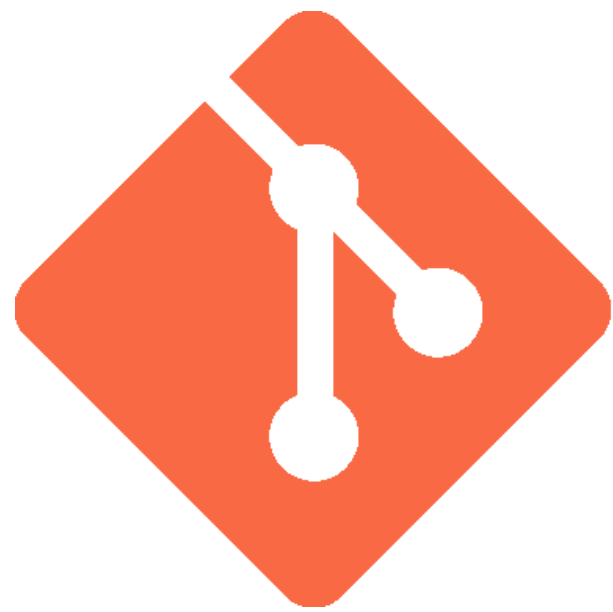


GIT / GITHUB

Introduction



git



GIT

Git is a software for versioning code created by Linus Torvalds for Linux kernel development in 2005. It has since become one of the most widely adopted version control systems for software development. Git is free software distributed under the terms of the GNU General Public License.

VERSIONING

Versioning softwares can follow the growth of a text file line by line.

- It follows the evolution of your source files and keep old versions of them
- It saves who has done what and why.
- If two people work in the same time on the same code, it could merge their modifications and avoid that the work of one is deleted.

So git has two main utilities:

- Following the evolution of a source code. Save modification on each file, and can go back if there are bugs.
- Working together, safe to not delete the work of the others, with merge option.

GITHUB

Github is a [web hosting service using Git](#).

In addition to git, it provides access control and [several collaboration features](#) such as bug tracking, feature requests, task management, and wikis for every project. GitHub offers both plans for private repositories and free accounts, which are usually used to host [open-source software projects](#). It's the most popular and the largest host of source code in the world.

GITHUB VOCABULARY

Repository

Like a project folder. A repository contains all of the project files (including documentation), and stores each file's revision history.

GITHUB VOCABULARY

Remote

This is the version of something that is hosted on a server (here Github). It can be connected to local clones so that changes can be synced.

GITHUB VOCABULARY

Clone

A clone is a copy of a repository that lives on your computer instead of on a website's server. With your clone you can edit the files and use Git to keep track of your changes without having to be online. It is, however, connected to the remote version so that changes can be synced between the two. You can push your local changes to the remote to keep them synced when you're online.

GITHUB VOCABULARY

Commit

A commit is an individual change to a file (or set of files). It's like when you save a file, except with Git, every time you save it creates a unique ID that allows you to keep record of what changes were made when and by who. Commits usually contain a commit message which is a brief description of what changes were made.

GITHUB VOCABULARY

Push

Pushing refers to sending your committed changes to a remote repository such as GitHub.

GITHUB VOCABULARY

Fetch

Fetching refers to getting the latest changes from an online repository without merging them in. Once these changes are fetched you can compare them to your local repository.

GITHUB VOCABULARY

Pull

Pull refers to when you are fetching in changes and merging them. For instance, if someone has edited the remote file you're both working on, you'll want to pull in those changes to your local copy so that it's up to date.

GITHUB VOCABULARY

Issue

Issues are suggested improvements, tasks or questions related to the repository. Issues can be created by anyone (for public repositories), and are moderated by repository collaborators. Each issue contains its own discussion forum, can be labeled and assigned to a user. Issue can be link to commit ID.

GITHUB VOCABULARY

Fork

A fork is a personal copy of another user's repository that lives on your account. Forks allow you to freely make changes to a project without affecting the original. Forks remain attached to the original, allowing you to submit a pull request to the original's author to update with your changes. You can also keep your fork up to date by pulling in updates from the original.

HEY BABY

**WANNA FORK ME ON
GITHUB?**

GITHUB VOCABULARY

Typic Git sentence:

You are going to clone the class repository, add your sketches to your local repository, commit your changes, and push it to the distant repository

Github Glossary:

<https://help.github.com/articles/github-glossary/>

INSTALLING GIT

<http://sourceforge.net/projects/git-osx-installer/>

RESSOURCES / LINKS

Git command cheet sheat:

<http://portfolio.newschool.edu/creativityandcomputation/2015/09/06/git-github-cheat-sheet/>

Great tutorial to learn Git in command line:

<https://try.github.io/levels/1/challenges/1>

Markdown Synthax:

<http://daringfireball.net/projects/markdown/syntax>

Diff Raphaël Bastide project

<http://raphaelbastide.com/diff/>