GIT CHEAT SHEET

Getting Help

Git Command	What Does it Do?
git help	Get an overview of the help command and commonly used Git commands
git help [command]	Get help for a specific Git command.

Git Configuration

Git Command	What Does it Do?
git config --global user.name [name]	Configure the username for Git to use for the current logged in user.
git config --global user.email [email_address]	Configure the user email address for Git to use for the current logged in user.

Creating a Git Repository

Git Command	What Does it Do?
git init	Creates a Git repository in the current directory.
git init [folder]	Creates a new directory and Git repository.

Cloning a Git Repository

Git Command	What Does it Do?
git clone [git-url] [folder-name]	Clone a Git repository at [git-url] and place it in a new directory called [folder-name]

Viewing Project Status

Git Command	What Does it Do?
git status	View status information about your current Git repository.

Adding, Moving, and Removing Files

Git Command	What Does it Do?
git add [file]	Add a specific file to the Git staging area of your repository.
git add .	Add all new/modified files inside the current directory to the staging area of your repository.
git mv [original-file] [renamed-file]	Changes the file name and prepares it for commit.
git rm [file]	Deletes the file from the working directory and stages the delete.
git rm --cached [file]	Removes the file from version control but keeps the file locally.

Committing Changes

Git Command	What Does it Do?
git commit	Commits all changes from the Git staging area, and launches a text editor to create a commit message. Save and close the text editor to complete the commit.
git commit -m “My commit message”	Commits all changes from the Git staging area with the corresponding commit message.

Viewing Commit History

Git Command	What Does it Do?
git log	View a history of commits to the Git repository containing the author, date, and description of the commit.
git log [file]	View a history of commits to a specific file.
git blame [file]	See who changed what and when in a file.

Viewing Changes

Git Command	What Does it Do?
git diff	Shows the changes between the last commit and the current working tree. This will only show changes in files that have been added to the repository.

Git Branches

Git Command	What Does it Do?
git branch [branch]	Create a new branch (copy of the code) to use to develop a new feature or fix a bug.
git branch	Lists all of the available branches.
git checkout [branch]	Checks out an existing Git branch. This simply switches your code to a different Git branch.
git checkout -b [branch]	Creates a new Git branch and checks it out. This is a shortcut so you do not have to create the branch and check it out using two steps.
git merge [branch]	Merge [branch_name] into your currently checked out Git branch.
git mergetool	Opens up an external Diff viewer or merge tool for merging conflicts.

GIT CHEAT SHEET

Undoing Changes

Git Command	What Does it Do?
git reset [file]	Removes a single file from the Git staging area but keeps any changes to that file.
git reset	Removes all files from the Git staging area but keeps all changes to the files.
git reset --hard	Removes all files from the Git staging area and discards all changes to the files.
git clean -f	Remove untracked files from the current directory.
git clean -fd	Remove untracked files and untracked directories from the current directory.
git checkout [file]	Gets rid of your local changes to a file and instead checks out (or uses) the contents of the file from the last commit.
git revert [commit]	Provides a way to safely remove a previous commit. Git will automatically remove the changes, and then create a new commit. This way you still have a history of the change being removed.

Git Remotes

Git Command	What Does it Do?
git remote -v	Lists all currently configured remotes.
git remote show [remote]	Shows information about a specific Git remote.
git remote add [remote] [remote-url]	Adds a remote repository called [remote] located at [remote-url]. We can now push and pull from this repository (assuming we have permission).
git remote rm [remote]	Remove a Git remote from your current Git project.

Pushing and Pulling

Git Command	What Does it Do?
git push [remote] [branch]	Push branch called [branch] to the remote Git repository called [remote].
git push --tags	Push tags to the remote Git repository.
git fetch [remote]	Download all changes from [remote] but do not merge.
git pull [remote] [branch]	Download all changes from a [remote] [branch] and merge.

Example Git Workflows

Existing Repository with single branch

Step 1: Run **git pull** command to pull down any changes

Step 2: Make changes to files within the repository.

Step 3: Run **git add** command

Step 4: Run **git commit** command

Step 5: Run **git push** command to push to external repository

Existing Repository with multiple branches

Step 1: Run **git pull** command to pull down any changes

Step 2: Create new git branch by running **git branch** or **git checkout -b** command

Step 3: Make changes to files within the repository.

Step 3: Run **git add** command

Step 4: Run **git commit** command

Step 5: Run **git push** command to push to external repository

Step 6: Merge git branch using **git merge** command or external tool

Helpful Git Links

Git Homepage - http://git-scm.com

Git Online Cheatsheet - http://git-scm.com/docs

Github - http://github.com

Bitbucket - https://bitbucket.org

Unfuddle - http://unfuddle.com

Beenstalk - http://beanstalkapp.com

Repository Hosting - http://repositoryhosting.com