

git and GitHub - seminar 1

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Resources

<https://git-scm.com/book/en/v2/>

<https://www.atlassian.com/git/tutorials/>

<https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet>

What is git?

A version control system

What is version control?

The **correct** solution to a common problem:

L^AT_EX

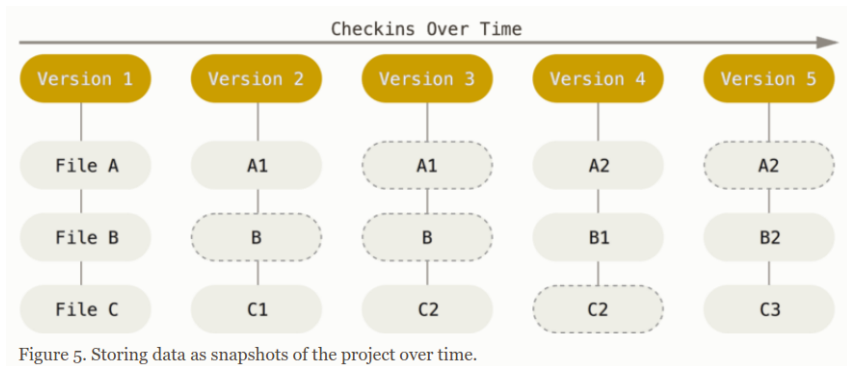
Oh no!
My code doesn't work anymore!
It worked perfectly last Monday!



What is GitHub?

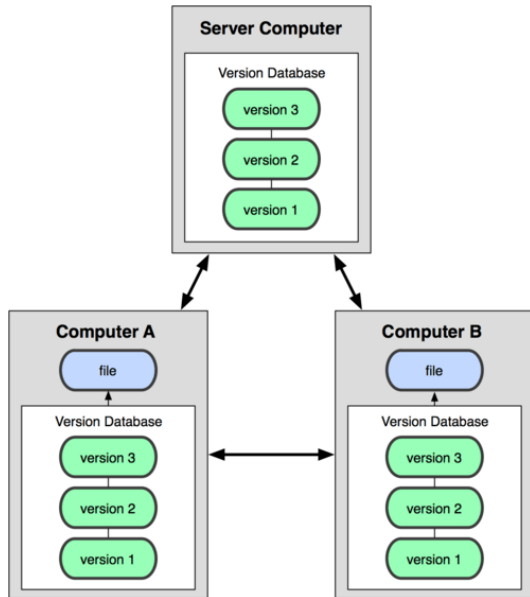
An online service to host **git** repositories (and a with a lot of services to manage code projects)

Version control the git way



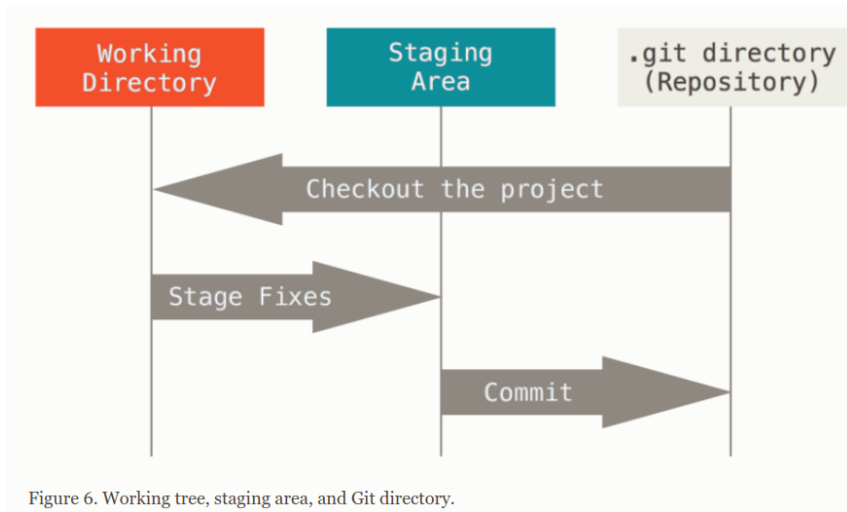
Version control the git way

It is **distributed**!



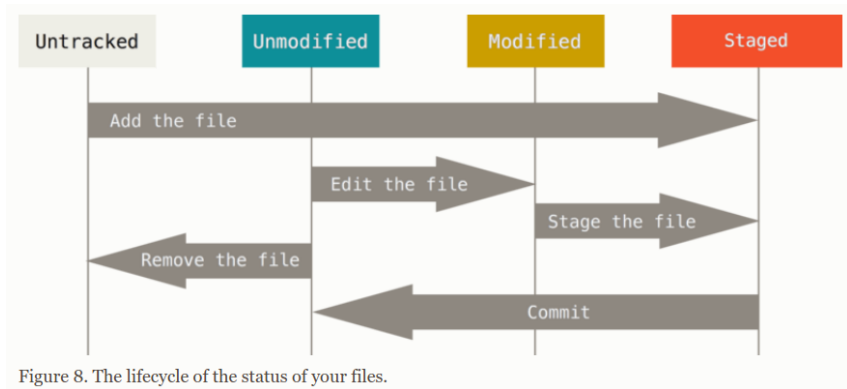
Let's start locally

The three states in your local **git** repository



Let's start locally

The life of a file in **git**



Let's start locally

Goal: Understand local workflow

1. Create a repository
2. Add and commit some files
3. Fix bad commits
4. Create a branch, then merge

Let's go online

Goal: Understand online/collaborative workflow

1. Clone a repository
2. Create a branch to work on
3. Pull in upstream changes
4. Merge/rebase
5. Push to online repository

(Re)sources

- ▶ <https://git-scm.com/book/en/v2/>
- ▶ <https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet>