



Git Cheat Sheet

 /dschetel/GitCheatSheet

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

```
$ git config --global core.editor vim
```

Set standard editor for crafting of commit messages

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

Suppress tracking

```
build/  
*.aux
```

A textfile named `.gitignore` suppresses accidental versioning of files and paths matching the specified patterns.

Use <https://www.gitignore.io/> to generate `.gitignore` files.

Basic vi / vim commands

i Enter insert mode

ESC Exit insert mode

:w Save file

:q Exit if no changes have been made

:q! Exit and undo made changes

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

```
$ git tag
```

Create, list, delete or verify a tag object

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

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

git commands

