Git Cheat Sheet

Create

From existing data
cd ~/projects/myproject
git init
git add .

From existing repo
git clone ~/existing/repo ~/new/repo
git clone you@host.org:dir/project.git
            default protocol is **ssh**

Remote repository for existing local data
mkdir repo.git && cd repo.git
git init --bare [--shared=group]
            see **help** for info

Update

Fetch latest changes from origin
git fetch
            this does not merge them
Pull latest changes from origin
git pull
            does a fetch followed by a merge
Apply a patch that someone sent you
git am -3 patch.mbox
            In case of conflict, resolve the conflict and
git am --resolve

Publish

Commit all local changes
git commit -a

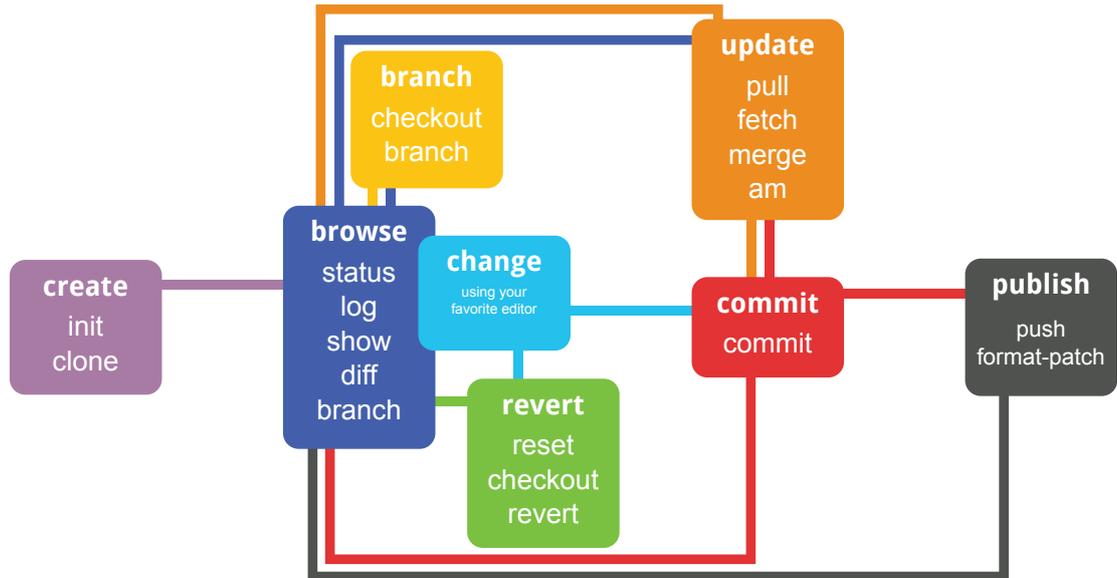Prepare a patch for other developpers
git format-patch origin

Push changes to origin
git push [origin] [branch]

Make a version or milestone
git tag <version_name>

Workflow

branch
checkout
branch

update
pull
fetch
merge
am

browse
status
log
show
diff
branch

change
using your
favorite editor

create
init
clone

commit
commit

publish
push
format-patch

revert
reset
checkout
revert

Branch

Switch to the BRANCH branch
git checkout <BRANCH>
Merge branch B1 into branch B2
git checkout <B2>
git merge <B1>
Create branch based on HEAD
git branch <BRANCH>
Create branch based on another
git checkout <new> <base>
Delete a branch
git branch -d <branch>

master is the default development branch
origin is the default upstream repository
HEAD is the current branch

Revert

Return to the last committed state
git checkout -f | git reset --hard
            ⚠ you cannot undo a hard reset
Revert the last commit
git revert HEAD
            Creates a new commit
Revert specific commit
git revert $id
            Creates a new commit
Fix the last commit
git commit -a --amend
            after editing the broken files
Checkout the ID version of a file
git checkout <ID> <file>

Show

Files changed in working directory
git status

Changes to tracked files
git diff

Changes between ID1 and ID2
git diff <ID1> <ID2>

History of changes
git log

History of changes with files changed
git whatchanged

Who changed what and when in a file
git blame <file>

A commit identified by ID
git show <ID>

A specific file from a specific ID
git diff <ID>:<FILE>

All local branches
git branch
            star "*" marks the current branch
Search for patterns
git grep <pattern> [path]

WALL-SKILLS

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