

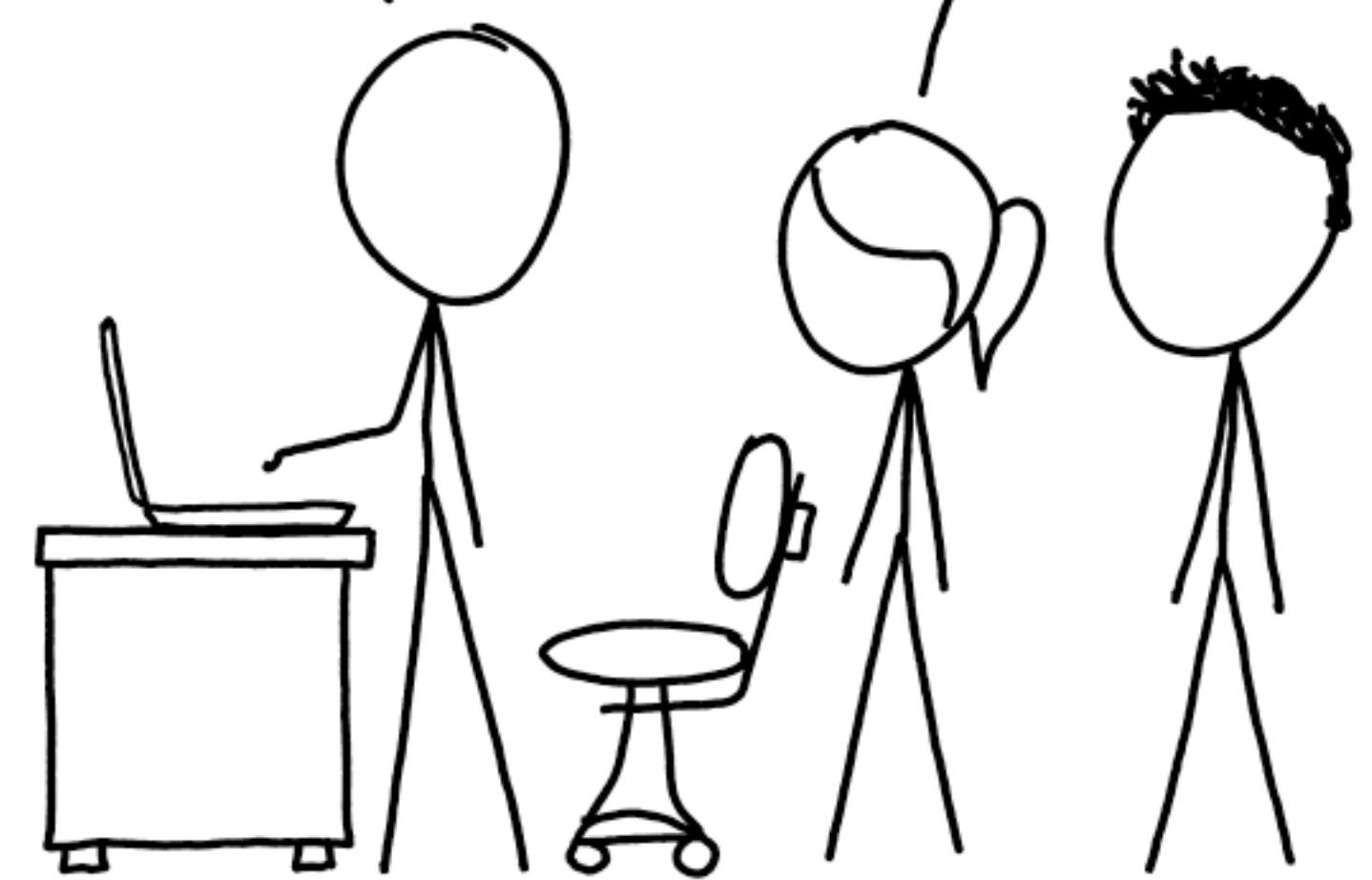
git
les bases

2022.09.04

THIS IS GIT. IT TRACKS COLLABORATIVE WORK
ON PROJECTS THROUGH A BEAUTIFUL
DISTRIBUTED GRAPH THEORY TREE MODEL.

| COOL. HOW DO WE USE IT?

