

FORMATION GIT

Ou comment bien collaborer à plusieurs
sur son code

Installation de Git

Sur **Windows** <https://gitforwindows.org/>

Sur **Mac** Déjà installé sinon **brew install git**

Sur **Linux** Déjà installé sinon **sudo apt update && sudo apt install git**

Pourquoi utiliser git ?

- Versionner son code
- Historique des modifications
- Travailler à plusieurs
- Sauvegarder son code à distance



Services d'hébergement de répo Git

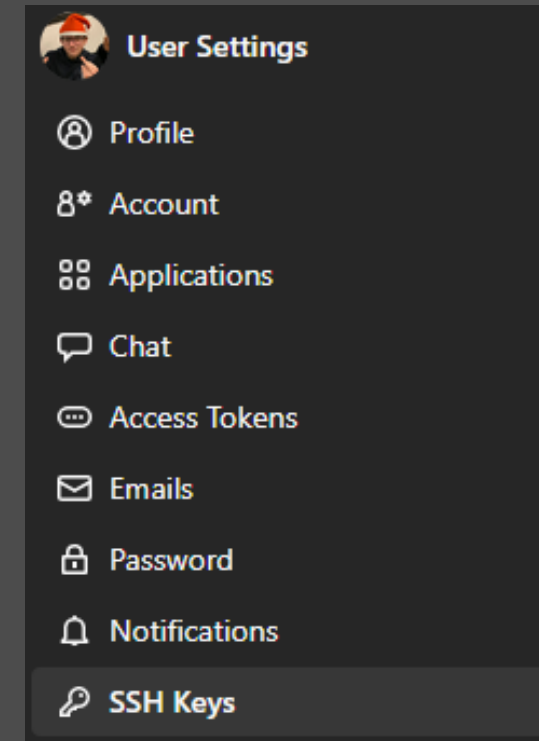
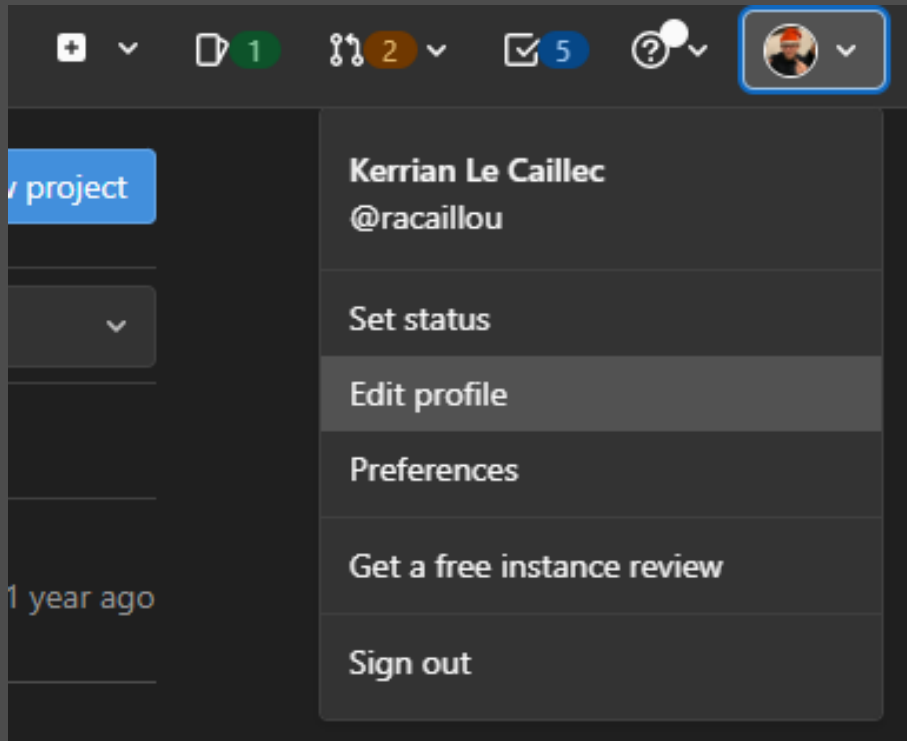


GitLab

gitlab.viarezo.fr

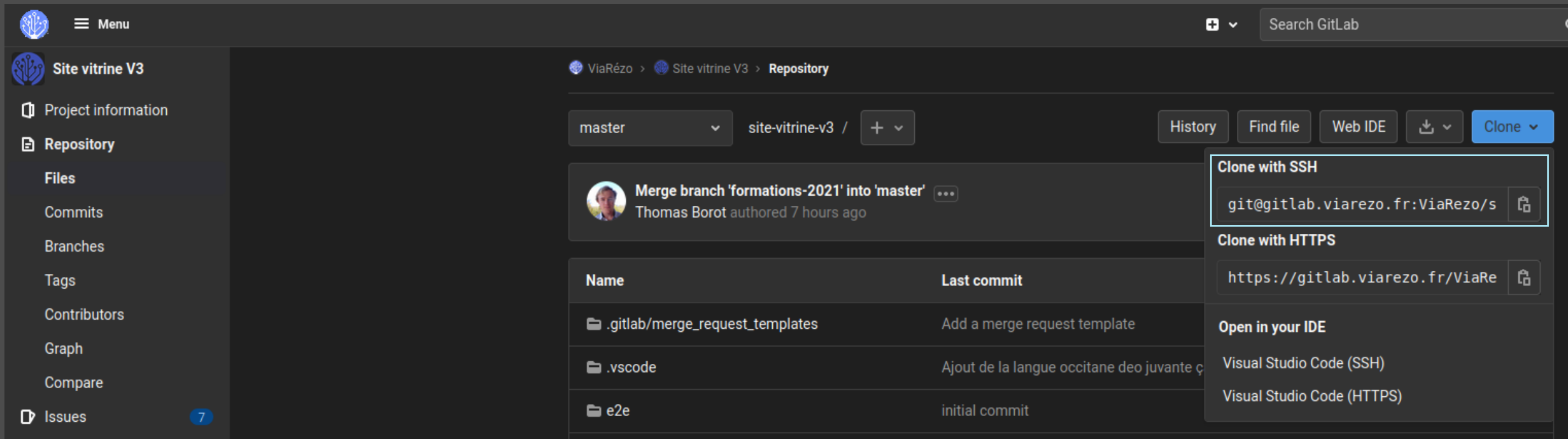
Ajouter une clé SSH

- `ssh-keygen -o -a 256 -t ed25519`
- `cd`
- `cat .ssh/id_ed25519.pub`



Cloner un repository

- `git clone < lien vers le répo >`



The screenshot shows the GitLab web interface for a repository named "Site vitrine V3". The left sidebar contains navigation links: Project information, Repository, Files, Commits, Branches, Tags, Contributors, Graph, Compare, and Issues (with a badge showing 7 issues). The main content area displays the repository's history, including a recent merge commit by Thomas Borot. A "Clone" button is visible, and a dropdown menu is open showing options to clone with SSH, HTTPS, or open in an IDE like Visual Studio Code.

Navigation links: Menu, Search GitLab, Site vitrine V3, Project information, Repository, Files, Commits, Branches, Tags, Contributors, Graph, Compare, Issues (7).

