

Small overview about the functions of git and the most used commands.

All covered commands start with git

Getting Started

init

initialize a repository

optional flag: `--bare` causing to have a repository without a working tree where you push from other repositories

clone 'url'

calls `init` but copies an existing repository

remote add origin 'url'

specify a remote repository electively on a website like `github.com` or `gitlab.com`

config --global user.name "Name"

sets an username for all local git repositories

config --global user.email E-mail

sets an E-Mail-address for all local git repositories

config --list

shows all set configurations for the called repository

The ".gitignore" file

file to exclude specific file types from being tracked

Basic commands

status

gives informations about the current working tree, as un-/staged files and branch

add 'filename'/'path'

add a file to index

optional: by `'*'` adding all tracked files

commit

commit current contents of index. You will be asked for a commit-message in which you describe changes

common way: `-m " 'commit message' "` - one line commit

fetch

downloads from remote without any merges on local files

pull

download the newest commit from remote and tries to merge conflicts automatically

push

upload the newest commit to remote

checkout

switches branches if appended by `'branchname'`
or: removes a staged file from commit if appended by `'filename'`

branch

creates a new branch pointing on the same commit as the master
used for having a independent working tree, i.e. for an experimental build

log

information about the last commits
optional: `--stat` gives detailed information of commits as changed lines per file

merge

Advanced/Specific commands

Some commands you probably only need in a very distinct situation

update-index --assume-unchanged 'filename'

in case to untrack a file which already has been added to the git repository