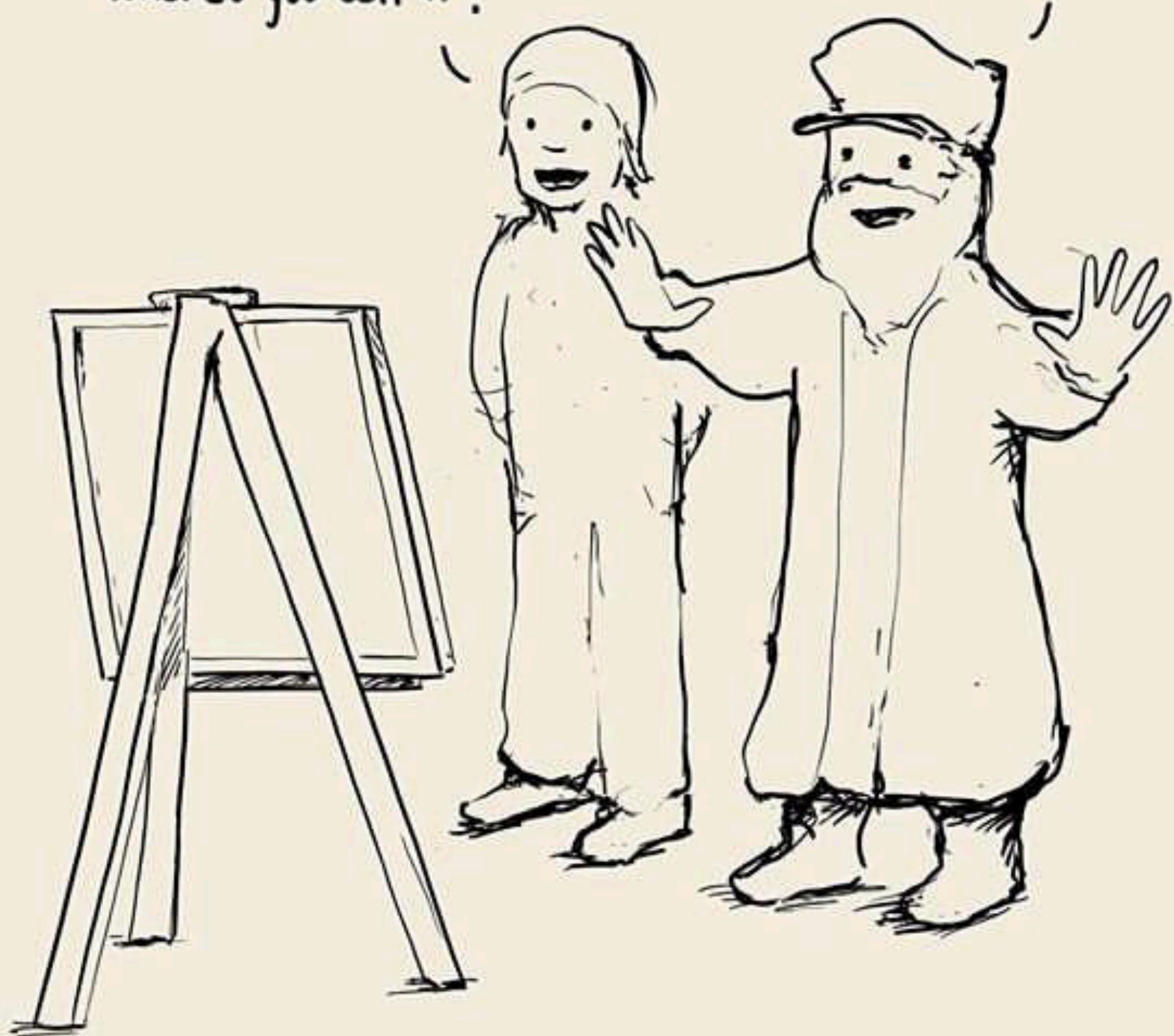
NO IDEA. JUST MEMORIZIZE THESE SHELL
COMMANDS AND TYPE THEM TO SYNC UP.
IF YOU GET ERRORS, SAVE YOUR WORK
ELSEWHERE, DELETE THE PROJECT,
AND DOWNLOAD A FRESH COPY.



git pourquoi?

Comment gérer les différentes versions du code ?

beautiful!
what do you call it?
mona_lisa_finalrealupdateFINALL6



git

pourquoi?

- Labo1_Nom1_Nom2_v1
- Labo1_Nom1_Nom2_v1.1
- Labo1_Nom1_Nom2_v1.1_test
- Labo1_Nom1_Nom2_final
- Labo1_Nom1_Nom2_final2

git pourquoi?

Comment partager son code ?

git

pourquoi?

- Dropbox ?
- Google Drive ?
- Email des .zip ?
- Telegram ?

git pourquoi?

git est un VCS: Version Control Software



C'est un programme qui va gérer les différentes versions du code et permettre de le partager entre les différents développeurs.

git

les concepts de base

repository

commit

staging area

branch

git

les concepts de base: repository

repository ~= projet

~= dossier

A screenshot of a GitHub repository page for the organization "heig-AMT". The page shows three public repositories: "gamify", "stack", and "teaching".

The "Repositories" tab is selected in the navigation bar.

Search or jump to...

