Compiled by Fernando Fenandez on 9/28/24

GIT Cheat Sheet

Initializing Repository

```
git init
```

Configuration

```
# view configurations
git config

# set your name
git config --global user.name "{name}"

# set your email
git config --global user.email "{email}"
```

Remote Repository

```
# download repo
git clone {repo_url}

# link to GitHub/GitLab
git remote add origin {repo_url}

# list remote
git remote -v
```

Committing Changes

```
# add changes
git add {file}
git add . # all files

# commit changes
git commit -m "{message}"

# add and commit
git commit -a -m "{message}"

# edit last commit
git commit --amend -m "{new_message}"

# reset last commit
git reset HEAD~1

# send single commit to branch
git log # to see its ID
git cherry-pick {commit_id}
```

Branch Management

```
# list local branches
git branch

# list local and remote
git branch -a

# rename local branch
git branch -m {old_name} {new_name}

# rename remote branch
git push origin :{old_name} {new_name}

# switch to branch
git checkout {name}
# switch to branch (new method)
git switch {name}

# create branch
git checkout -b {name}
# create branch (new method)
git switch -c {name}

# merging branch to current branch
git merge {name}
```

Push and Pull

```
# push changes to remote
git push origin {branch}

# pull changes from remote
git pull origin {branch}
```

Working with Stash

```
# store changes without committing
git stash

# list stash
git stash list

# apply stashed changes
git stash apply
```

Viewing Changes

```
# list modified files
git status

# view file differences
git diff

# list commits
git log

# restore file undoing changes
git restore {file}
```

Miscellaneous

```
# create tag for branch
git tag -a {tag_version}

# renaming branch to main
git checkout -b main

# get help
git help
git help {git_command}

# remove git from folder
rm -rf .git
```

Resources

https://git-scm.com/book/en/v2

https://www.conventionalcommits.org/en/v1.0.0/

https://cmsinstallation.blogspot.com/2021/05/7-most-common-git-mistakes.html

https://dev.to/snaka/10-things-i-always-setup-in-git-when-i-prepare-a-new-environment-d99

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GIT Cheat Sheet (Advanced)

Remove folder from remote (keeping the local version)

```
cd {myFolder}

git rm -r --cached
{myFolder}

git commit -m "removed
myFolder"

git push origin main
```

Download folder from remote

```
git fetch

git checkout
origin/master --
{path_to_folder}
```

Discard changes and switch to folder from remote

```
git switch -f
{branch_name}
```

Remove folder from both local and remote

```
git rm -r {folder}

git commit . -m "removed
duplicate {folder}"

git push origin master
```

Git VI Editor

```
Esc to enter a command

:x to exit and save

:q! to exit without
saving

# to learn more, run
vimtutor
```

Discard last commit that hasn't been pushed yet

```
git reset --soft HEAD~1
```

Revert last commit

```
git revert {hash of last
commit}
```

Undo the last N commits

```
# undo and keep changes
git reset
HEAD~{number_of_commits}

# undo and discard
changes
git reset --hard
HEAD~{number_of_commits}
```

Configuration

```
# list all 3 levels of
configuration:  system,
user and project
git config --list

# set editor to VSCode
git config --global
core.editor code

# edit all 3 levels of
configuration
git config --system
--edit
git config --global
--edit
git config --local --edit
```

Switch from SSH to HTTPS

```
git remote set-url origin
username@bitbucket.org:re
positoryFolderAndName.git
```

View what was stashed @ 0

```
git show
stash@{0}:./{filename}
```

Fix "fatal: refusing to merge unrelated histories"

```
# download from GitHub
first and merge
git pull origin master
--allow-unrelated-histori
es

git commit
```

Workaround for "failed to connect to github.com port 443…"

```
# check that SSH key was
properly set first
# if your repo is at
https://github.com/my-Nam
e/repo-name.git
# use
git remote set-url origin
git@github.com:my-Name/re
po-name.git
```

Show graph of branches

```
git log --color --graph
--pretty=format:'%Cred%h%
Creset
-%C(yellow)%d%Creset %s
%Cgreen(%cr) %C(bold
blue)<%an>%Creset'
--abbrev-commit
```

Fix "error: src refspec main does not match any / error: failed to push some refs to *"

```
git checkout -b main
```