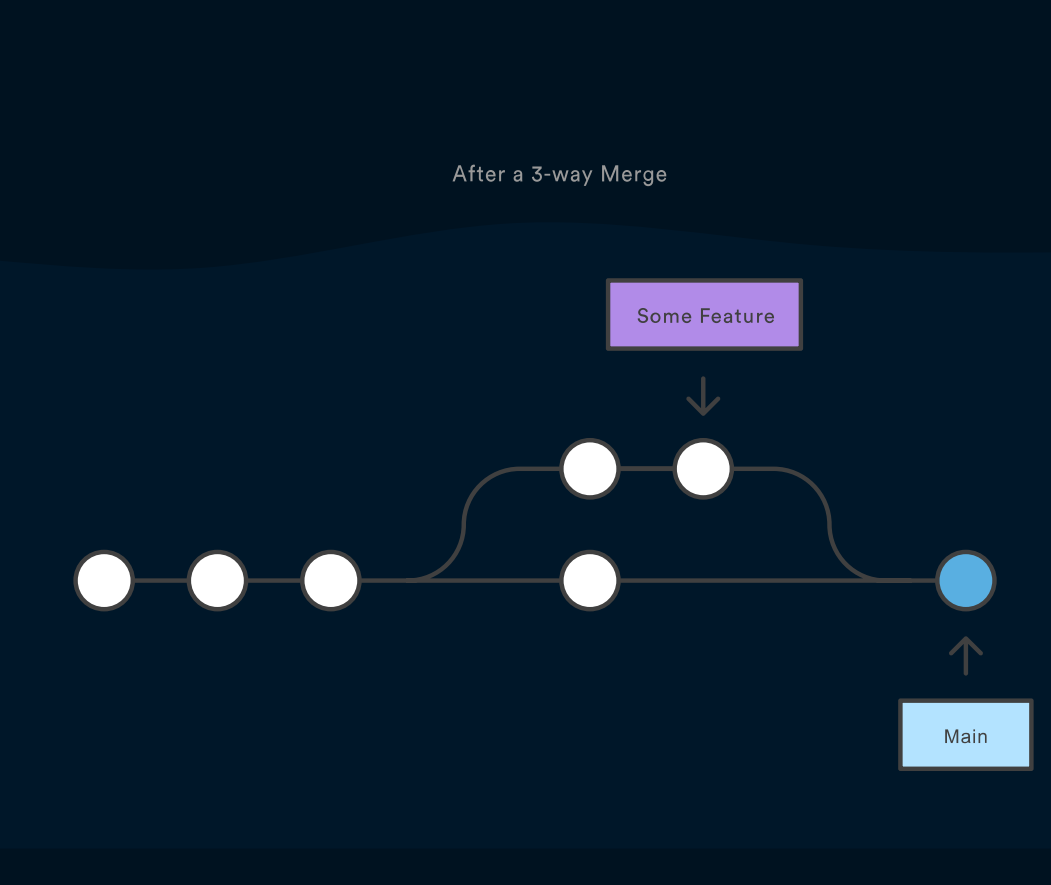

Before Merging
Some Feature
Main

What is Git ?

Git Basics

Merging

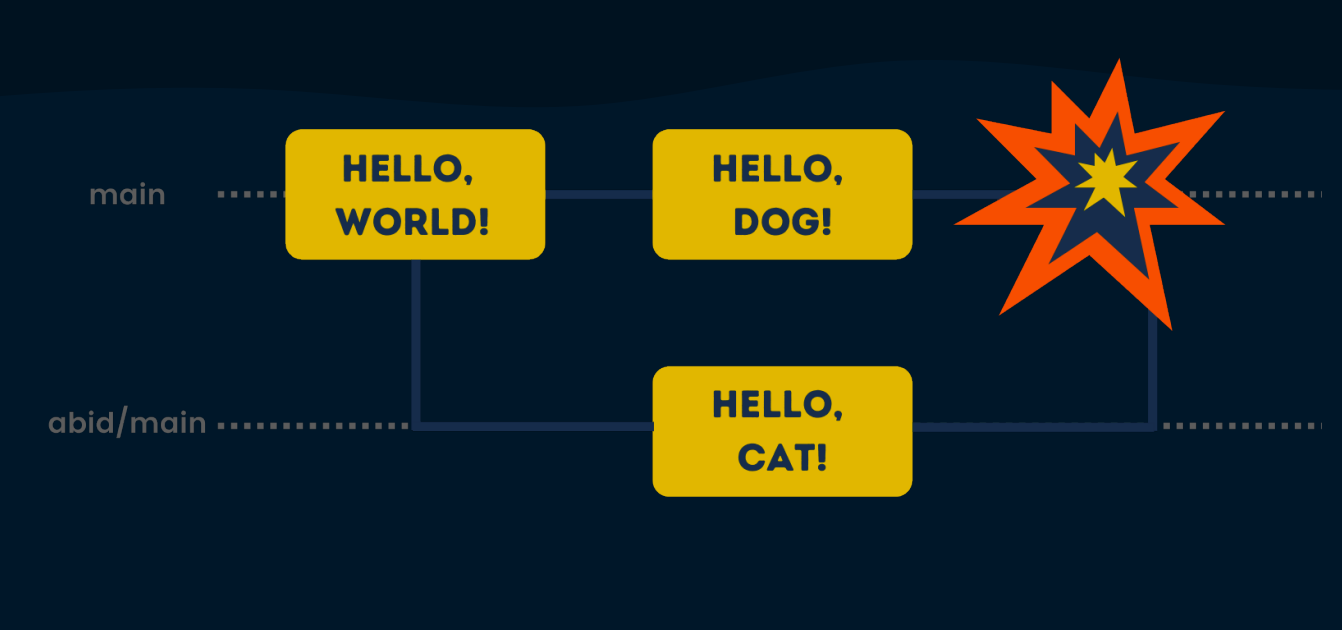
```
# Merge in the new-feature branch
git merge new-feature
git branch -d new-feature
```