Pull requests Issues Marketplace Explore

heig-AMT

Overview Repositories Projects Packages Teams People Settings

New repository

Find a repository...

Type **Language** **Sort**

gamify **Public archive**
The second project of the AMT class of HEIG-VD

java spring-boot cucumber

Java MIT 1 1 0 0 Updated on 24 Jan 2021

stack **Public archive**
The first and third project of the AMT class of HEIG-VD.

heroku amt

Java 0 2 0 0 Updated on 24 Jan 2021

teaching **Public**
Forked from SoftEng-HEIGVD/Teaching-HEIGVD-AMT-2020
A fork of the official teaching repository for the AMT class.

18 0 0 0 Updated on 21 Jan 2021



⌘1

~/D/H/netscan (-fish)

⌘1 +

```
glsubri@GuyLaursMacBook ~/D/H/netscan (main)> ll
Permissions Size User Group Date Modified Git Name
.rw-r--r--@ 8.2k glsubri staff 14 Mar 09:00 -I .DS_Store
.rw-r--r-- 132 glsubri staff 7 Feb 14:37 -- .env.database
.rw-r--r-- 57 glsubri staff 7 Feb 14:37 -- .env.https
.rw-r--r-- 259 glsubri staff 7 Feb 14:37 -- .env.metabase
drwxr-xr-x - glsubri staff 18 Aug 09:55 -- .git ←
drwxr-xr-x - glsubri staff 7 Feb 14:37 -- .github
.rw-r--r-- 241 glsubri staff 7 Feb 14:37 -- .gitignore
.rw-r--r-- 113 glsubri staff 7 Feb 14:37 -- .gitmodules
drwxr-xr-x - glsubri staff 20 Aug 08:25 -I .idea
.rw-r--r-- 20k glsubri staff 7 Feb 14:37 -- codestyle.xml
drwxr-xr-x - glsubri staff 9 Mar 13:16 -- data
drwxr-xr-x - glsubri staff 11 Apr 13:52 -- deployment
.rw-r--r-- 1.2k glsubri staff 7 Feb 14:37 -- docker-compose.yml
drwxr-xr-x - glsubri staff 9 Mar 09:36 -- docs
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- lambda-queue
.rw-r--r-- 941 glsubri staff 11 Feb 14:58 -- LICENSE
.rw-r--r-- 547 glsubri staff 11 Feb 14:58 -- LICENSE.header
drwxr-xr-x - glsubri staff 7 Feb 14:37 -- metabase
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- netscan-backend
drwxr-xr-x - glsubri staff 18 Aug 09:55 -- netscan-cli
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- netscan-core
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- netscan-frontend
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- netscan-geocoder
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- netscan-scanner
drwxr-xr-x - glsubri staff 16 Jun 09:26 -- netscan-testing
.rw-r--r-- 18k glsubri staff 1 Mar 11:55 -I netscan.iml
.rw-r--r-- 10k glsubri staff 9 Mar 09:36 -- pom.xml
drwxr-xr-x - glsubri staff 7 Feb 14:37 -- postgis
.rw-r--r-- 284 glsubri staff 7 Feb 14:37 -- push_new_image.sh
.rw-r--r-- 9.1k glsubri staff 7 Feb 14:37 -- README.md
.rw xr-xr-x 101 glsubri staff 7 Feb 14:37 -- run_backend.sh
glsubri@GuyLaursMacBook ~/D/H/netscan (main)>
```

git

les concepts de base: repository

`git init` — crée un nouveau repository dans le dossier courant

`git clone` — copie un repository existant (crée un nouveau dossier)

