Git Basics

David Kouka

October 25, 2024

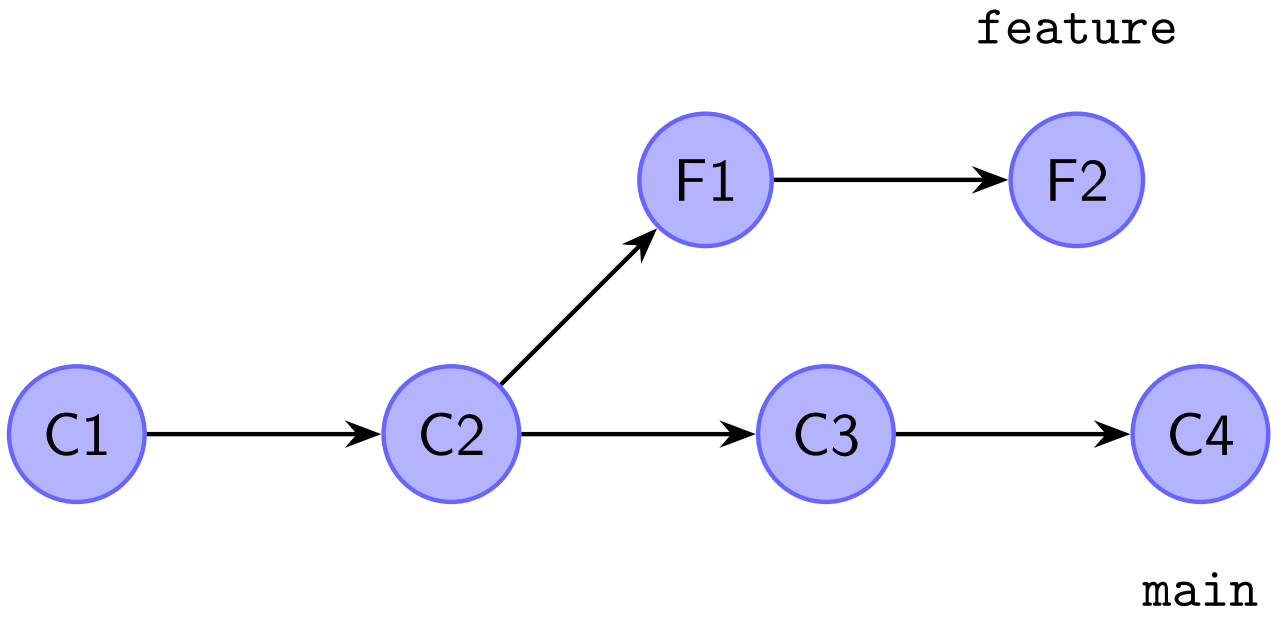
In case of fire

1. git commit

2. git push

3. leave building

Illustrating Git Branches and Commits



Why using version control

- Tracking changes `git diff`

Why using version control

- Tracking changes `git diff`
- Backup and recovery `git checkout`

Why using version control

- Tracking changes `git diff`
- Backup and recovery `git checkout`
- Collaborative work (authors, conflicts, PR)

Why using version control

- Tracking changes `git diff`
- Backup and recovery `git checkout`
- Collaborative work (authors, conflicts, PR)
- Accountability `git blame`

Why using version control

- Tracking changes `git diff`
- Backup and recovery `git checkout`
- Collaborative work (authors, conflicts, PR)
- Accountability `git blame`
- "Documentation" via commit messages `git log`

Why using version control

- Tracking changes `git diff`
- Backup and recovery `git checkout`
- Collaborative work (authors, conflicts, PR)
- Accountability `git blame`
- "Documentation" via commit messages `git log`
- Safe experiments `git branch`

Why using version control

- Tracking changes `git diff`
- Backup and recovery `git checkout`
- Collaborative work (authors, conflicts, PR)
- Accountability `git blame`
- "Documentation" via commit messages `git log`
- Safe experiments `git branch`
- Easy release management (tags, banches, CI/CD, ...)