Repository: ViaRézo > Site vitrine V3 > Repository

Clone options:

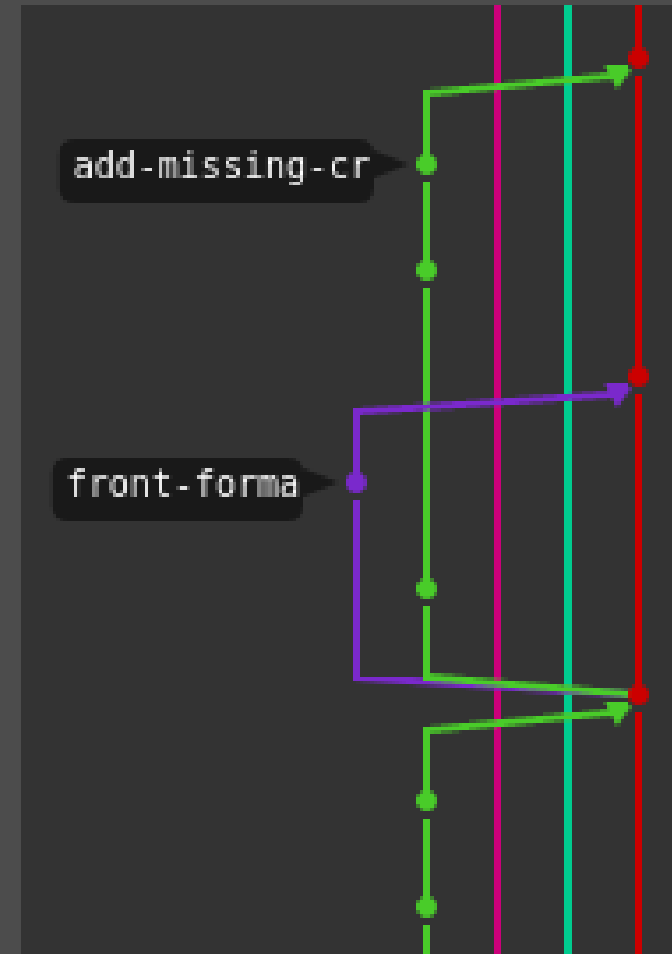
- Clone with SSH: `git@gitlab.viarezo.fr:ViaRezo/s`
- Clone with HTTPS: `https://gitlab.viarezo.fr/ViaRe`
- Open in your IDE: Visual Studio Code (SSH), Visual Studio Code (HTTPS)

Name	Last commit
<code>.gitlab/merge_request_templates</code>	Add a merge request template
<code>.vscode</code>	Ajout de la langue occitane deo juvante ç
<code>e2e</code>	initial commit

Le commit

Un commit c'est :

- L'unité de base de git
- Un ensemble de changement (diff)
- Une version du code
- 1 commit = 1 fonctionnalité



Je vous montre un diff !

The screenshot displays the GitLab web interface for a project named "Mobile". The left sidebar contains navigation links: Project information, Repository, Issues (2), Merge requests (7), CI/CD, Security & Compliance, Deployments, Packages and registries, Infrastructure, Monitor, Analytics, Wiki, Snippets, and Settings. The main area shows the "Changes" tab with a search bar and a file tree. The file tree lists files under the path "src/global/core/components/association/tabViews", including "Clubs.tsx" (+1 -6), "Description.tsx" (+27 -24), "Members.tsx" (+2 -9), "Description.tsx" (+1 -5), and "AssoView.tsx" (+2 -1). The diff view for "Members.tsx" shows a comparison between two versions of the file. The left column shows the original code (lines 37-43), and the right column shows the modified code (lines 36-42). The diff highlights changes in the return statement, adding a new `<View>` component and updating the `<FlatList>` component. The diff also shows a change in the `const styles = StyleSheet.create({` block, adding a new `section` property. The bottom of the interface shows the diff for "Description.tsx" (+1 -5).

Search GitLab

Mobile

Project information

Repository

Issues 2

Merge requests 7

CI/CD

Security & Compliance

Deployments

Packages and registries

Infrastructure

Monitor

Analytics

Wiki

Snippets

Settings

Overview 5 Commits 4 Pipelines 3 Changes 5

1 unresolved thread

Search (e.g. *.vue) (Ctrl+P)

src

global/core/.../association/tabViews

Clubs

Clubs.tsx +1 -6

Description

Description.tsx +27 -24

Members

Members.tsx +2 -9

Description.tsx +1 -5

views

AssoView.tsx +2 -1

src/global/core/components/association/tabViews/Members/Members.tsx +2 -9 Viewed

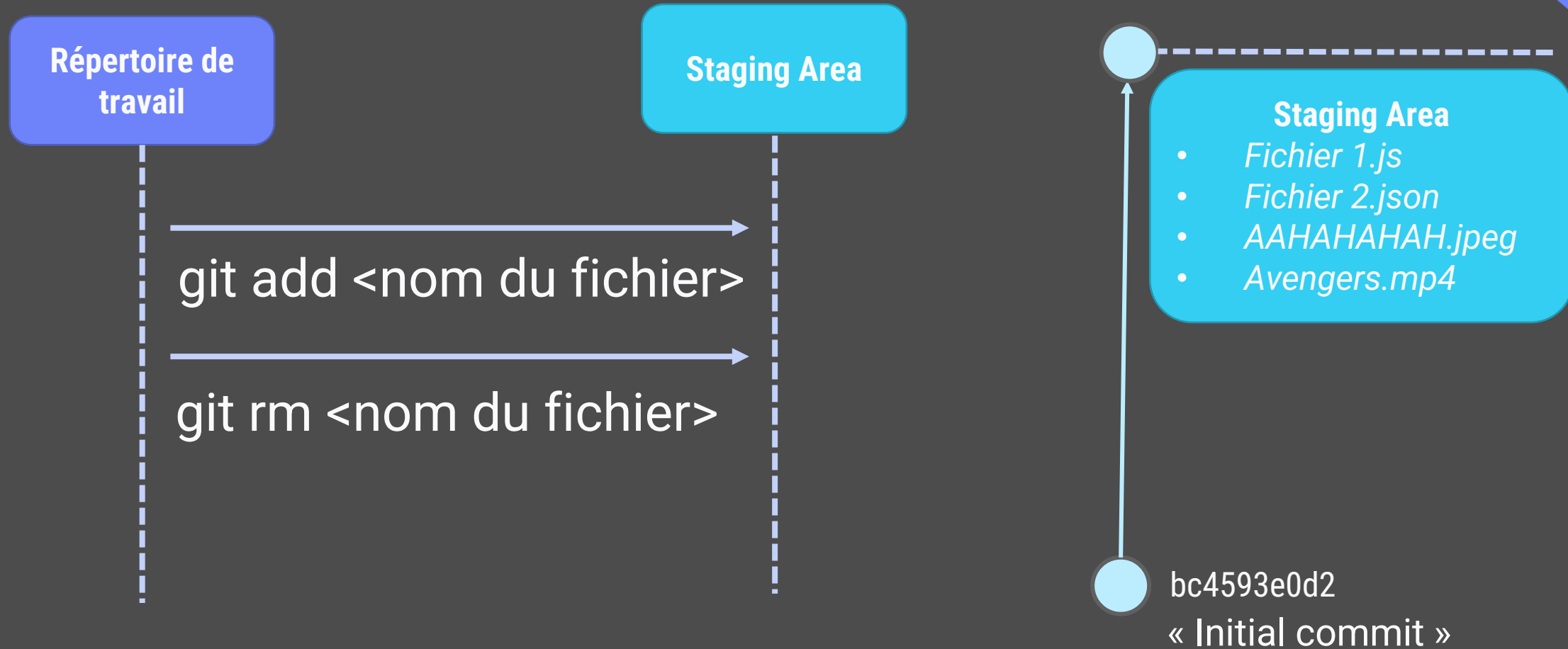
```
37 36      return <AssoUser data={item} navigation={navigation} />;
38 37    };
39 38    return (
40 -    <View style={styles.section}>
39 +    <View>
41   <FlatList
42     style={styles.liste}
43     data={dataSectors}
@@ -79,13 +78,7 @@ const styles = StyleSheet.create({
79 78     margin: 5,
80 79     marginRight: 10,
81 80   },
82 -   section: {
83 -     height: '100%',
84 -     paddingVertical: 10,
85 -     marginBottom: 18,
86 -   },
87 81   liste: {
88 -   flex: 1,
89 82   width: '100%',
90 83   alignSelf: 'center',
91 84   },
```