git

les concepts de base: commit

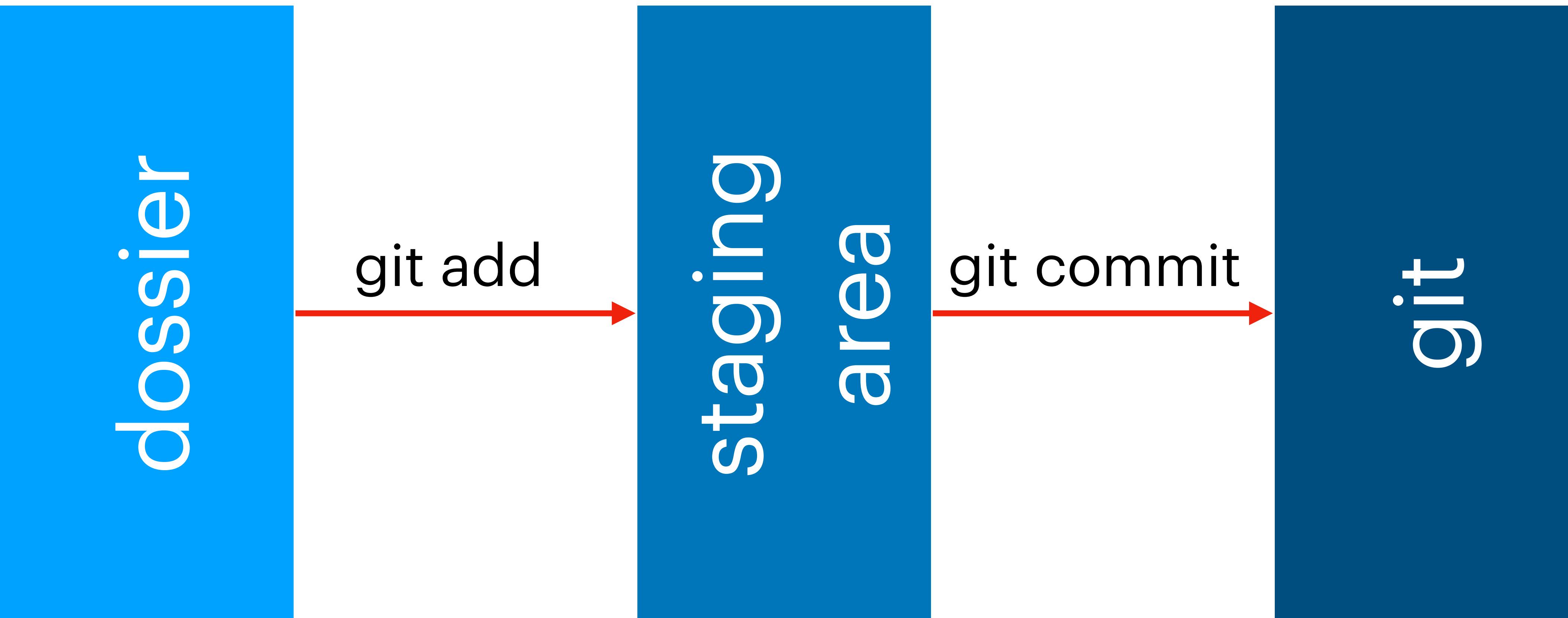
commit ~= sauvegarder qqch

git graph ~/D/H/netscan (less)

```
* 6b241e11 (HEAD → main, origin/main, origin/HEAD) Store AWS creds in cli import results task definition
* 7ea0f098 Fix taskRole
* 54d6e9ab Add new CLI task definition
  2d00e6fa Merge pull request #545 from heigvd-software-engineering/deploy-results
  \
  | * 34a6104e Add new CLI task definition
  |
  * 7e5626a3 Merge pull request #544 from heigvd-software-engineering/fix/cleanup
  \
  | * 7bd518a5 (origin/fix/cleanup) Remove DataAnalysis page from frontend
  | * 15a5787d Add documentation on materialized views
  | * 21b3e428 Remove Map from backend
6b241e118bb5396955eb38f6eb87312aa57f163f
* 77e298f2 Merge pull request #532 from heigvd-software-engineering/feature/import-test-data
  \
  | * 7b988ce4 (origin/feature/import-test-data) Merge origin/main
  |
  |/
  |/
  |/
  * 972f0a70 Merge pull request #538 from heigvd-software-engineering/fix/sonar
  \
  | \
  | * 9dc28227 (origin/fix/sonar) Fixing code smells
  | * 7073fe28 Adding more coverage
  | * ff6edc97 Merged with main to be upated
  | \
  | | *
  | | | 470169fb Improving coverage
  | | | 9e8e0c97 Fixed security hotspots with cookie
  | | | 36b2bd6e Fixing code smells
  * | | | 98d030f5 Merge pull request #537 from heigvd-software-engineering/feature/maint_orga_dashboard
  | \
  | | \
  | | | *
  | | | | f4d13d18 Added page and card to list the number of organisation for maintainer
  | | |
  | | :
  | | :
```

git

les concepts de base: staging area



git

les concepts de base: commit & staging area

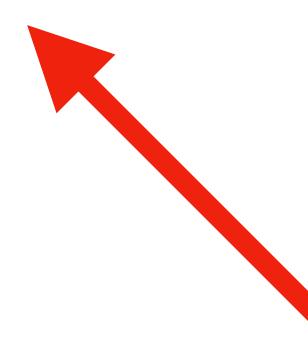
```
$ ls
```

```
README.md
```

```
$ git add README.md
```

```
$ git commit -m "Add README.md"
```

Ajoute “README.md” dans le staging area



Prend tout ce qu'il y a dans le staging area et le sauvegarde dans git
(i.e. crée un nouveau commit)

The Git logo, consisting of the lowercase letters "git" in a bold, sans-serif font. The letters are colored with a gradient: "g" is blue, "i" is white, and "t" is red.

