GIT CHEAT SHEET

MAKE CHANGES

Review edits and craft a commit transaction

$ git status

Lists all new or modified files to be committed

$ git add [file]

Snapshots the file in preparation for versioning

$ git reset [file]

Unstages the file, but preserve its contents

$ git diff

Shows file diﬀerences not yet staged

$ git diff --staged

Shows file diﬀerences between staging and the last file version

$ git commit -m "[descriptive message]"

Records file snapshots permanently in version history

CONFIGURE TOOLING

Configure user information for all local repositories

$ git config --global user.name "[name]"

Sets the name you want attached to your commit transactions

$ git config --global user.email "[email address]"

Sets the email you want attached to your commit transactions

$ git config --global color.ui auto

Enables helpful colorization of command line output

CREATE REPOSITORIES

Start a new repository or obtain one from an existing URL

$ git init [project-name]

Creates a new local repository with the specified name

$ git clone [url]

Downloads a project and its entire version history

GROUP CHANGES

Name a series of commits and combine completed eﬀorts

$ git branch

Lists all local branches in the current repository

$ git branch [branch-name]

Creates a new branch

$ git checkout [branch-name]

Switches to the specified branch and updates the working directory

$ git merge [branch]

Combines the specified branch’s history into the current branch

$ git branch -d [branch-name]

Deletes the specified branch

Git is the open source distributed version control system that facilitates GitHub activities on your laptop or

desktop. This cheat sheet summarizes commonly used Git command line instructions for quick reference.

INSTALL GIT

GitHub provides desktop clients that include a graphical user

interface for the most common repository actions and an automati-

cally updating command line edition of Git for advanced scenarios.

GitHub for Windows

https://windows.github.com

GitHub for Mac

https://mac.github.com

Git distributions for Linux and POSIX systems are available on the

oﬃcial Git SCM web site.

Git for All Platforms

http://git-scm.com

V 1.1.1

training@github.com

training.github.com

Learn more about using GitHub and Git. Email the Training Team or visit

our web site for learning event schedules and private class availability.

GIT CHEAT SHEET

SYNCHRONIZE CHANGES

Register a repository bookmark and exchange version history

$ git fetch [bookmark]

Downloads all history from the repository bookmark

$ git merge [bookmark]/[branch]

Combines bookmark’s branch into current local branch

$ git push [alias] [branch]

Uploads all local branch commits to GitHub

$ git pull

Downloads bookmark history and incorporates changes

REFACTOR FILENAMES

Relocate and remove versioned files

$ git rm [file]

Deletes the file from the working directory and stages the deletion

$ git rm --cached [file]

Removes the file from version control but preserves the file locally

$ git mv [file-original] [file-renamed]

Changes the file name and prepares it for commit

SAVE FRAGMENTS

Shelve and restore incomplete changes

$ git stash

Temporarily stores all modified tracked files

$ git stash list

Lists all stashed changesets

$ git stash pop

Restores the most recently stashed files

$ git stash drop

Discards the most recently stashed changeset

REDO COMMITS

Erase mistakes and craft replacement history

$ git reset [commit]

Undoes all commits after [commit], preserving changes locally

$ git reset --hard [commit]

Discards all history and changes back to the specified commit

REVIEW HISTORY

Browse and inspect the evolution of project files

$ git log

Lists version history for the current branch

$ git log --follow [file]

Lists version history for a file, including renames

$ git diff [first-branch]...[second-branch]

Shows content diﬀerences between two branches

$ git show [commit]

Outputs metadata and content changes of the specified commit

SUPPRESS TRACKING

Exclude temporary files and paths

$ git ls-files --other --ignored --exclude-standard

Lists all ignored files in this project

\*.log

build/

temp-\*

A text file named .gitignore suppresses accidental versioning of

files and paths matching the specified patterns