

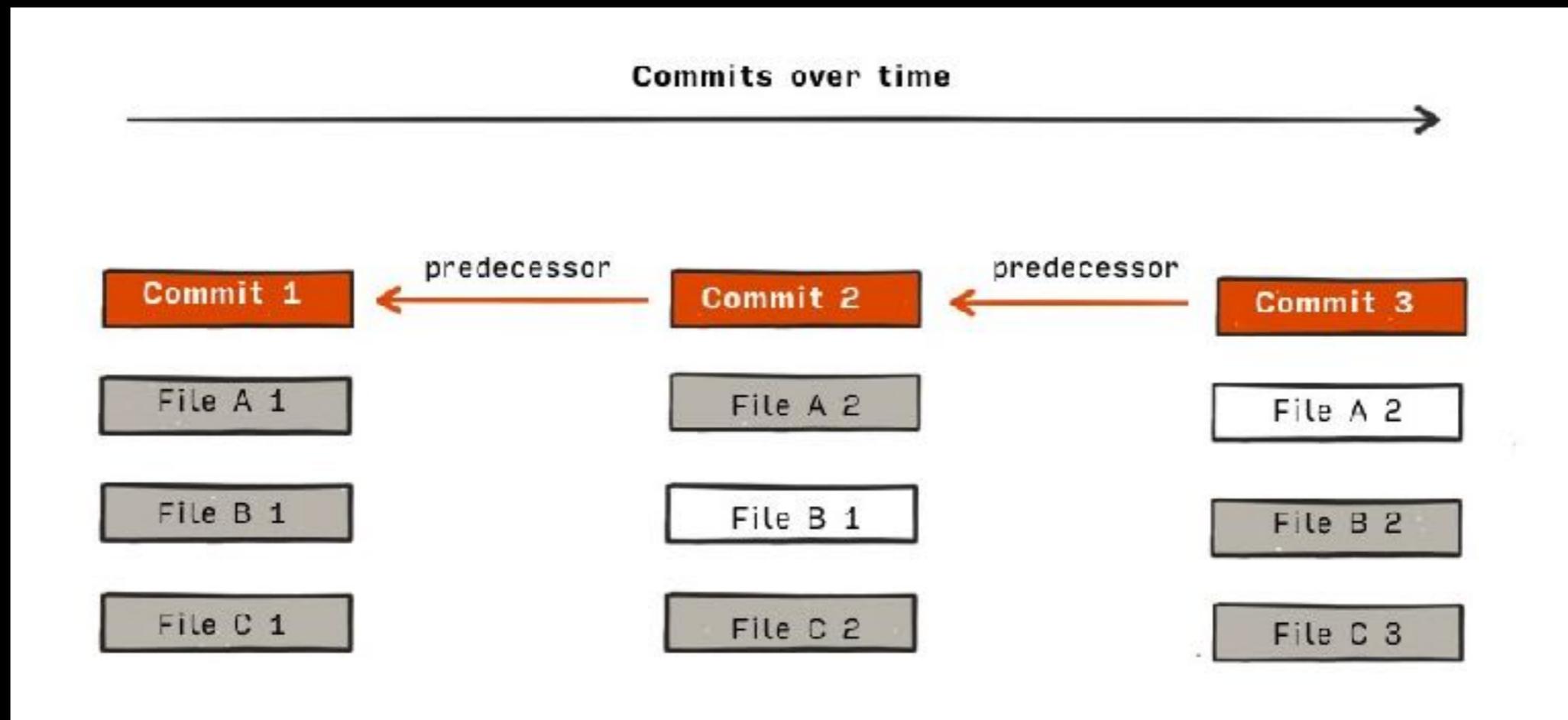
Git

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