src/global/core/components/association/tabViews/Description.tsx +1 -5 Viewed

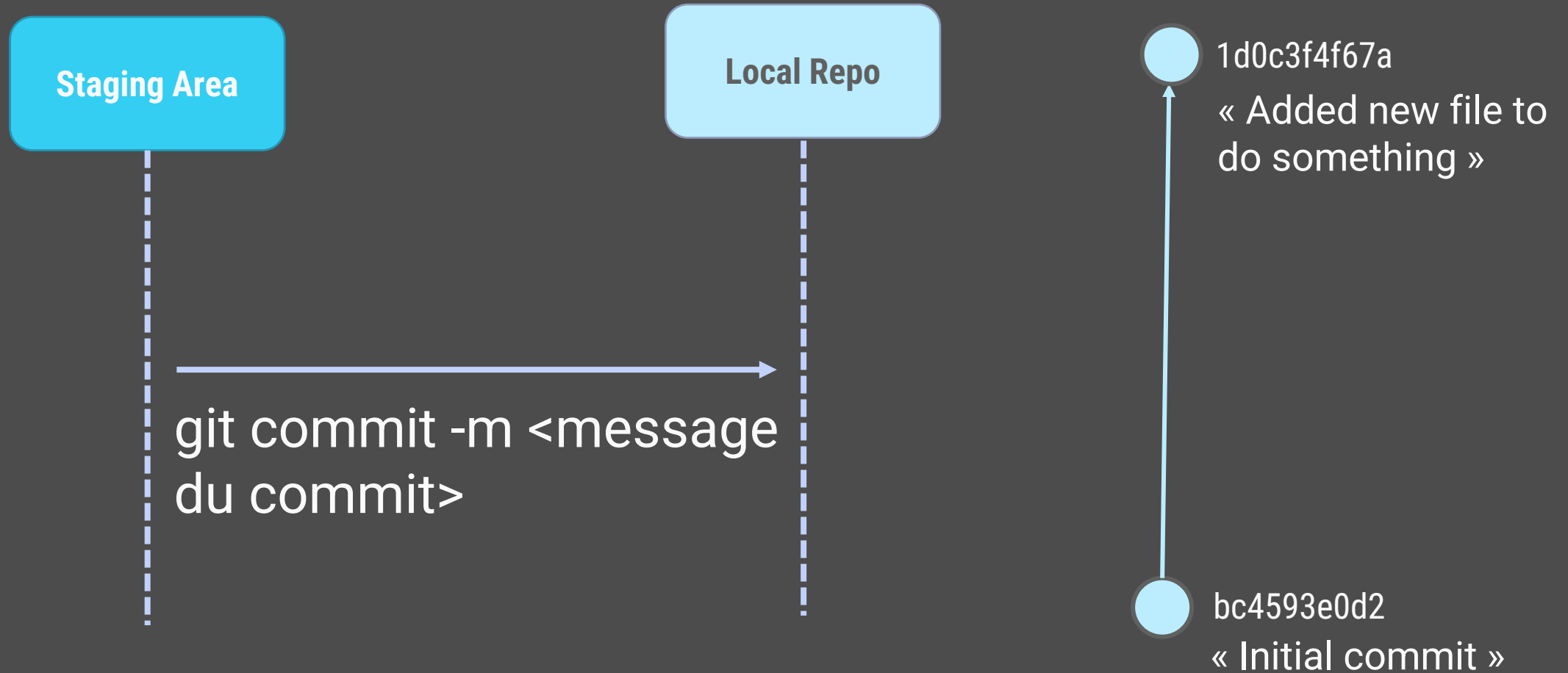
Commandes d'information

- **git status** affiche un résumé de la situation
- **git log** affiche un historique des "commit"
- **git log --graph** affiche un historique sous forme de graphe
- **git log --stat** affiche les détails des "commit"
- **git diff <référence> <comparé>** affiche les différences entre 2 "commit"