After a 3-way Merge
Some Feature
Main

What is Git ?

Git Basics

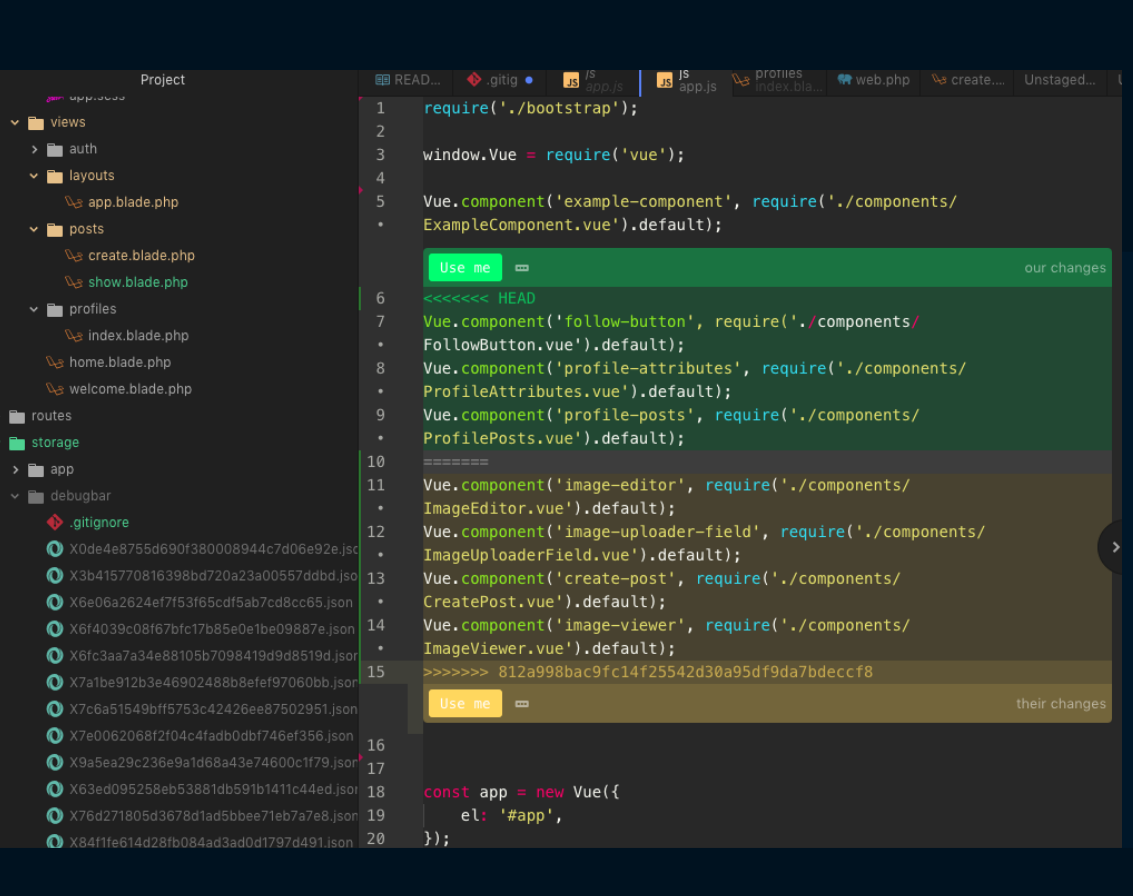
Conflicts


main
HELLO, WORLD!
HELLO, DOG!
abid/main
HELLO, CAT!

What is Git ?