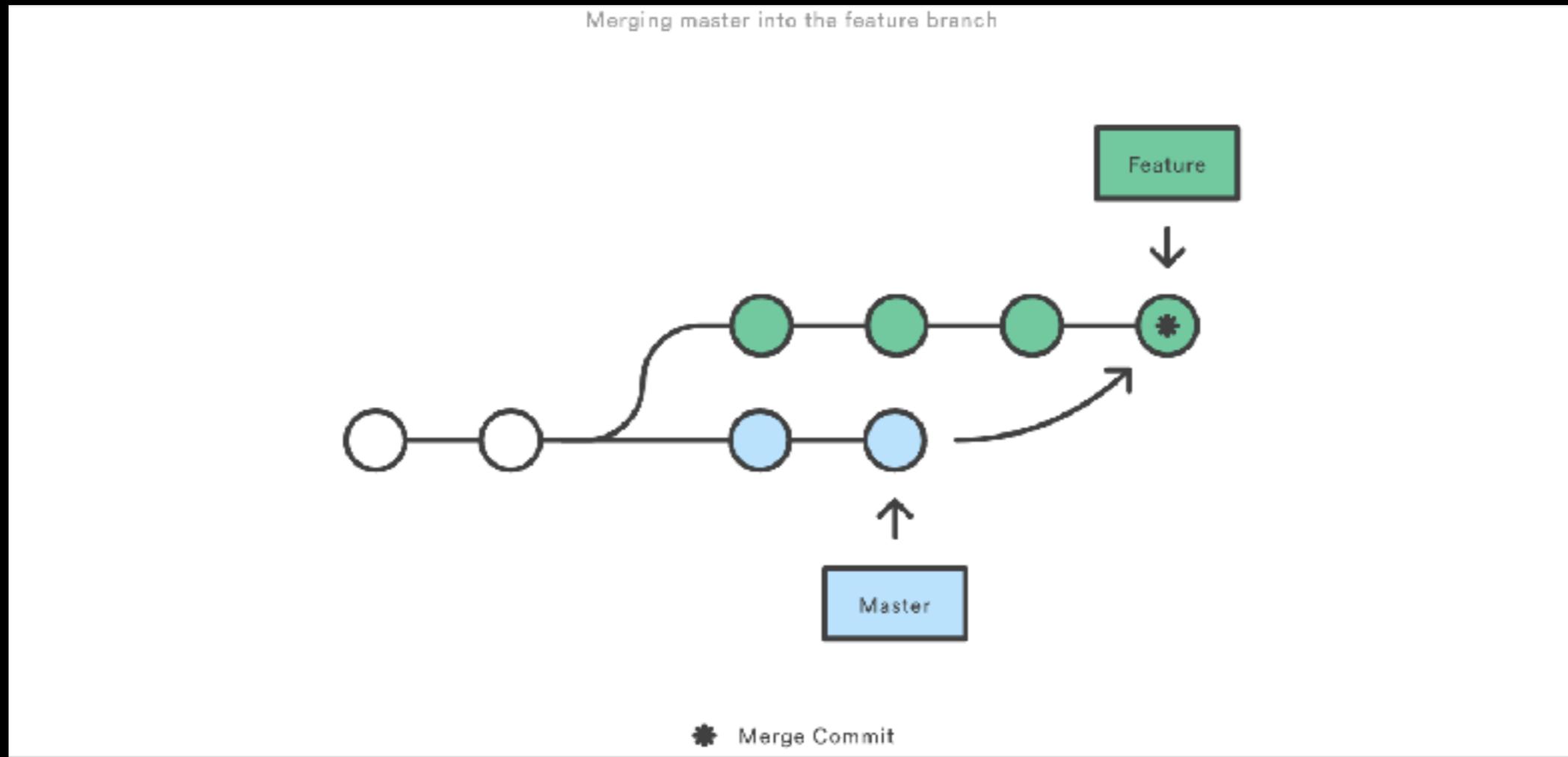
Reasons to Learn Git

