

Git Cheat Sheet

1. Git configuration

- **Git config**

Get and set configuration variables that control all facets of how Git looks and operates.

Set the name:

```
$ git config --global user.name "User name"
```

Set the email:

```
$ git config --global user.email "victor@edubridge.info"
```

Set the default editor:

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

Check the setting:

```
$ git config -list
```

- **Git alias**

Set up an alias for each command:

```
$ git config --global alias.co checkout
```

```
$ git config --global alias.br branch
```

```
$ git config --global alias.ci commit
```

```
$ git config --global alias.st status
```

2. Starting a project

- **Git init**

Create a local repository:

```
$ git init
```

- **Git clone**

Make a local copy of the server repository.

\$ git clone

3. Local changes

- **Git add**

Add a file to staging (Index) area:

\$ git add Filename

Add all files of a repo to staging (Index) area:

\$ git add*

- **Git commit**

Record or snapshots the file permanently in the version history **with a message**.

\$ git commit -m "Commit Message"

4. Track changes

- **Git diff**

Track the changes that have not been staged: \$ git diff

Track the changes that have staged but not committed:

\$ git diff --staged

Track the changes after committing a file:

\$ git diff HEAD

Track the changes between two commits:

\$ git diff Git Diff Branches:

\$ git diff < branch 2>

- **Git status**

Display the state of the working directory and the staging area.

\$ git status

- **Git show Shows objects:**

\$ git show

5. Commit History

- **Git log**

Display the most recent commits and the status of the head:

\$ git log

Display the output as one commit per line:

\$ git log -oneline

Displays the files that have been modified:

\$ git log -stat

Display the modified files with location:

\$ git log -p

- **Git blame**

Display the modification on each line of a file:

\$ git blame <file name>

6. Ignoring files

- **.gitignore**

Specify intentionally untracked files that Git should ignore. Create .gitignore:

\$ touch .gitignore List the ignored files:

\$ git ls-files -i --exclude-standard

7. Branching

- **Git branch Create branch:**

\$ git branch List Branch:

\$ git branch --list Delete a Branch:

\$ git branch -d Delete a remote Branch:

\$ git push origin -delete Rename Branch:

\$ git branch -m

- **Git checkout**

Switch between branches in a repository.

Switch to a particular branch:

\$ git checkout

Create a new branch and switch to it:

\$ git checkout -b Checkout a Remote branch:

\$ git checkout

- **Git stash**

Switch branches without committing the current branch. Stash current work:

\$ git stash

Saving stashes with a message:

\$ git stash save ""

Check the stored stashes:

\$ git stash list

Re-apply the changes that you just stashed:

\$ git stash apply

Track the stashes and their changes:

\$ git stash show

Re-apply the previous commits:

\$ git stash pop

Delete a most recent stash from the queue:

\$ git stash drop

Delete all the available stashes at once:

\$ git stash clear

Stash work on a separate branch:

```
$ git stash branch
```

- **Git cherry pic**

Apply the changes introduced by some existing commit:

```
$ git cherry-pick
```

8. Merging

- **Git merge**

Merge the branches:

```
$ git merge
```

Merge the specified commit to currently active branch:

```
$ git merge
```

- **Git rebase**

Apply a sequence of commits from distinct branches into a final commit.

```
$ git rebase
```

Continue the rebasing process:

```
$ git rebase -continue Abort the rebasing process:
```

```
$ git rebase --skip
```

- **Git interactive rebase**

Allow various operations like edit, rewrite, reorder, and more on existing commits.

```
$ git rebase -i
```

9. Remote

- **Git remote**

Check the configuration of the remote server:

```
$ git remote -v
```

Add a remote for the repository:

\$ git remote add Fetch the data from the remote server:

\$ git fetch

Remove a remote connection from the repository:

\$ git remote rm

Rename remote server:

\$ git remote rename

Show additional information about a particular remote:

\$ git remote show

Change remote:

\$ git remote set-url

- **Git origin master**

Push data to the remote server:

\$ git push origin master Pull data from remote server:

\$ git pull origin master

10. Pushing Updates

- **Git push**

Transfer the commits from your local repository to a remote server. Push data to the remote server:

\$ git push origin master Force push data:

\$ git push -f

Delete a remote branch by push command:

\$ git push origin -delete edited

11. Pulling updates

- **Git pull**

Pull the data from the server:

\$ git pull origin master

Pull a remote branch:

\$ git pull

- **Git fetch**

Download branches and tags from one or more repositories. Fetch the remote repository:

\$ git fetch< repository Url> Fetch a specific branch:

\$ git fetch

Fetch all the branches simultaneously:

\$ git fetch -all

Synchronize the local repository:

\$ git fetch origin

12. Undo changes

- **Git revert**

Undo the changes:

\$ git revert

Revert a particular commit:

\$ git revert

- **Git reset**

Reset the changes:

\$ git reset -hard

\$ git reset -soft:

\$ git reset --mixed

13. Removing files

- **Git rm**

Remove the files from the working tree and from the index:

```
$ git rm <file Name>
```

Remove files from the Git But keep the files in your local repository:

```
$ git rm --cached
```