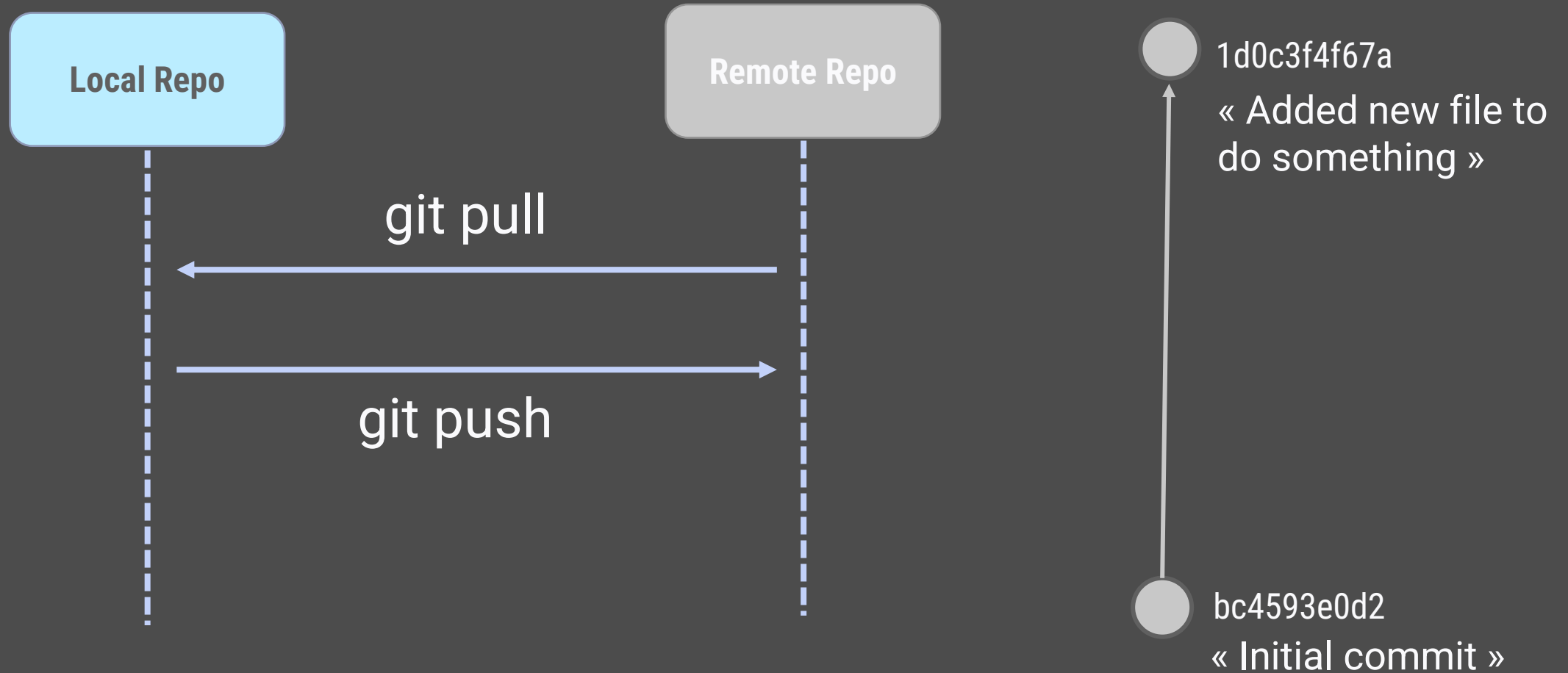
Ajouter ou supprimer des fichiers



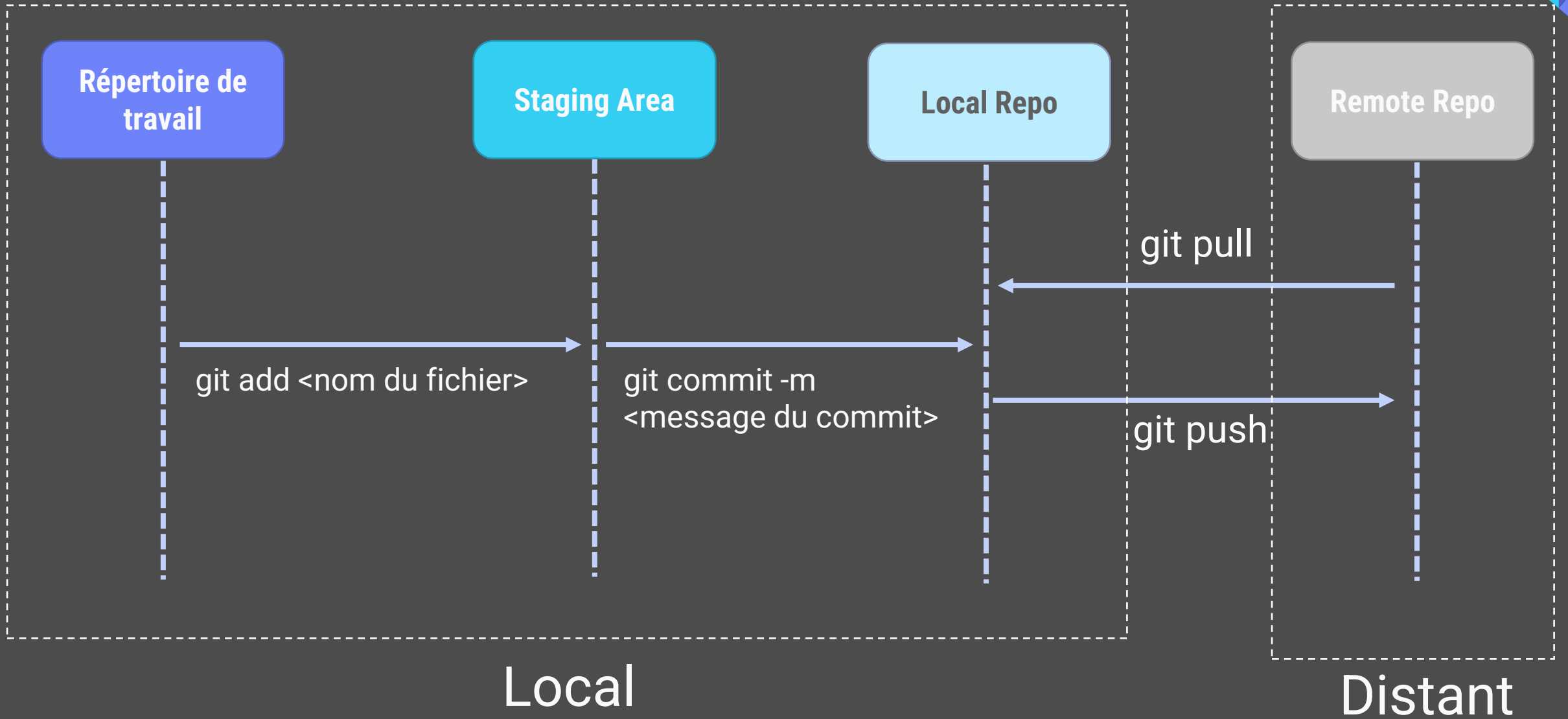
Commit les changements



Publier et récupérer les changements à distance



Bilan des actions



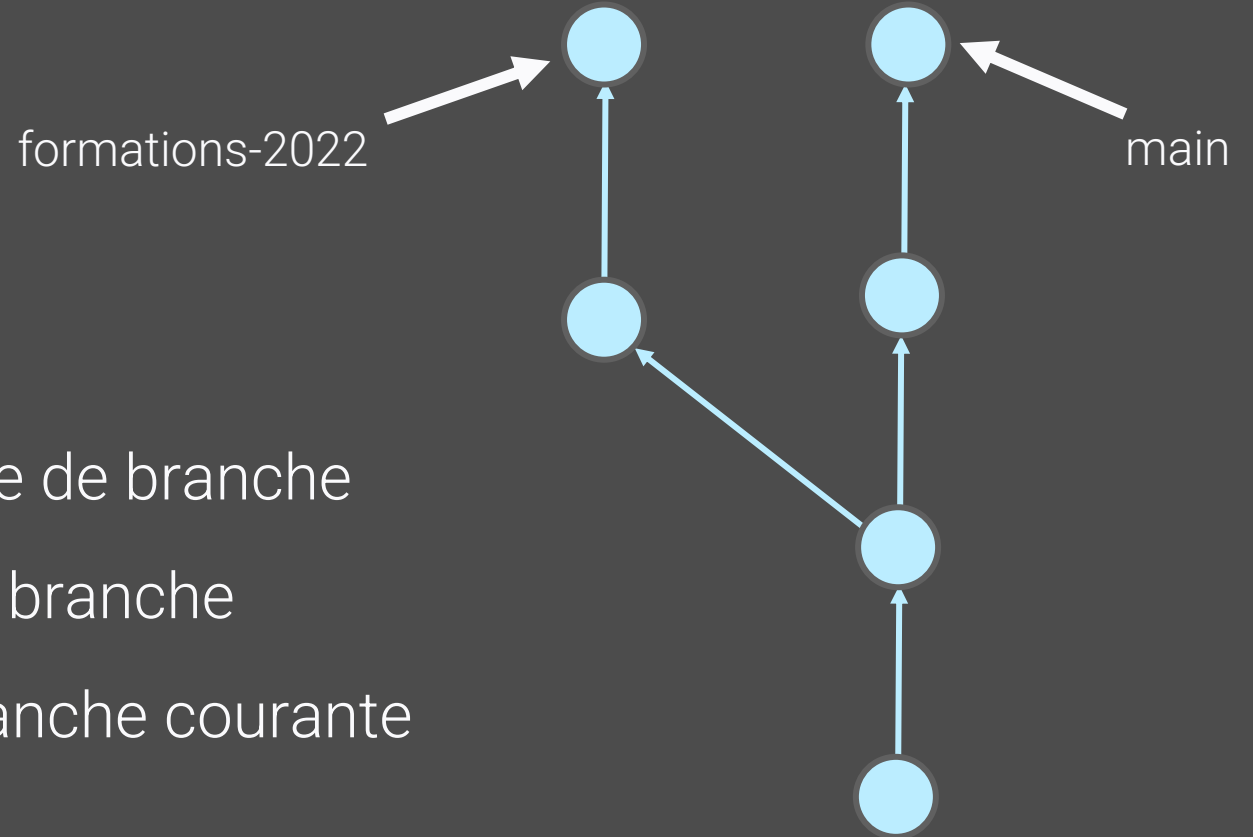
On passe au TP !

C'est l'heure du TP :

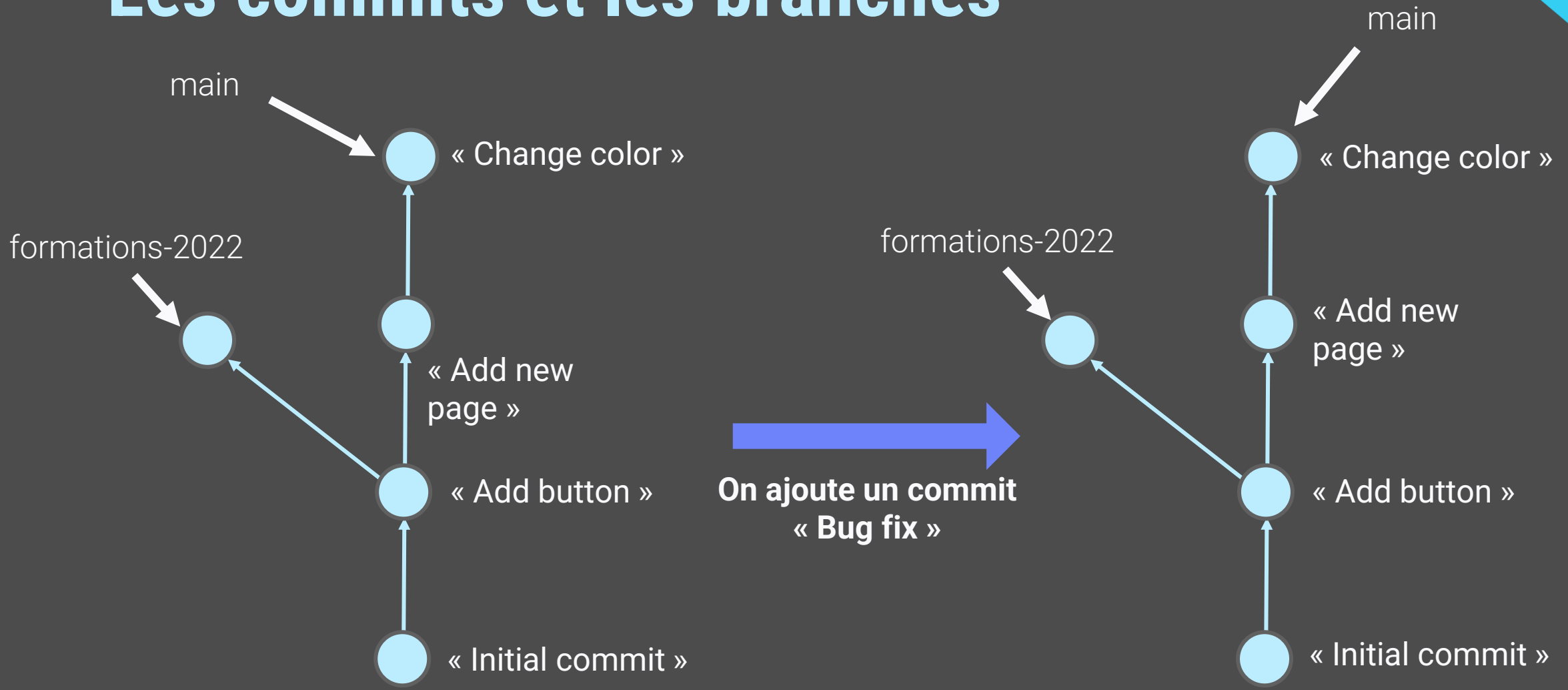
- Se rendre sur **<https://gitlab.viarezo.fr/ViaRezo/formation-git>**
- Suivre les indications du README jusqu'à la **partie 3**
- Bien travailler dans le fork du projet ! (il doit y avoir l'username dans l'url)
- N'hésitez pas à poser des questions aux staffeurs