git clone

Copy repository from server

git clone

Copy repository from server

- Bitbucket

git clone

Copy repository from server

- Bitbucket
- Gitea

git clone

Copy repository from server

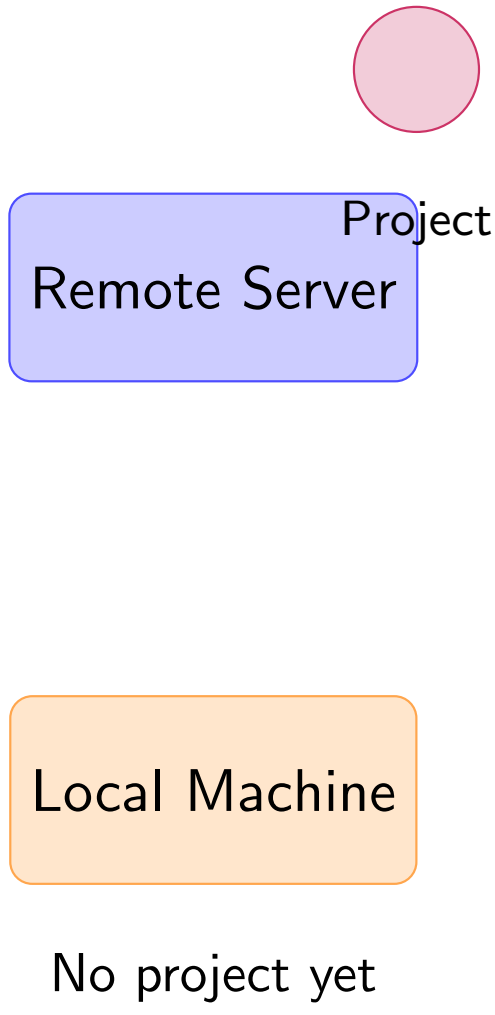
- Bitbucket
- Gitea
- Github

git clone

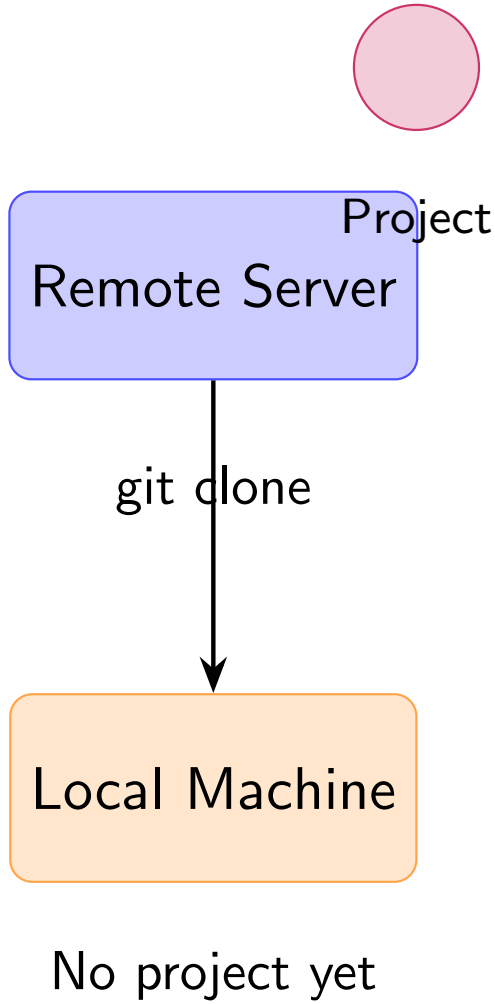
Copy repository from server

- Bitbucket
- Gitea
- Github
- Gitlab

Illustrating Git Clone Operation



Illustrating Git Clone Operation



No project yet

Illustrating Git Clone Operation