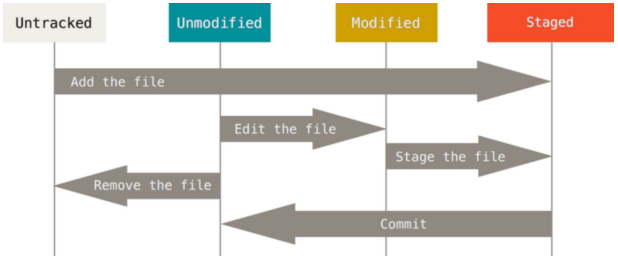
Git Cheat Sheet

Workflow



Start a new repository

Command	Description
`git init`	Create a new repository in the current directory
`git clone <url> [<dir>]`	Clone a remote repository

History

Command	Description
`git log`	Show commit logs
`git log --oneline`	Show commit logs with one line per commit
`git show`	Show the changes of the last commit
`git shortlog`	Summarize git log output by author
`git blame <file>`	Show who changed which line in a file

Local changes

Command	Description
`git status`	List which files are staged, unstaged, and untracked
`git add <file>`	Add a file to the staging area
`git add -p`	Interactively choose hunks of a file to add to the staging area

Local changes (cont.)

Command	Description
`git diff`	Show unstaged changes
`git diff --staged`	Show staged changes
`git commit`	Commit staged changes using the default editor
`git commit -m <message>`	Commit staged changes with a message provided on the command line
`git commit --amend`	Amend the last commit
`git reset HEAD <file>`	Unstage a file
`git checkout -- <file>`	Discard local changes in a file

Branches

Command	Description
`git branch`	List local branches
`git branch -r`	List remote branches
`git branch <branch>`	Create a new branch
`git checkout <branch>`	Switch to a branch
`git checkout -b <branch>`	Create a new branch and switch to it
`git merge <branch>`	Merge a branch into the active branch
`git branch -d <branch>`	Delete a branch

Tags

Command	Description
`git tag`	List tags
`git tag <tag>`	Create a tag
`git tag -a <tag>`	Create an annotated tag
`git tag -s <tag>`	Create a GPG-signed tag
`git tag -d <tag>`	Delete a tag
`git show <tag>`	Show the tag data

Collaboration

Command	Description
`git remote -v`	List remote repositories
`git remote add <name> <url>`	Add a new remote repository
`git fetch <remote>`	Download all changes from a remote repository but don't integrate them
`git pull <remote>`	Download changes and directly merge/integrate them
`git pull <remote> <branch>`	Download changes and directly merge/integrate a remote branch
`git push <remote> <branch>`	Upload local changes to a remote repository
`git push <remote> --delete <branch>`	Delete a remote branch
`git push <remote> --tags`	Push tags to a remote repository

Stashing

Command	Description
`git stash`	Stash the changes in a dirty working directory away
`git stash list`	List all stashes
`git stash pop`	Apply the last stash and delete it
`git stash apply`	Apply the last stash but don't delete it
`git stash drop`	Delete the last stash
`git stash clear`	Delete all stashes

Writing good commit messages

1. Separate subject from body with a blank line
2. Limit the subject line to 50 characters
3. Capitalize the subject line
4. Do not end the subject line with a period
5. Use the imperative mood in the subject line
6. Wrap the body at 72 characters
7. Use the body to explain what and why vs. how