Les branches

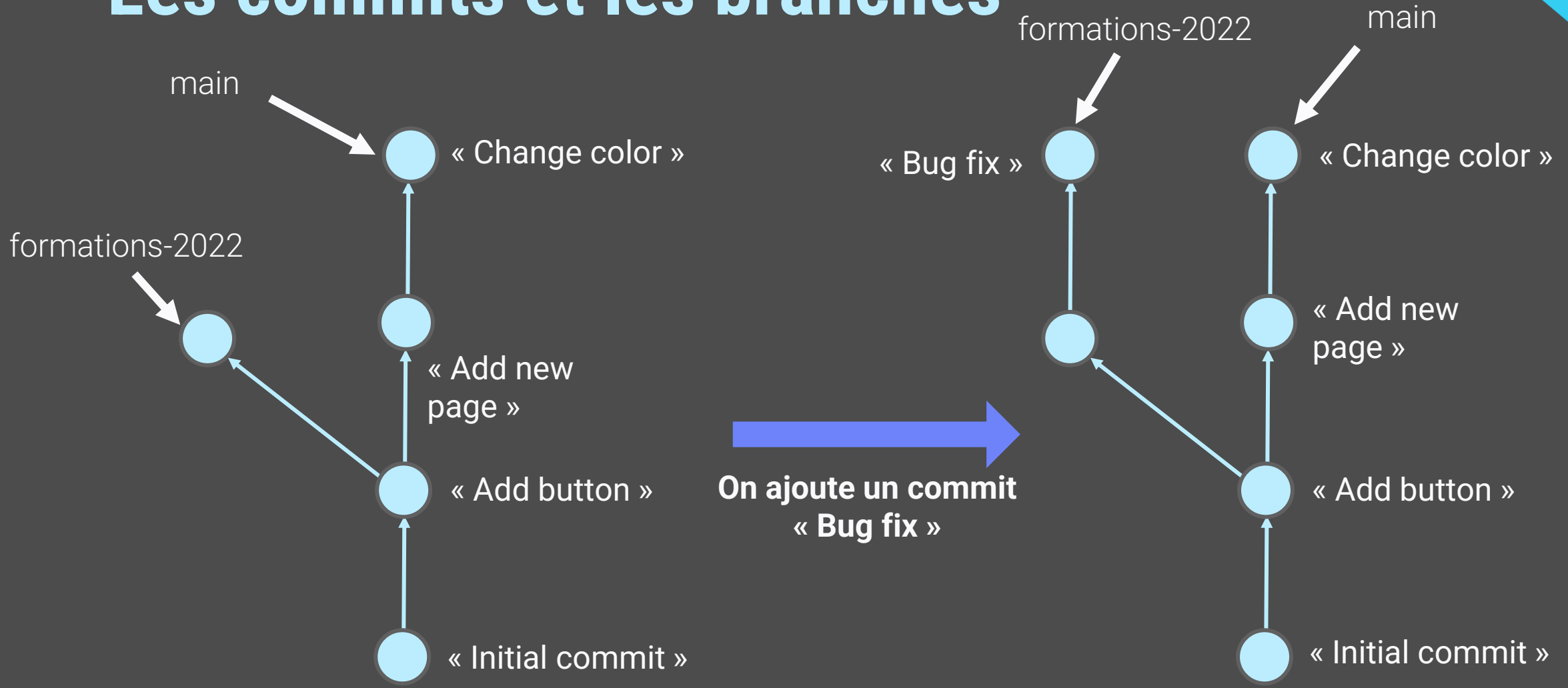
- **git checkout <ma branche>** change de branche
- **git branch <ma branche>** crée une branche
- **git diff <référence>** compare la branche courante avec une branche de référence



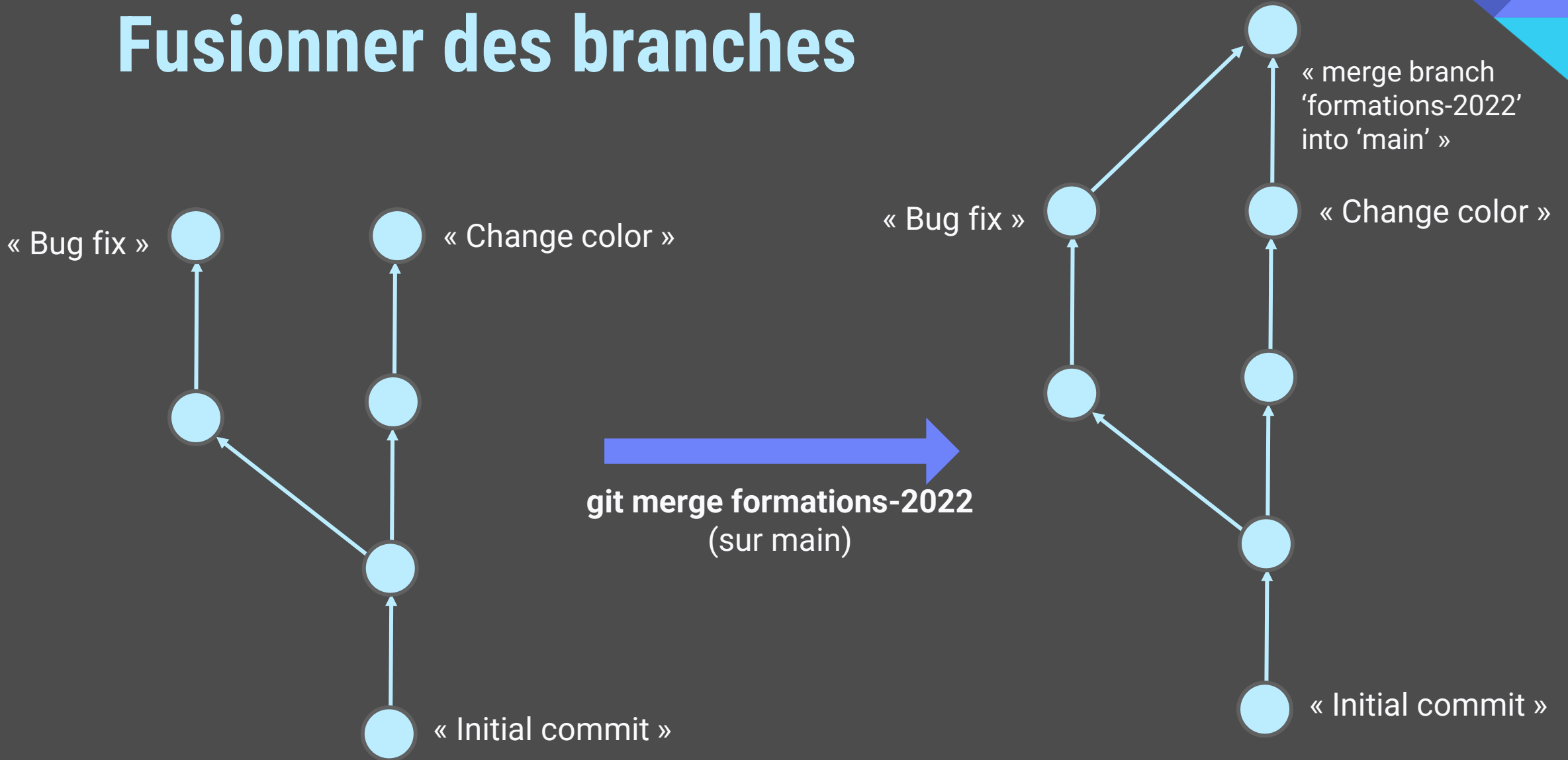
Les commits et les branches



Les commits et les branches



Fusionner des branches



Merge Request

Convention pour ajouter du code dans master

ViaRézo > Site vitrine V3 > Merge requests

Open 2

Merged 175

Closed 10

All 187

Recent searches ▾

Search or filter results...

