## **Installation & Configuration**

#### **Install Git**

http://git-scm.com

#### 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]

Sets the email you want attached to your commit transactions

\$ git config --global color.ui auto

Enables helpful colorization of command line output

# **Create a Repository**

Start a new repository or obtain one from an existing URL

\$ git init [project name]

Creates a new local repository

\$ git clone [url]

Downloads a project and its entire version history

#### **Supress tracking**

build/

\*.aux

A textfile named .gitignore suppresses accidental versioning of files and paths matching the specified patterns
Use <a href="https://www.gitignore.io/">https://www.gitignore.io/</a> go build .gitignore files

**master** is the default mainline branch **origin** is the default upstream repository **HEAD** is the current branch

### Make changes

\$ git status

Show the working tree status

\$ git diff

Shows the file differences not yet staged

\$ git add [file]

Add file contents to the staging area

\$ git add .

Add all modified contents to the staging area

\$ git add -p

Add modified contents to the staging area in parts

\$ git diff --cached

Shows file differences between staged files to HEAD

\$ git diff [commit1] [commit2]

Shows file differences between commit1 and commit2

\$ git reset [file]

Unstages the file, but preserves its contents

\$ git commit -m "commit message"

Record changes to the repository

\$ git log

Lists version history for the current branch

## **Working with Branches**

\$ 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-name]

Combines the specified branch's history into the current branch

\$ git branch -d [branch-name]

Deletes the specified branch

## Stashing

\$ git stash

Temporarily stores all modified tracked files

\$ git stash pop

Restores the most recently stashed file

\$ git stash list

Lists all stashed change-sets

\$ git stash drop

Discards the most recently stashed change-set

#### **Redo commits**

\$ git reset [commit]

Undoes all commits after [commit], preserving changes locally

\$ git reset --hard

Discards all history and changes back to the specified commit

## **Synchronize**

\$ git remote add [bookmark] [url]

Set a new repository

\$ git fetch [bookmark]

Downloads all history from the repository

\$ git merge [bookmark]/[branch-name]

Combines bookmark's branch into local branch

\$ git pull

Downloads bookmark history and incorporates changes

\$ git push [bookmark] [branch-name]

Uploads all local branch commits to the remote repository

