Installation and download

GitHub for Windows

htps://windows.github.com

GitHub for Mac

htps://mac.github.com

For Linux and Solaris platforms, the latest release is available on the official Git web site.

Git for All Platforms

htp://git-scm.com

* SETUP

Configuring user information used across all local repositories.

git config --global user.name “[firstname lastname]”

set a name that is identifiable for credit when review version history.

git config --global user.email “[valid-email]”

set an email address that will be associated with each history marker.

git config --global color.ui auto

set automatic command line coloring for Git for easy reviewing.

* SETUP & INIT

Configuring user information, initializing and cloning repositories.

git init

initialize an existing directory as a Git repository.

git clone [url]

retrieve an entire repository from a hosted location via URL.

* STAGE & SNAPSHOT

Working with snapshots and the Git staging area

git status

show modified files in working directory, staged for your next commit.

git add [file]

add a file as it looks now to your next commit (stage).

git reset [file]

unstage a file while retaining the changes in working directory.

git diff

diff of what is changed but not staged.

git diff --staged

diff of what is staged but not yet committed.

git commit -m “[descriptive message]”

commit your staged content as a new commit snapshot.

* BRANCH & MERGE

Isolating work in branches, changing context, and integrating changes.

git branch

list your branches. a \* will appear next to the currently active branch

git branch [branch-name]

create a new branch at the current commit.

git checkout

switch to another branch and check it out into your working directory.

git merge [branch]

merge the specified branch’s history into the current one.

git log

show all commits in the current branch’s history.

* SHARE & UPDATE

Retrieving updates from another repository and updating local repos

git remote add [alias] [url]

add a git URL as an alias.

git fetch [alias]

fetch down all the branches from that Git remote.

git merge [alias]/[branch]

merge a remote branch into your current branch to bring it up to date.

git push [alias] [branch]

Transmit local branch commits to the remote repository branch.

git pull

fetch and merge any commits from the tracking remote branch.

* INSPECT & COMPARE

Examining logs, diffs and object information

git log

show the commit history for the currently active branch.

git log branchB..branchA

show the commits on branchA that are not on branch.

git log --follow [file]

show the commits that changed file, even across renames.

git diff branchB...branchA

show the diff of what is in branchA that is not in branch.

git show [SHA]

show any object in Git in human-readable format.