Created date ▾

⌵

Feature: add latex slides

!189 · created 11 hours ago by Thomas Borot

Ready for review

0

updated 11 hours ago

Update from demande to viarezo.demande (yes, even in the PDF.)

!188 · created 2 days ago by Téo Chaillou

Easy

Ready for review

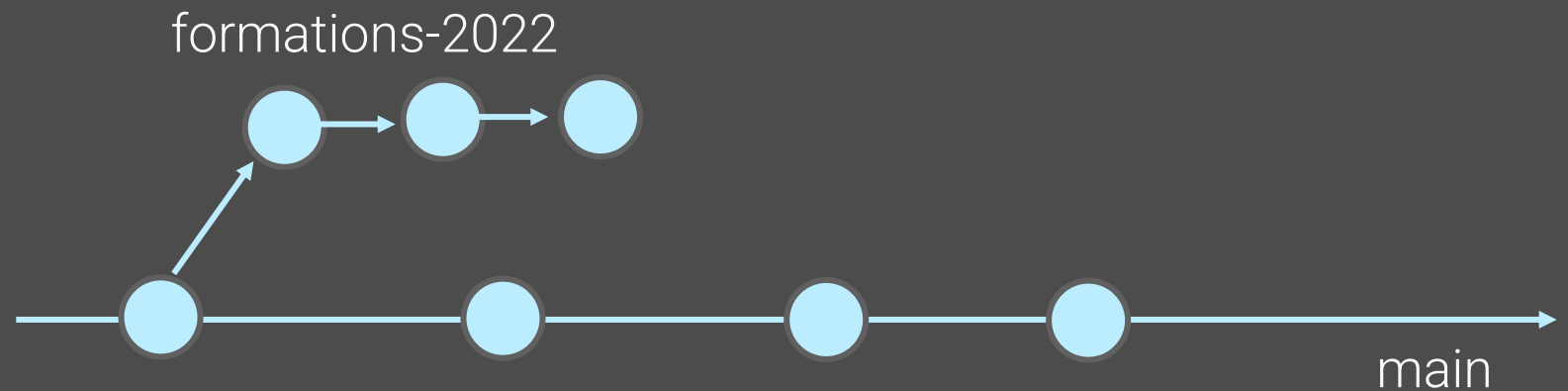
2

updated 11 hours ago

Le rebase

- Refaire les modifications à partir de la dernière version
- Objectif : éviter les trop grandes divergences
- **git rebase main**

(sur formations-2022)

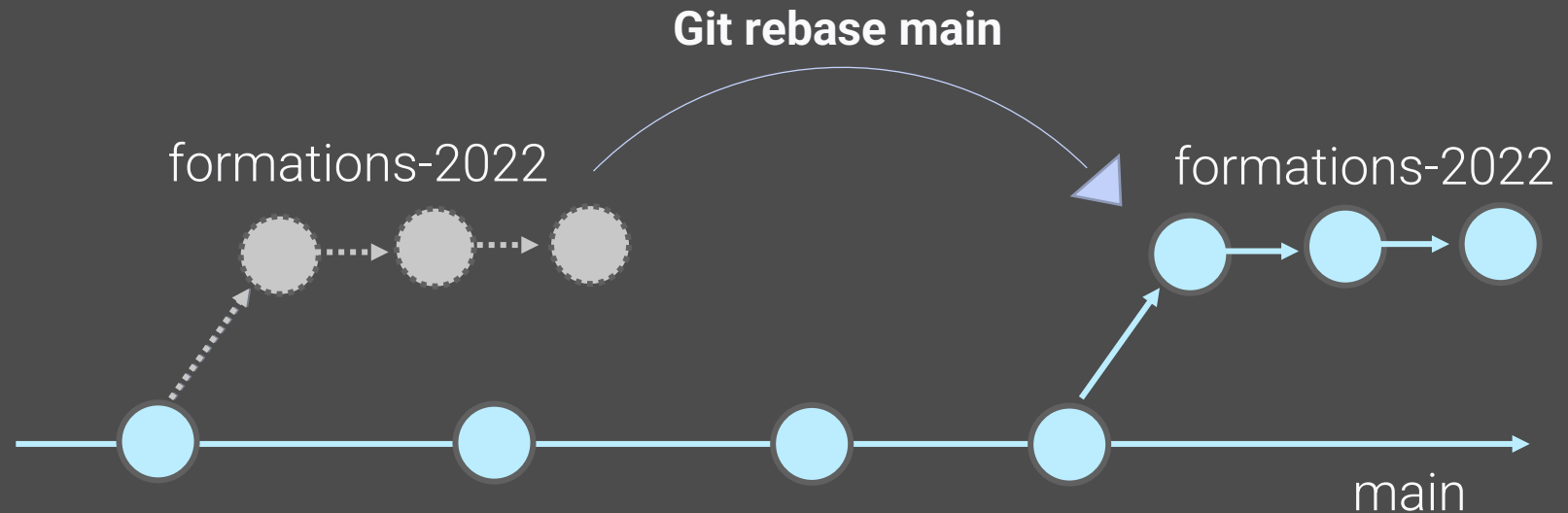


Le rebase

- Refaire les modifications à partir de la dernière version
- Objectif : éviter les trop grandes divergences

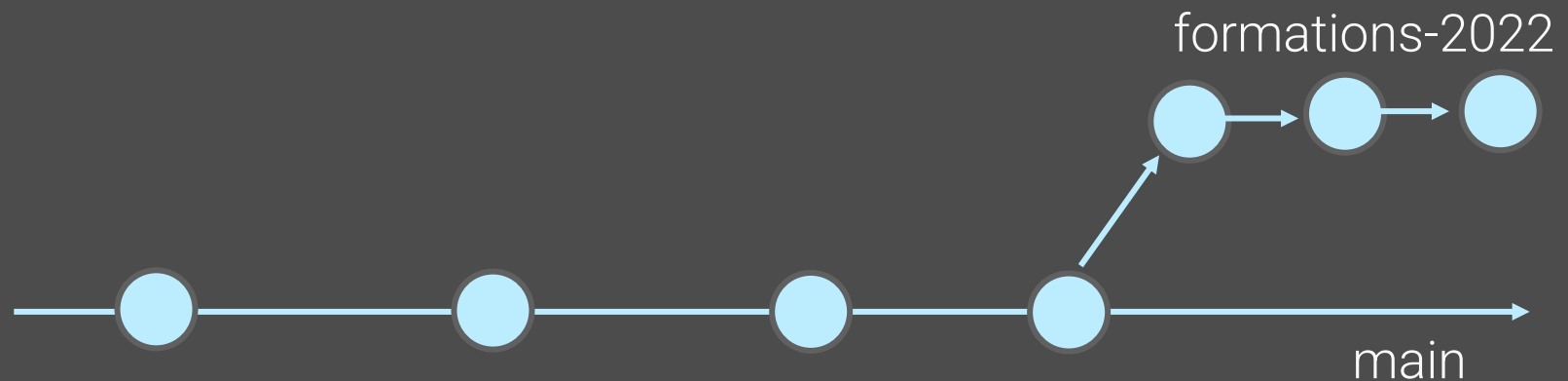
- **git rebase main**

(sur formations-2022)



Le rebase

- Refaire les modifications à partir de la dernière version
- Objectif : éviter les trop grandes divergences
- **git rebase main**
(sur formations-2022)



