

yet another git cheat sheet (using github)

set username	git config --global user.name "<username>"
set email	git config --global user.email <email-address>
make git case insensitive	git config --global core.ignorecase true
initialize local repo	git init
add a remote (use 'origin' for remote name)	git remote add <remote-name> git@github.com:<account-name>/<repo-name>.git
add single file	git add <filename>
add all files not in index	git add .
commit all changes to index	git commit -a
push local to remote & track	git push -u <remote-name> <branch-name>
clone repo for first time	git clone git@github.com:<account-name>/<repo-name>.git
switch branch	git checkout <branch-name>
checkout and track a remote	git branch -f <local-name> <remote-name>/<branch-name>
pull from remote branch	pull git pull origin <branch-name>
push to remote branch	git push origin <branch-name>
delete remote branch	git push origin :<branch-name>
delete local branch	git branch -d <branch-name>
create branch	git checkout -b <new-branch-name> <branch-to-branch-off>
rename branch	git branch -m <old-branch-name> <new-branch-name>
update latest from remote	git remote update
unstage committed changes	git reset HEAD
unstage previous n commits	git reset HEAD~n
view staged changes	git status
lose changes to working copy	git reset --hard
stash changes	git stash
pop stashed changes	git stash pop
clean everything (ignored, dirs, files)	git clean -xdf
who changed file contents	git blame <file>
view remote branches	git branch -r
revert changes to file	git checkout -- <file> git checkout HEAD <file>
undo conflict resolution	git checkout -m <file>
un-stage single file commit	git reset HEAD <file>

cherry pick from a local branch (e.g. if committed to a wrong branch)

```
//get the sha of the commit
git checkout <correct-branch-name>
git cherry-pick <sha>
git push origin <correct-branch-name>
git checkout <incorrect-branch-name>
git reset -hard HEAD^
git push origin <incorrect-branch-name>
```

interactive add

```
git add -i
2 - update index with changes to existing files
4 - add untracked files according to selection
```

visualize index

```
git gui
```

visualize log/history

```
gitk
```

pull historical version of branch into another (e.g. known good integration into master)

```
git checkout <sha> //now in detached head state
git checkout -b <branch-name> //branch based on <sha>
git checkout master //for example
git pull <temporary-branch-name>
git push origin master
git branch -d <temporary-branch-name>
```

add submodule

```
git submodule add git@github.com:<account-name>/<repo-name>.git <location>
```

commit as amend to the previous commit

```
git commit -a --amend
//then "i" for interactive ":w" to save, and ":q" to quit
```

force local to track remote

```
git branch set-upstream origin/branch-to-track
```

differences between branches

```
git diff --name-status master..branch
```

list commits to branch

```
git log
```

check the result of a merge (before commit)

```
git pull <remote-name> //bring yourself up-to-date
git merge <branch-name> --no-commit --no-ff
```

prune knowledge of deleted remotes

```
git remote prune <remote-name> //e.g. 'origin'
git gc
```

find in files

```
git grep -n <string-to-find>
```

tag a branch

```
git tag -a <branch-name> -m "<message>"
```

“chop the head off a branch”

NOTE: this adds a commit with the tree at the state it was at the given sha. It doesn't actually chop the head off.

```
//id the sha of the last good commit
git reset <sha> //reset index to the desired tree
git reset --soft HEAD@{1} //move branch pointer to previous HEAD
git commit -m "<message>" //e.g. “revert to <sha>”
git reset --hard //reset working copy to reflect new commit
```

add color

```
git config color.ui true
```

add alias

```
git config --global alias.myalias '<actual-command>'
```