layout: post title: Git Cheatsheet category: ComputerScience tags: [Linux]

A useful and brief Git cheatsheet.

1.Initialization	
Init a local repo	git init
Associate it with a Github repo	git remote add origin <url>
Change the URL	git remote set-url origin <url>
Download a remote repo	git clone <url> <path>
Check the URL	git remote -v
2.Update	
Track all changes	git add .
Delete files	git rm <filename>
Commit all untracked changes	git commit -am <commit message>
Push to remote repo	git push origin <branch name>
Update to local repo	git pull
3.Branch Management	
Create a branch	git branch <branch name>
Switch to branch	git checkout <branch name>
Create and switch to a branch	git checkout -b <branch name>
Check all branches	git branch
Merge a branch back into the master branch	git checkout master && git merge <branch name>
Update a branch from remote repo	git pull orgin <branch name>
Delete a local branch	git branch -d <branch name>
Delete a remote branch	git push origin --delete <branch name>
4.Log and History	
See the commit history	git log
Show details of a specific commit	git show <commit id>
Show changes of a file in a specific commit	git show <commit id> <file name>
Checkout form a previous commit	git checkout <commit code>
Force pushing	git push -f origin master

Combine n local commits	git rebase -i HEAD~<n>
Change commit message	git commit -amend
Check changed files	git status
Compare changed files	git diff --stat
5.Search in the repo	
Show the line number of the keyword	git grep -n <keyword>
Show the appearence number of the keyword	git grep -c <keyword>
6.Rolling back	
Roll back to a commit locally	git reset --hard <commit-id>
Roll back to the last (n - 1) commit locally	git reset --hard HEAD~<n>
Roll back to a commit remotely (a backup may be necessary.)	git checkout <branch name>
	git pull
	git reset --hard <commit id>
	git push origin --delete <branch name>
	git push origin <branch name>