CONFLICTS : aled

- Parfois Git rencontre des erreurs
- Pas de panique ! Git explique les erreurs
- Bien lire les messages d'erreur

```
Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes
79 <<<<<<< HEAD (Current Change)
80     navigation.push(pathType, getPathIdByType(pathType, pathId));
81 =====
82     navigation.navigate(pathType, pathType === 'association' ? { code: pathId } : { id: pathId });
83 >>>>>>> b09c6d2 (remplace oush by navigate) (Incoming Change)
```

Bilan de comment travailler sur Git

- Je crée ma branche
- J'ajoute des commit dessus
- Je fusionne ma branche avec main

Stasher ses changements

Répertoire de travail

- *Fichier 1.js*
- *Fichier 2.json*
- *AAHAHAHAH.jpeg*
- *Avengers.mp4*

git stash push

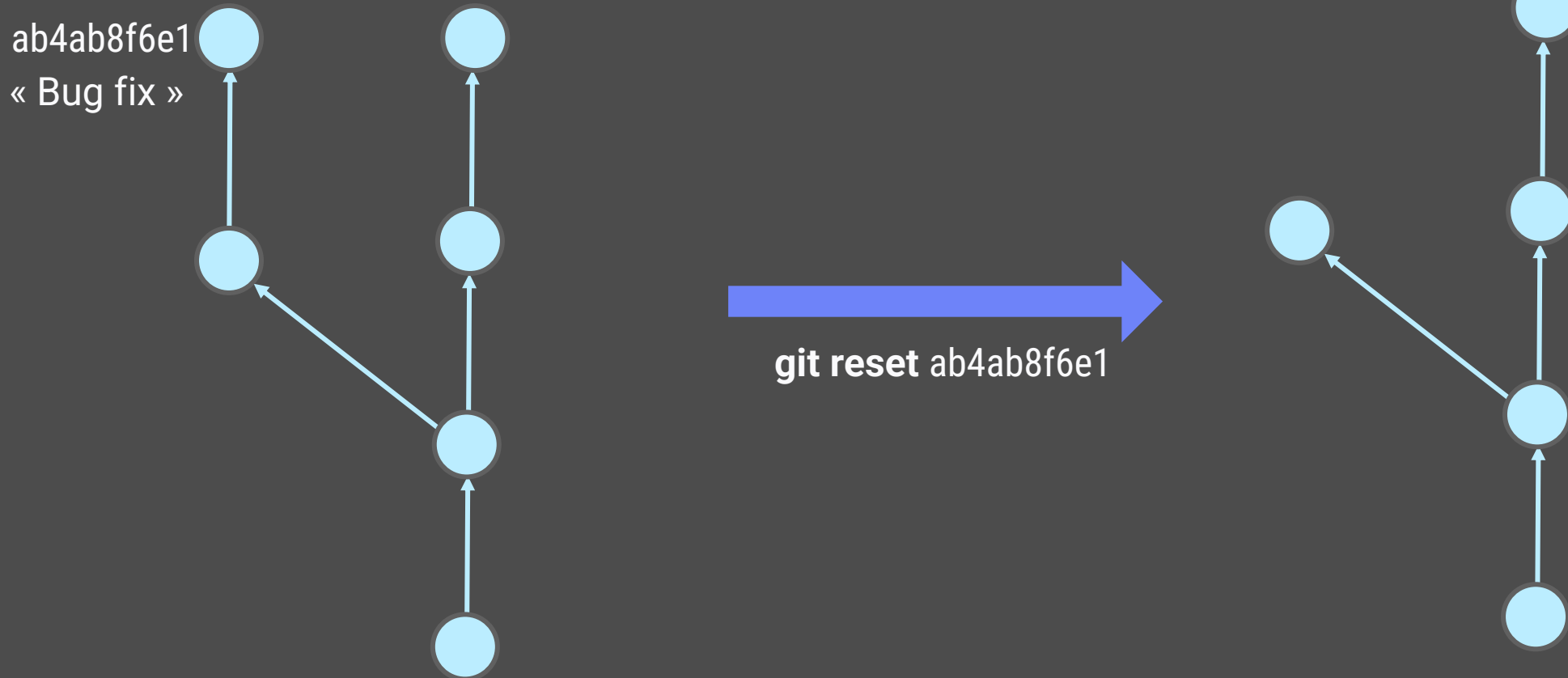
