# Commands

# Git Setup

#### **Git Init**

Create an empty Git repository or reinitialize an existing one.

## Git config --global user.name <name>

Define the author name to be used for all commits by the current user.

## Git config --global user.email <email>

Define the author email to be used for all commits by the current user.

## Git Clone <url to remote repository>

Clone a remote repository into a local directory.

# Git Workflow

#### **Git Status**

List which files are staged, unstaged, and untracked.

#### **Git Diff**

Show unstaged changes between your index and working directory.

#### Git Diff -staged

Show what is staged but not yet committed to local repository

## Git Add < . > / <filename> / <directory>

Stage all changes < . > / in <directory> / or < filename > for the next commit.

# Git Commit -m "<commit message>"

Commit your staged content to the local repository

# Git Push <url to remote repository>

Push the branch to <remote>. Creates named branch in the remote repository if it doesn't exist.

# **Git Branches**

#### Git Branch <new branch name>

List all of the branches in your repository. Use < **new branch name** > to create a new branch.

#### Git Switch <br/> <br/> branch name>

Switch to the branch < branch name>.

#### Git Merge <br/> <br/> branch name>

Merge <br/>branch> into the current branch.

#### Git Checkout -b <br/>branch name>

Create and check out a new branch named **<br/>branch name>** into your working directory. Use the **-b flag** to checkout an existing branch.

#### Git Log

Display the entire commit history for the current branch.

Additional options:

-oneline : show commit properties in 1 line-all : show commit history for all branches

-graph : text-based graphical representation of the commit history

# Git Update

#### Git Remote add <name< <url>

Create a new connection to a remote repo.

After adding a remote, you can use <name> as a shortcut for <url> in other commands.

#### Git Fetch <br/> branch>

Fetches a specific **<branch>**, from the repo. Leave off **<branch>** to fetch all remote refs.

## Git Pull <remote>

Fetch the remote's copy of its current branch and immediately merge it into the local copy.

#### **Git Merge**

Join two or more development histories together.

# Git Rewrite history

#### Git Rebase <base>

Rebase the current branch onto **<base>**.

The **<base>** can be a commit ID, branch name, a tag, or a relative reference to HEAD.

#### Git Reset -hard <commit>

Clears the staging area, rewrite the working tree from the specified **<commit>**.

#### Git Commit –amend

Replace the last commit with the staged changes and last commit combined.

Use with nothing staged to edit the last commit's message.

#### Git Clean -n / -f

Shows which files would be removed from the working directory.

Use the **-f** flag in place of the **-n** flag to execute the clean.

## Git Cherry pick <name>

Apply the changes introduced by some existing commits.

#### Git Revert < commit>

Create a new commit that undoes all of the changes made in **<commit>**, then apply it to the current branch.

#### Git Stash

Stash the current state of the working directory so you can switch to another branch and come back later to re-stash your work and continue. All without committing or adding your work.