- Version Control
- Collaboration and Experimentation
- Industry Standard

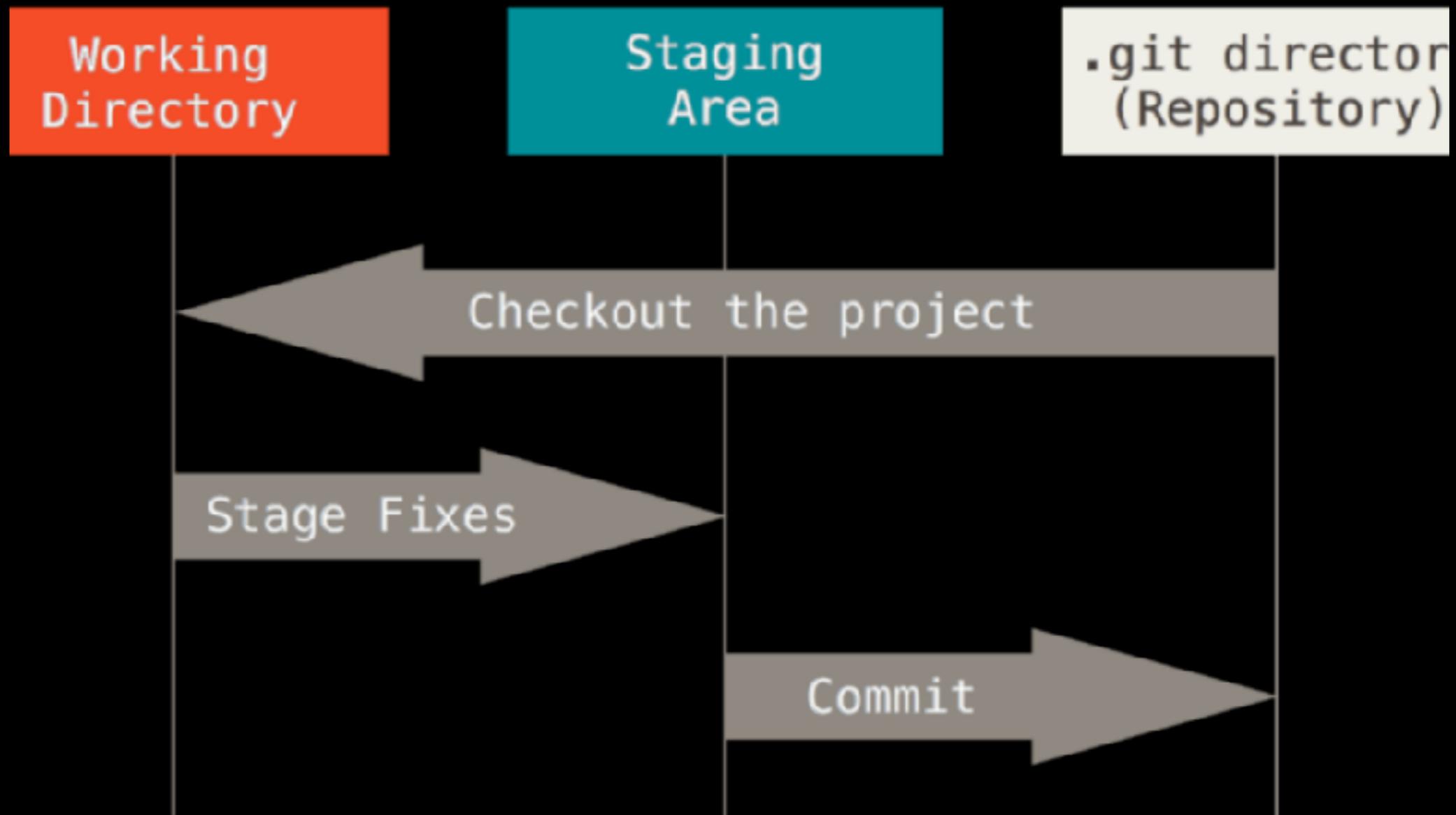
Version Control

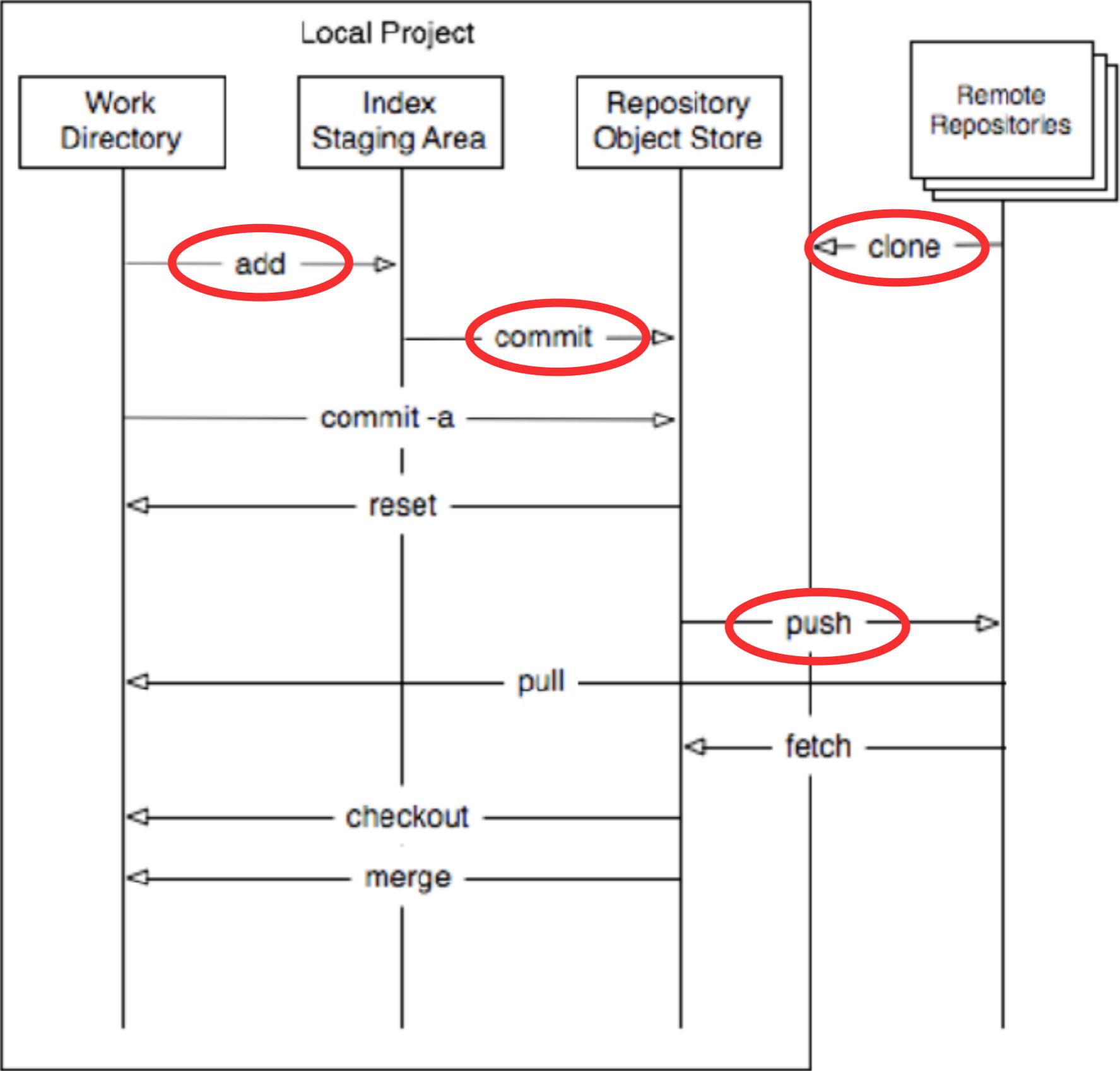


Collaboration and Experimentation



Understanding Git





Important Commands

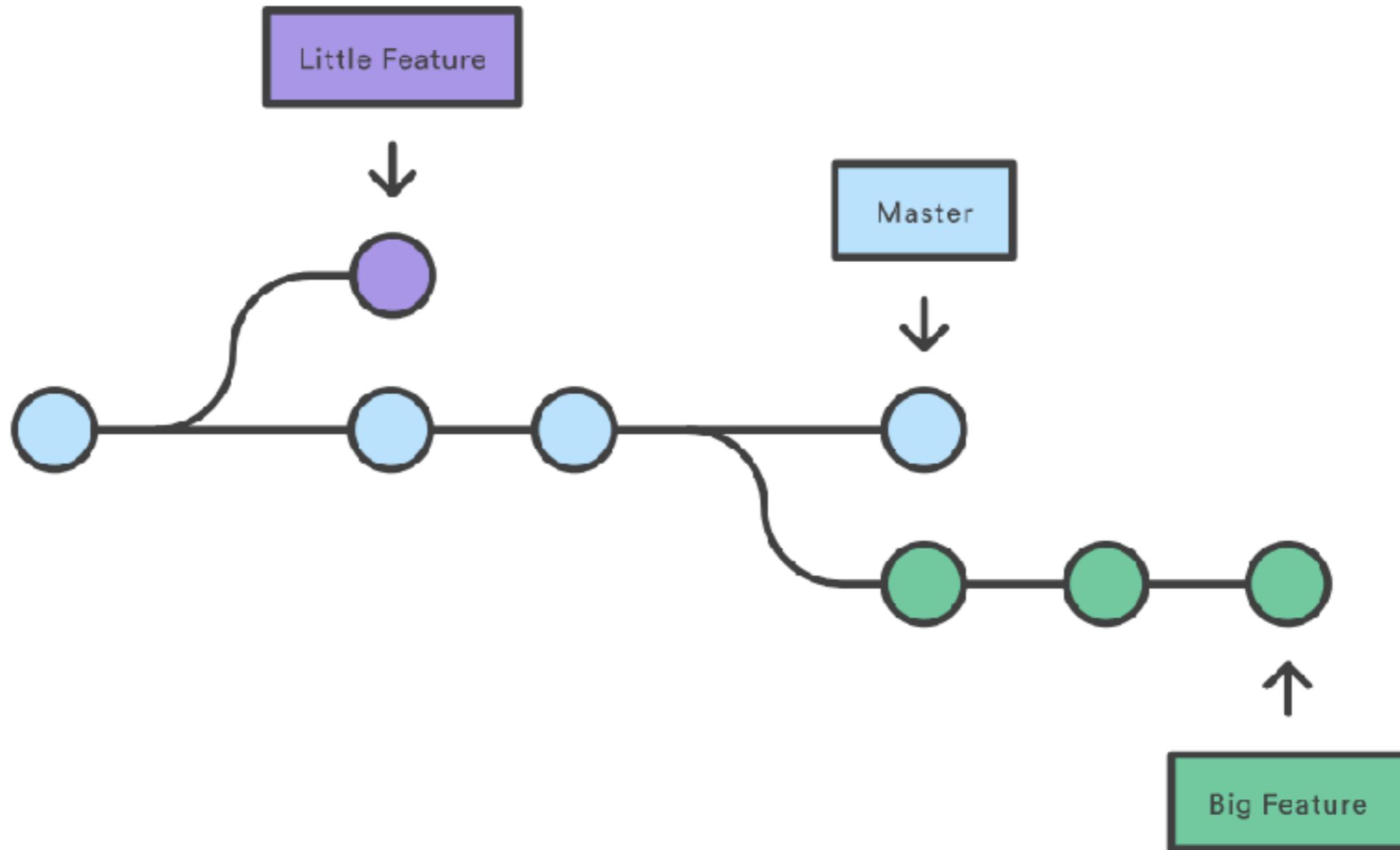
- `git status` — See which files are in which area (untracked, staged, committed)
- `git log` — see a history of the commits or “snapshots”
- `git checkout <commit> <filename>` — go back to a previous version of the file
- `git revert` — go back to a previous commit (by creating a new commit)
- `git reset` — go back to a previous commit (by erasing a commit)

GitHub

Breakout #1: Basic Git