git stash pop

Répertoire de travail

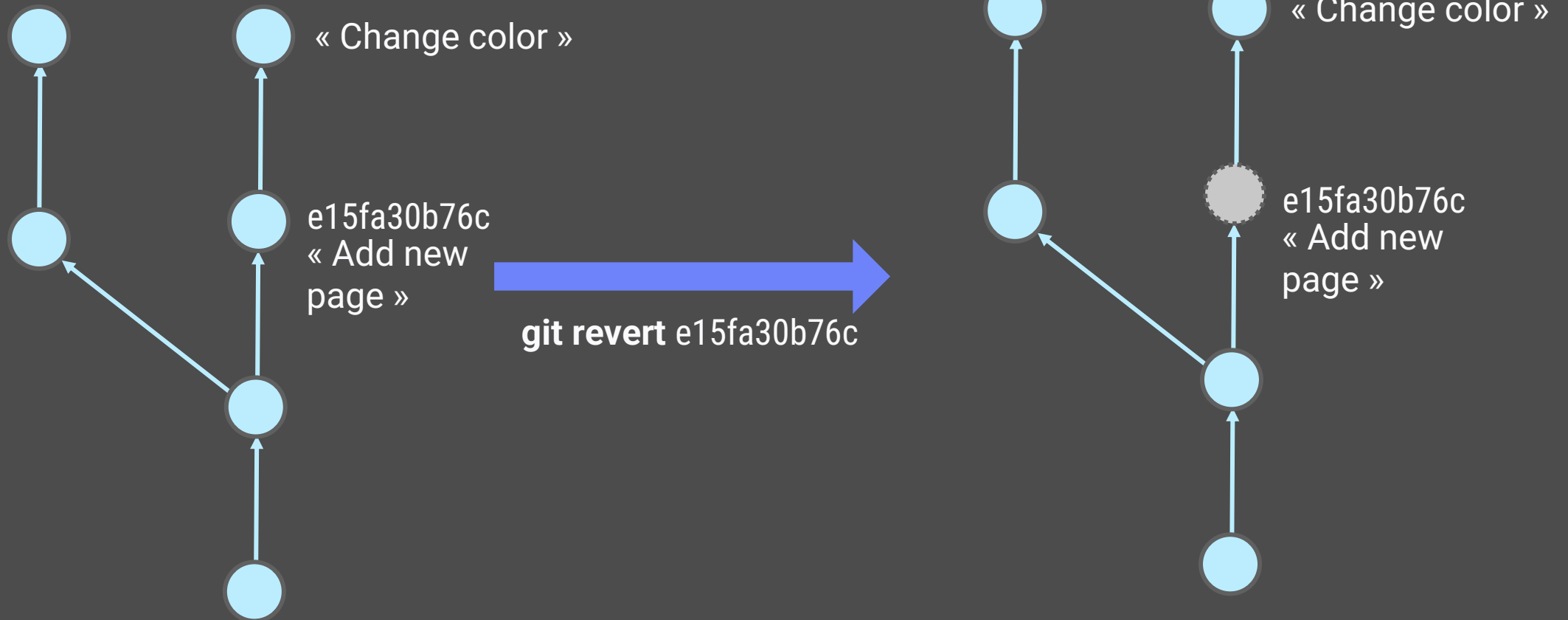
git stash show

- *Fichier 1.js*
- *Fichier 2.json*
- *AAHAHAHAH.jpeg*
- *Avengers.mp4*

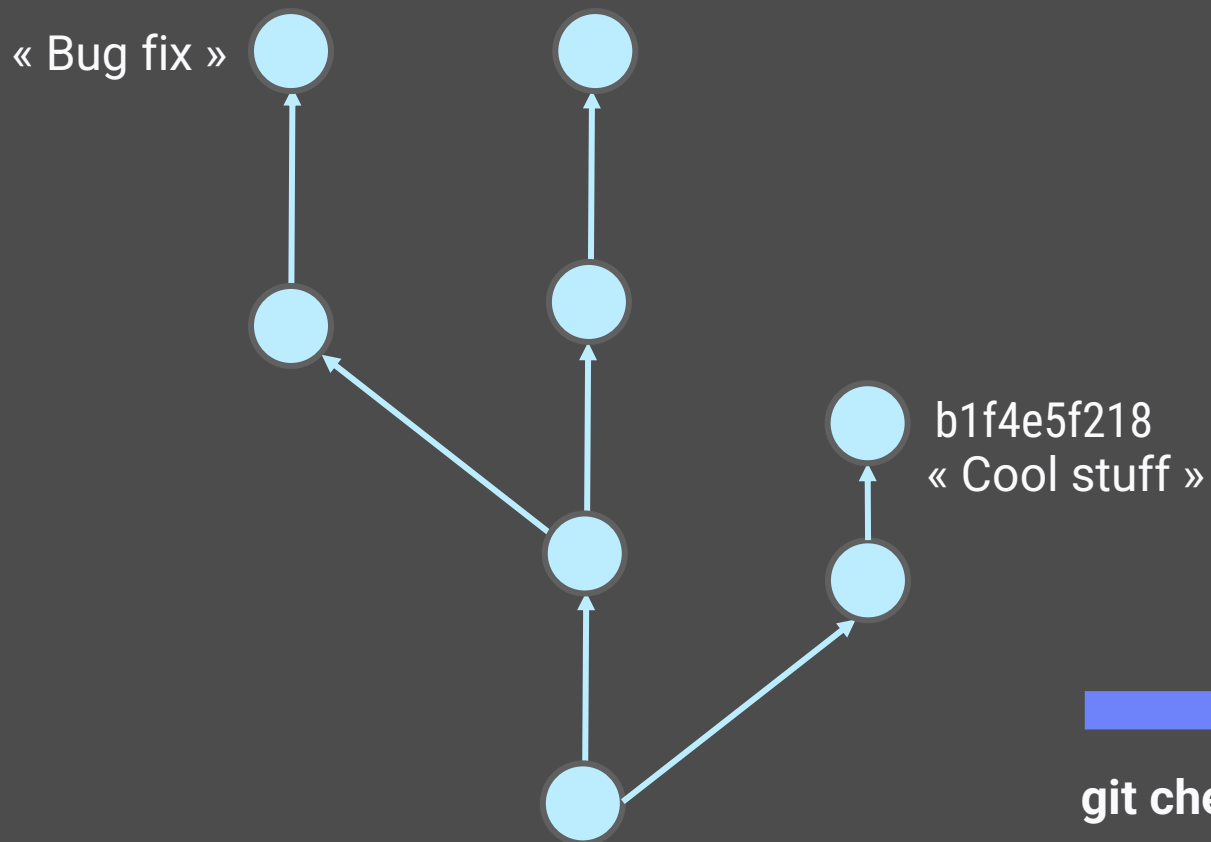
Reset un commit



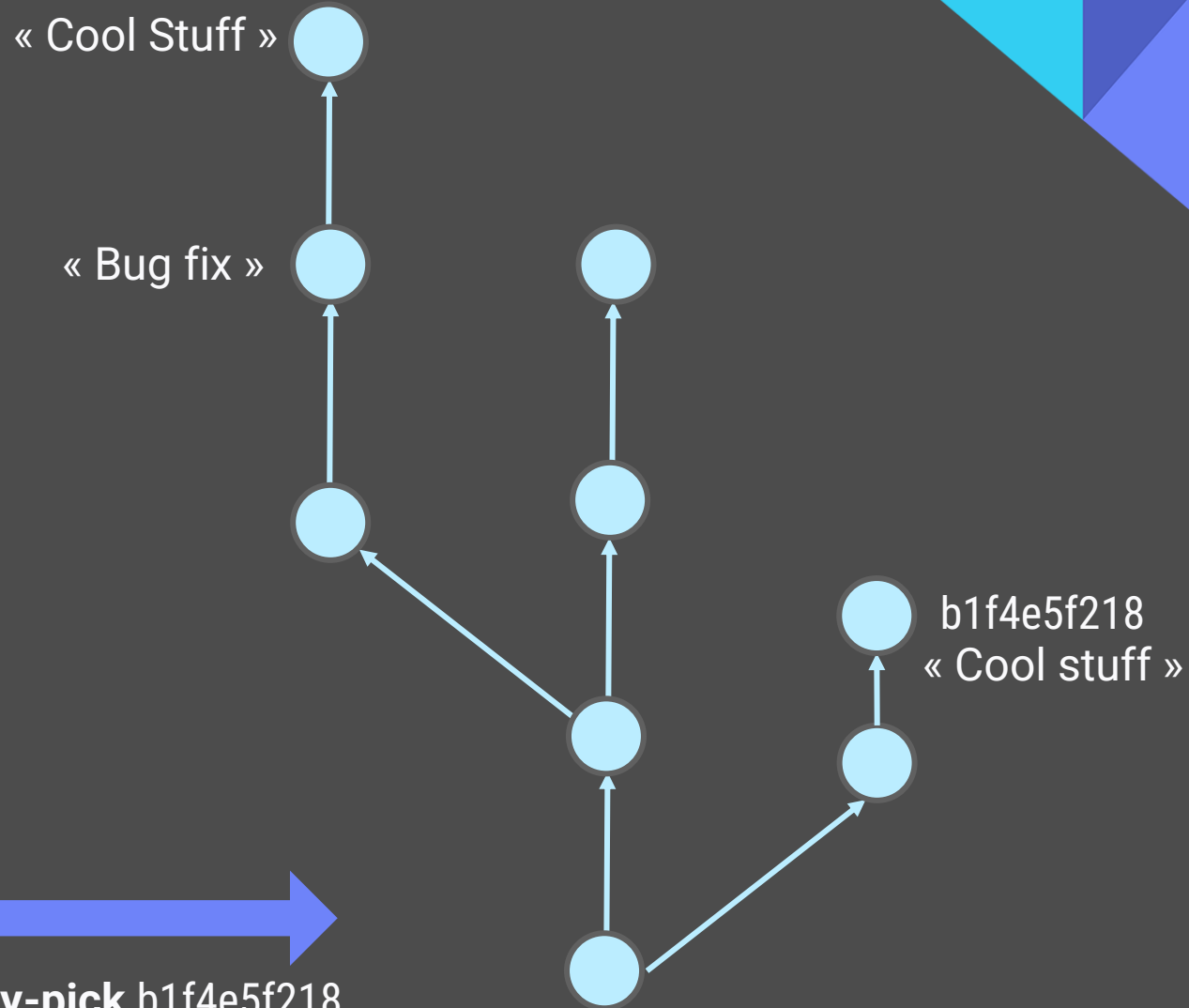
Revert un commit



Cherry-pick



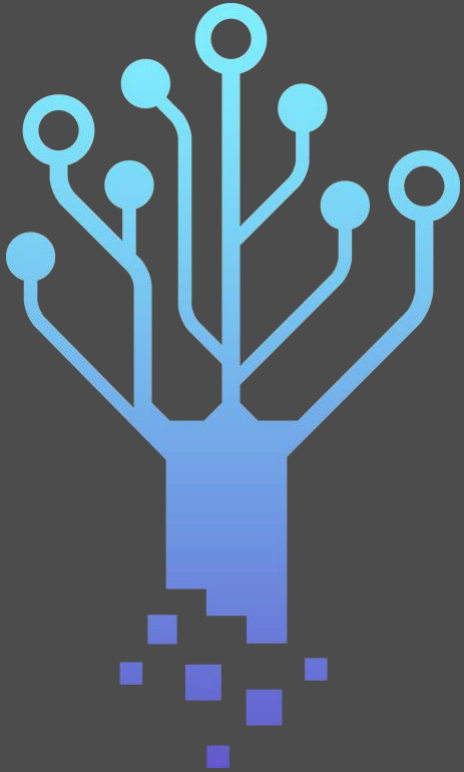
git cherry-pick b1f4e5f218



On passe au TP !

C'est encore l'heure du TP :

- Se rendre sur <https://gitlab.viarezo.fr/ViaRezo/formation-git>
- Suivre les indications du README jusqu'à la **fin**
- N'hésitez pas à poser des questions aux staffeurs



POUR ALLER PLUS LOIN

- Une autre ressource
<https://learngitbranching.js.org/>
- CI/CD : Tester son code automatiquement et le déployer (jeudi 13/10 17h)