



Git Glossary

General

git

A free and open-source file versioning system

GitHub

A website for hosting and managing git repositories

Branches

Branch

An alternative version of the git repository

Checkout

Switch to a different state of the repository. Updates all the files to match their versions in the selected commit or branch

Merge

Transfer the changes made in one branch to another branch.

Merge conflict

When the two branches in a merge have conflicting changes. The conflicts must be resolved by choosing one of the versions before completing the merge.

Pull request (or PR)

Request to merge a branch into another branch. Must be reviewed and approved by an admin of the GitHub repository.

File Management

Stage (or Add)

Add a new, edited or deleted file to the git index, to be included in the next commit

Commit

Add all staged files to the git history. Commits are identified by a unique hash and a commit message, which describes what changes were made.

Online syncing

Push

Send local commits to an online repository (e.g. GitHub)

Pull

Synchronise the local git repository with an online repository

Fetch

Retrieve the latest file history from an online repository, without syncing the files

Clone

Create a local copy of an online repository

Fork

Create an independent copy of an existing online repository

Repository files

Readme

A general description of the repository, including its purpose, how to use the code, and who the authors are (with contact information). Written in markdown format.

.gitignore

A list of files that should *not* be tracked by git. Use wildcards (*) to match patterns, e.g. *.Rproj

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