

git and GitHub an quick introduction

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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:

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

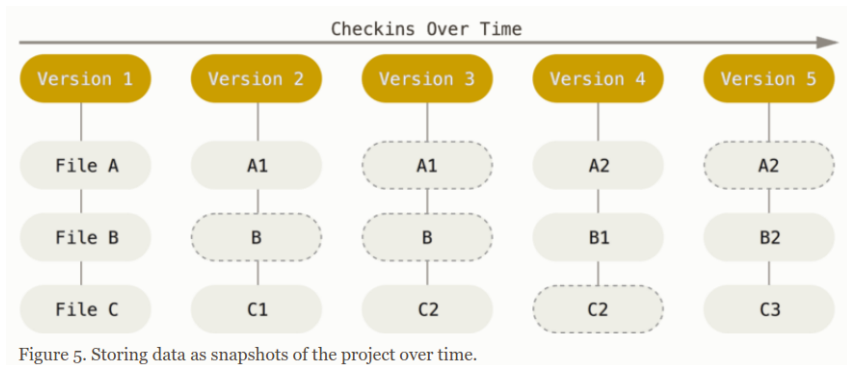


What is GitHub?

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

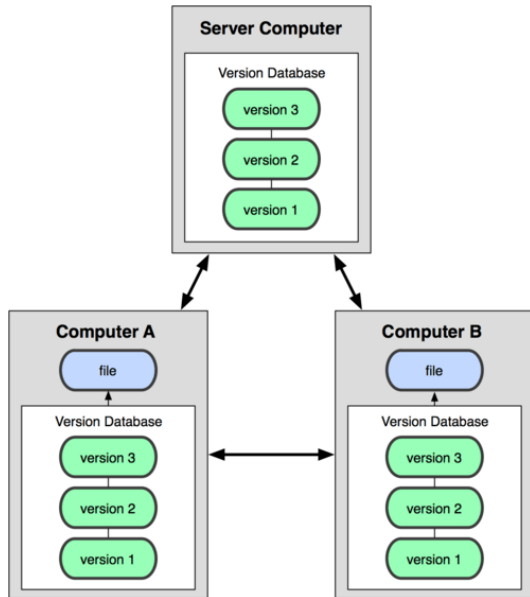
It is not the only option. There's also GitLab and Bitbucket, and others.

Version control the git way



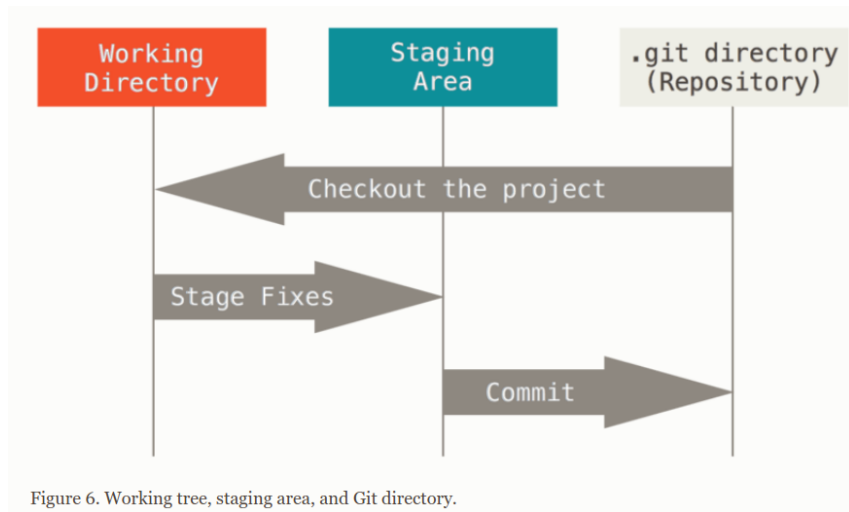
Version control the git way

It is **distributed**!



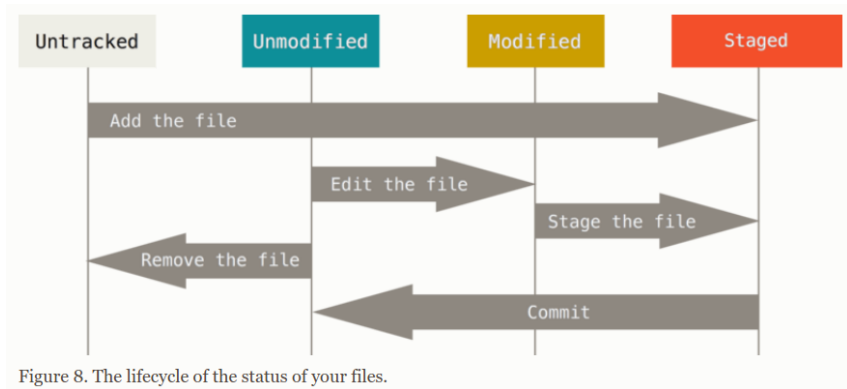
Let's start locally

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. 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>
- ▶ <https://github.com/k88hudson/git-flight-rules>