Git Basics

Conflicts



```
require('./bootstrap');

window.Vue = require('vue');

Vue.component('example-component', require('./components/
ExampleComponent.vue').default);
<<<<<<< HEAD
Vue.component('follow-button', require('./components/
FollowButton.vue').default);
Vue.component('profile-attributes', require('./components/
ProfileAttributes.vue').default);
Vue.component('profile-posts', require('./components/
ProfilePosts.vue').default);
=======
Vue.component('image-editor', require('./components/
ImageEditor.vue').default);
Vue.component('image-uploader-field', require('./components/
ImageUploaderField.vue').default);
Vue.component('create-post', require('./components/
CreatePost.vue').default);
Vue.component('image-viewer', require('./components/
ImageViewer.vue').default);
>>>>>>> 812a998bac9fc14f25542d30a95df9da7bdeccf8


const app = new Vue({
    el: '#app',
});
```

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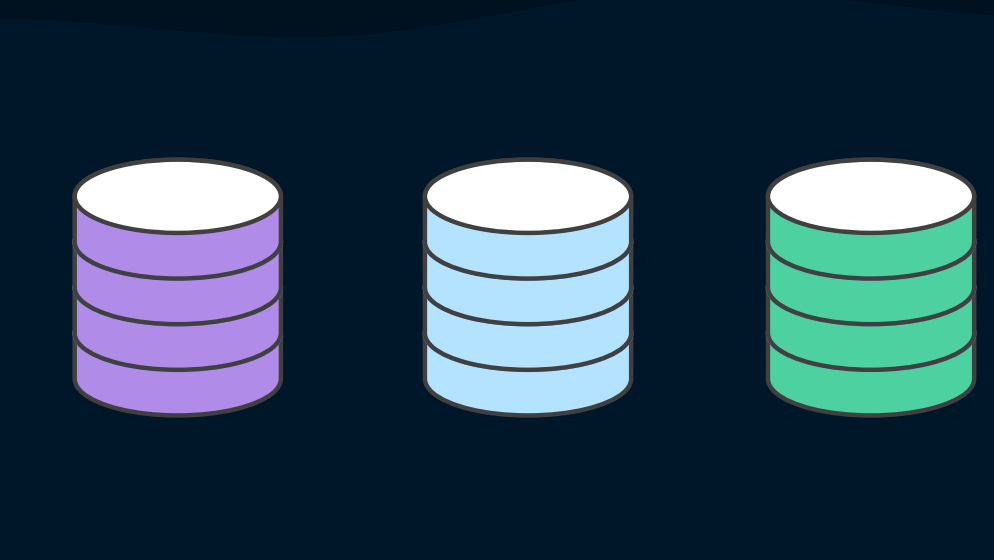
any Questions ?

What is Git ?

Git for Collab

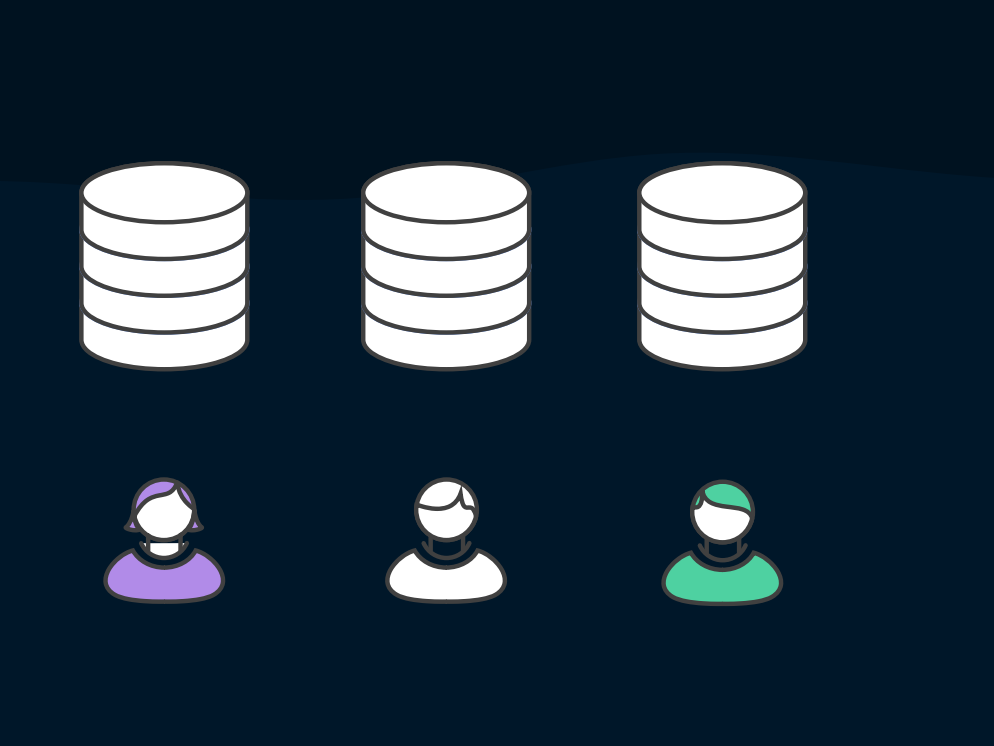
Forking



What is Git ?

Git for Collab

Pull Request



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any Questions ?

Wanna play a Game ?

Thank you