les concepts de base: commit & staging area

```
$ ls
```

```
README.md main.cpp DO_NOT_README.md
```

```
$ git add README.md
```

```
$ git commit -m "Add README.md"
```

```
$ git add main.cpp
```

The Git logo, consisting of the word "git" in a bold, lowercase, sans-serif font. The letters are colored blue and magenta.

les concepts de base: commit & staging area

```
$ ls  
README.md main.cpp DO_NOT_README.md  
  
$ git add README.md  
$ git commit -m "Add README.md"  
$ git add main.cpp
```

```
$ ls -l  
README.md  
DO_NOT_README.md  
main.cpp
```

git

les concepts de base: commit & staging area

```
$ ls  
README.md main.cpp DO_NOT_README.md  
  
$ git add README.md  
$ git commit -m "Add README.md"  
$ git add main.cpp
```

```
$ ls -l  
README.md → committed  
DO_NOT_README.md  
main.cpp
```

git

les concepts de base: commit & staging area

```
$ ls  
README.md main.cpp DO_NOT_README.md  
  
$ git add README.md  
$ git commit -m "Add README.md"  
$ git add main.cpp
```

```
$ ls -l  
README.md → committed  
DO_NOT_README.md → inconnu de git  
main.cpp
```

git

les concepts de base: commit & staging area

```
$ ls  
README.md main.cpp DO_NOT_README.md  
  
$ git add README.md  
$ git commit -m "Add README.md"  
$ git add main.cpp
```

```
$ ls -l
```

README.md	→	committed
DO_NOT_README.md	→	inconnu de git
main.cpp	→	staging area

git

les concepts de base: commit & ?

commit ~= sauvegarder qqch
mais sauvegarder où ?

git

les concepts de base: branch

branch ~=

git

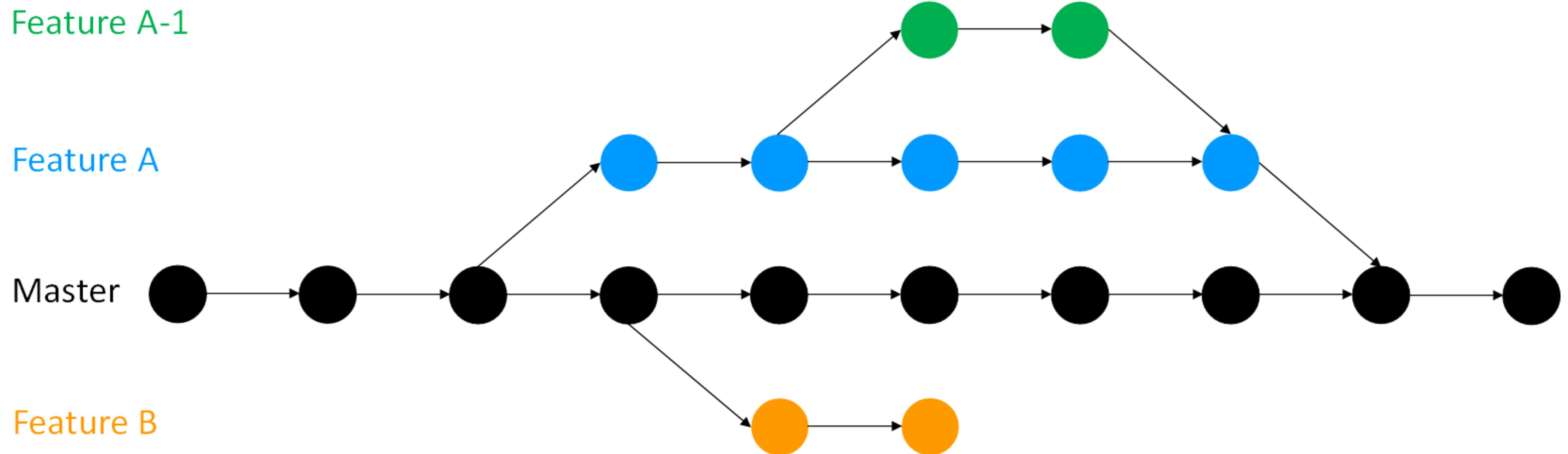
les concepts de base: branch

branch ~= branche



git

les concepts de base: branch



git

les concepts de base: branch

git branch – affiche les branches existantes

git checkout <branch> – se déplace dans une autre branche

git checkout -b <branch> – crée une nouvelle branche et se déplace

git

les concepts de base: récapitulatif

Les dossiers qui possèdent un .git sont des repository.

On peut prendre des fichiers et les ajouter dans le staging area, puis les commit dans git.

Chaque commit est fait sur une branche.

git

comment partager son code ?

git clone <repository>
mais depuis où ?

