

# Git

# Grundlagenhandbuch

- [Git Commands](#)

# Git Commands

## Git Commands (common)

Command	Description
<code>git help</code>	Show help information about git commands
<code>git init</code>	Init new git project in current folder (folder needs to be empty)
<code>git clone git@github.com:myusername/myrepositoryname. git</code>	Clone a git repository from github.com
<code>git add --all</code>	Stage all files (or <code>git add file.txt` for adding a single file)</code>
<code>git commit -m "my message"</code>	Create a commit of your stages files (do not forget to stage your files/changes before that, e.g.: <code>git add --all`)</code>
<code>git pull</code>	Pull updates from remote to current branch
<code>git push</code>	Push your commits to remote repository
<code>git push -u origin master</code>	Push your commits to (new) remote repository and set local branch to track remote branch upstream (-u is equal to --set-upstream). Useful if you don't have any upstream set up yet.
<code>git push --follow-tags</code>	Push your commits + tags
<code>git status</code>	Show status of unstaged files, project info, branch info, ...
<code>git branch</code>	Show all git branches (option -a for showing remotes too)

<code>git branch mynewbranch</code>	Create a new branch
<code>git checkout myotherbranch</code>	Switch to another git branch
<code>git log</code>	Show latest git commits and messages (or "git show")
<code>git fetch --all</code>	Fetch from all remote repositories
<code>git tag -a v0.1.0</code>	Tag current as "v0.1.0" (or `git tag -am "My Release Message" v0.1.0`). You can use `git push --follow-tags` to push all your tags to the remote.
<code>git tag --delete v0.1.0</code>	Remove Tag "v0.1.0"
<code>git revert commitHash</code>	Revert changes of a specific commit

## Git Commands (advanced)

Command	Description
<code>git stash --include-untracked</code>	Save all changes to the stash
<code>git stash --include-untracked -m "stashname"</code>	Save all changes to the stash with a name
<code>git stash list</code>	Show all saved stashes
<code>git stashpop 0</code>	Apply the latest stash + remove it from the stash list
<code>git stash apply 0</code>	Apply the latest stash
<code>git stash drop 0</code>	Remove latest stash from stash list
<code>git stash clear</code>	Remove all stash items
<code>git blame pathtomyfile.txt</code>	Show information who to blame for a file change
<code>git diff</code>	Show changes between two commits

<code>git grep "text-to-search"</code>	Search for a specific string in commits
<code>git format-patch -1 &lt;commitID&gt;</code>	Create a patch of a specific commit
<code>git apply &lt;patchfile&gt;</code>	Apply a patch
<code>git bisect start</code>	Start Bugfinding / Begin using the git bisect command
<code>git bisect good</code>	Identify if a commit is "good", without the bug
<code>git bisect bad</code>	Identify if a commit is "bad", with the bug
<code>git bisect reset</code>	Return to original head
<code>git bisect log</code>	Displays commits you've identified as "good" or "bad"
<code>git bisect visualize</code>	View commits that have not yet been checked
<pre># Set a new remote upstream and push changes/commits git remote add origin git@github.com:username/repository-name.git git push -u origin master</pre>	<ol style="list-style-type: none"> <li>1. Command - Set a remote (if you don't have any) to your local branch</li> <li>2. Command - Push changes/commits to this new remote branch (-u is equal to --set-upstream)</li> </ol>