



Git Command

Setup

- check version
`git --version`
- setup user name
`git config --global user.name "first last"`
- setup user email
`git config --global user.email "email@example.com"`
- check status
`git status`

Local Repo

- create new repo inside current directory
`git init`
- add new file `git add <filename>`
- add all files in folder `git add .`
- shortcut for remove file `git rm <filename>`
- shortcut for move/rename file
`git mv <filename>`
- unstage file `git reset <filename>`
or `git restore --staged <filename>`
- commit file with **commit message**
`git commit -m <commit message>`
- checkout with **commit reference**
`git checkout <commit reference>`
- discard change `git restore <filename>`
- restore file from specific commit
`git restore --source=<commit reference> <filename>`

Type of Change

- **[A]** Add
- **[M]** Modify
- **[R]** Move/Rename
- **[D]** Delete

Commit Reference

- Commit ID
- HEAD
- Tag
- Branch

Branching

- create a new branch at current commit
`git branch <branch name>`
+ switch to new branch
`git checkout <branch name>`
+ recheck branch `git status`
- [popular] create a branch and switch to it
`git checkout -b <new branch name>`
- list local branch `git branch`
- rename current branch
`git branch -m <old branch name> <new branch name>`
- remove branch with recheck this branch is merged
`git branch -d <branch name>`
- hard remove branch
`git branch -D <branch name>`
- merge branch
`git merge <incoming branch name>`

Remote Repo: sync commands

- setup upstream branch with setup current branch
`git branch --set-upstream-to <remote branch>`
- setup upstream branch with setup current branch and upload change to remote repo
`git push -u <remote name> <remote branch>`
- download change from remote repo `git fetch`
- git fetch and git merge with current branch `git pull`
- update change to remote `git push`
if have an update, pull it before because maybe you found conflict
- clone repo `git clone <url>`
 - `git clone <url>` → `git branch -r` → `git checkout <remote branch>`

Remote Repo: manage repo

- add remote repo in your device
`git remote add <remote name> <url>`
default remote name is origin
- list remote repo `git remote`
- change url of remote repo
`git remote set-url <remote name> <url>`
- check this git is connected with url
`git remote get-url <remote name>`

Stash: first-in-last-out

- stash change `git stash`
for include untrack file
`git stash --include-untracked`
- apply latest stash and remove it
`git stash pop`
- maybe: apply latest stash
`git stash apply`
- maybe: see all the stash
`git stash list`

Fixed error in previous version

- git reset: after use this, get untracked files
`git reset <commit id>`
- git reset: cancel merged commit
`git reset <commit id> hard`
- git revert
`git revert <commit id>`
- git revert with 1 file
`git revert <commit id> -no-commit`
- git cherry-pick
`git cherry-pick <commit id>`