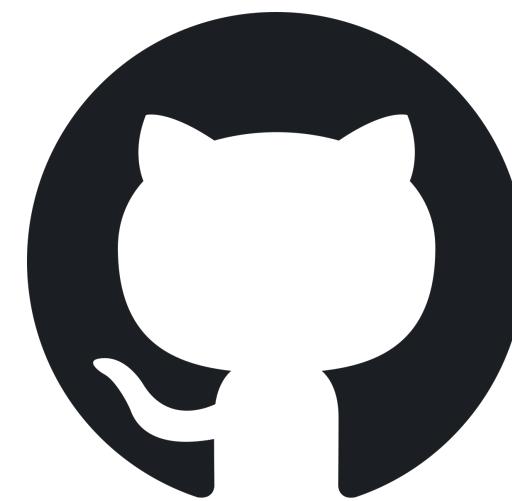
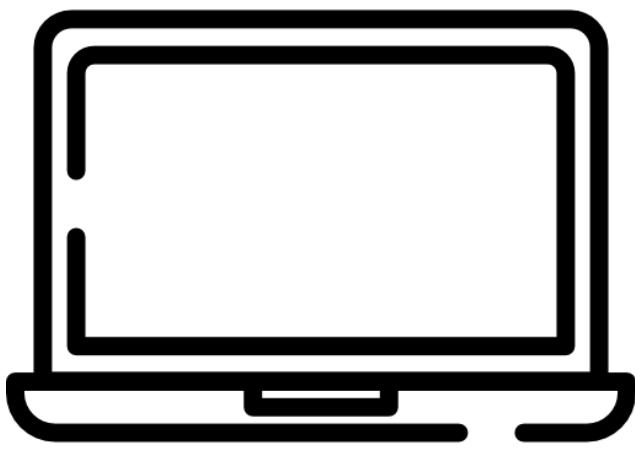
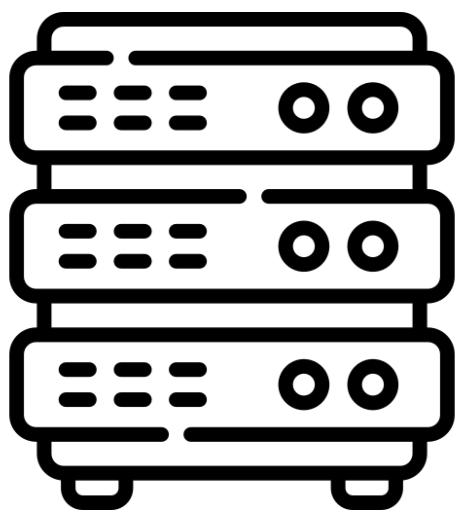
git

comment partager son code ?

n'importe où !

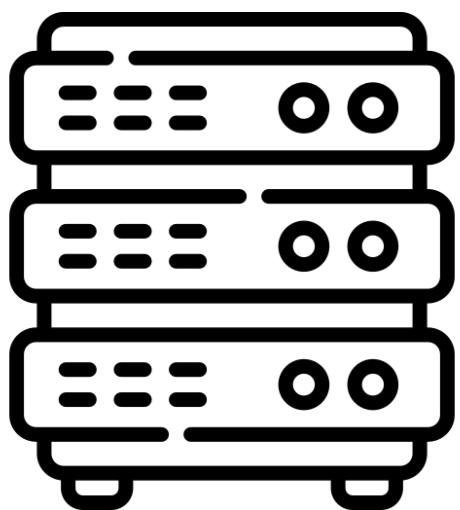
git

comment partager son code ?

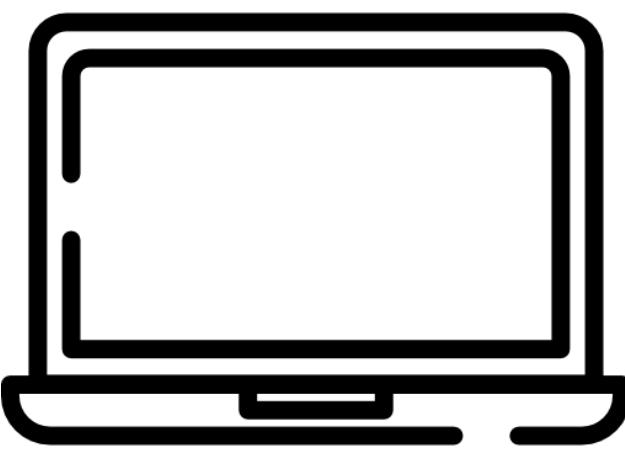


git

comment partager son code ?



