GitHub Commands

•Set-up and Initialization:

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:

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:

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

•Inspect & Compare:

git log
show the commit history for the currently active branch
git log branchB..branchA
show the commits on branchA that are not on branchB
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 branchB
git show [SHA]
show any object in Git in human-readable format

•Tracking Path Changes:

git rm [file]
delete the file from project and stage the removal for commit
git mv [existing-path] [new-path]
change an existing file path and stage the move
git log --stat -M
show all commit logs with indication of any paths that moved

•Share & Update:

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

•Temporary Commits:

git stash
Save modified and staged changes
git stash list
list stack-order of stashed file changes
git stash pop
write working from top of stash stack
git stash drop
discard the changes from top of stash stack