- “Fork” the repository <https://github.com/hljames/git-seminar>
- Change the name of the repo to git-seminar-`<your_name>`
- In IDE “git clone `<url_of_your_new_repo>`”
- Add some CSS styling
- Add the file, commit the change, and push
- View the result on GitHub

Branching



Important Commands

- `git branch` — See all branches
- `git checkout -b <name_of_new_branch>` — create a new branch and switch to that branch
- `git checkout <branch_name>` — switch to another branch
- `git merge <branch_name>` — merge your current branch and the branch specified

Merge Conflicts

```
Terminal — zsh — 80x24
mergeTest % git merge fr
Auto-merging Greetings.txt
CONFLICT (content): Merge conflict in Greetings.txt
Auto-merging Partings.txt
CONFLICT (content): Merge conflict in Partings.txt
Automatic merge failed; fix conflicts and then commit the result.
mergeTest % █
```

```
1 <<<<<<< HEAD
2
3 Here is the original change.
4 =====
5 Here is the modified change.
6 >>>>>>> 58326c301d09b58f3ac23d616e73f7b478424cc5
7
```

Breakout #2: Merge Conflicts and Branching

- One partner should form the team (Settings > Collaborators)
- The partner added should git clone <url of repo>
- Create profile pages for each team member using branches, then merge the branches
- Both team members edit code.html
- git add, commit, and push — the second partner should pull before pushing
- Work together to resolve any merge conflicts
- View result on GitHub