remote



remote



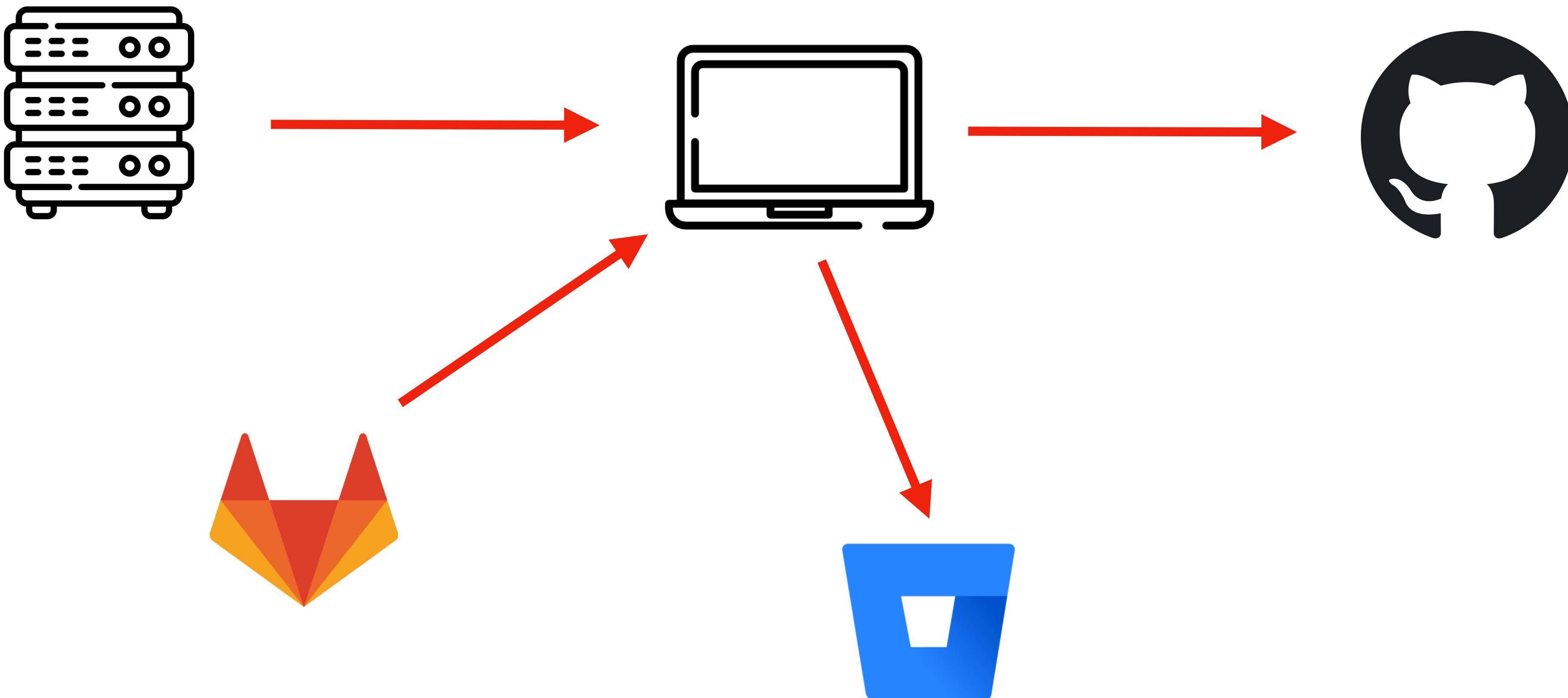
remote



remote

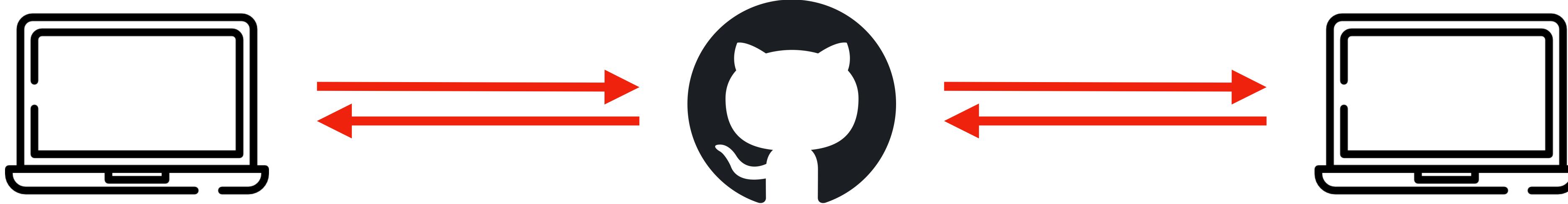
git

comment partager son code ?



git

comment partager son code ?



git

comment partager son code ?

git remote – affiche les remote existantes

git remote add myRemote git@github.com:xxx/yyy.git – ajoute
une remote nommée myRemote

git

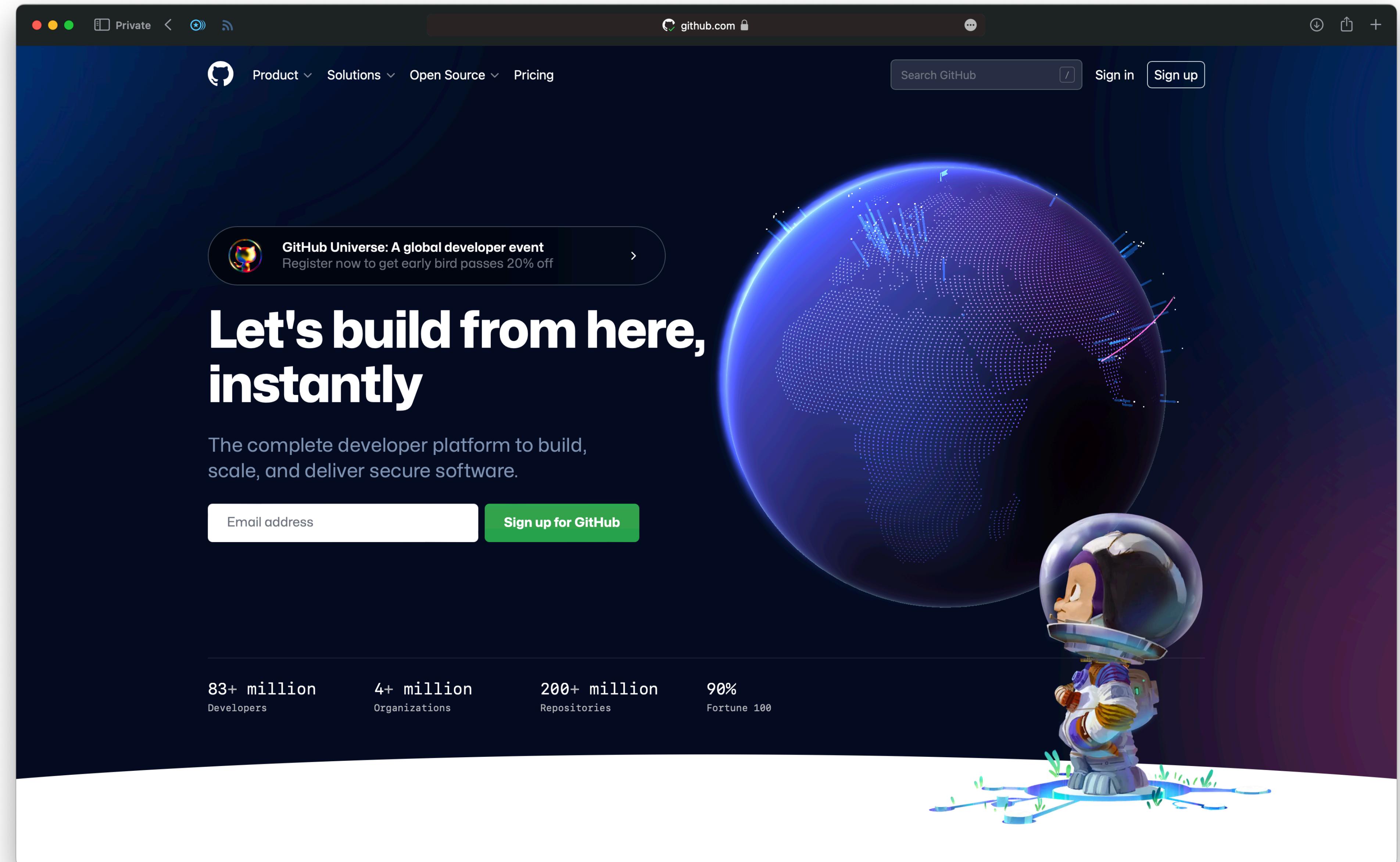
comment partager son code ?

git fetch – téléchargé les dernières données

git pull – téléchargé les dernières données et les appliques

git push – upload les commits locaux

github setup



The screenshot shows the GitHub homepage with a dark blue background. At the top, there's a navigation bar with links for Product, Solutions, Open Source, and Pricing. On the right side of the header are search and sign-in options. A prominent feature is a large, glowing blue globe on the right, with a small cartoon astronaut standing on a base at the bottom. In the center-left, there's a call-to-action section with the text "Let's build from here, instantly" and a subtext about being a complete developer platform. Below this are four statistics: "83+ million Developers", "4+ million Organizations", "200+ million Repositories", and "90% Fortune 100". At the very bottom, there's a white footer bar.

github.com

Product Solutions Open Source Pricing

Search GitHub Sign in Sign up

GitHub Universe: A global developer event
Register now to get early bird passes 20% off >

**Let's build from here,
instantly**

The complete developer platform to build,
scale, and deliver secure software.

Email address [Sign up for GitHub](#)

83+ million Developers

4+ million Organizations

200+ million Repositories

90% Fortune 100