Git Cheat Sheet

Command

Observe your Repository

List new or modified files not yet committed

```
git status
```

Show the changes to files not yet staged

```
git diff
```

Show full change history

```
git log
```

Synchronize

Get the latest changes from origin (no merge)

```
git fetch
```

Fetch the latest changes from origin and merge

```
git pull
```

Fetch the latest changes from origin and rebase

```
git pull --rebase
```

Push local changes to the origin

```
git push
```

Working with Branches

List all local branches

```
git branch
```

List all branches, local and remote

```
git branch -av
```

Create a new branch called my-branch

```
git branch my-branch
```

Switch to a branch and update working directory

```
git checkout branch-name
```

Delete the branch called my-branch

```
git branch -d my-branch
```

Merge branch-a into branch-b

```
git checkout branch-b
git merge branch-a
```

Tag the current commit

```
git tag my-tag
```

Make a change

Stages the file, ready for commit

```
git add [file]
```

Commit all staged files to versioned history

```
git commit -m "commit message"
```

Unstages file, keeping the file changes

```
git reset [file]
```

Undoes all commits afer [commit], preserving change locally

```
git reset [commit]
```

Discards all history and changes back to the specified commit

```
git reset --hard [commit]
```

Save fragments

Lists all stashed changesets

```
git stash list
```

Temporarily stores all modified tracked files

```
git stash
```

Temporarily stores all modified tracked files with a stash name

```
git stash save "stash-name"
```

Details stash number 'n'

```
git stash show stash@{n} -p
```

Restores stash number 'n'

```
git stash apply stash@{n}
```

Discards stash number 'n'

```
git stash drop stash@{n}
```

Restores the most recently stashed files

```
git stash pop
```

Oh Shit, Git!

I did something terribly wrong, please tell me git has a magic time machine!?!

```
git reflog
# you will see a list of every thing you've done in git, across all branches!
# each one has an index HEAD@{index}
# find the one before you broke everything
git reset HEAD@{index}
# magic time machine
```

I committed and immediately realized I need to make one small change!

```
# make your change
git add . # or add individual files
git commit --amend
# follow prompts to change or keep the commit message
# now your last commit contains that change!
```

I need to change the message on my last commit!

```
git commit --amend
# follow prompts to change or keep the commit message
```

I accidentally committed something to master that should have been on a brand new branch!

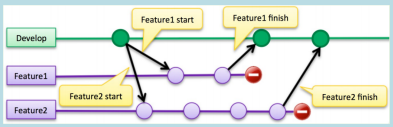
```
# create a new branch from the current state of master
git branch branch-name
# remove the commit from the master branch
git reset HEAD~ --hard
git checkout branch-name
# your commit lives in this branch now
```

I accidentally committed to the wrong branch!

```
# undo the last commit, but leave the changes available
git reset HEAD~ --soft
git stash
# move to the correct branch
git checkout branch-name
git stash pop
git add . # or add individual files
git commit -m "your message here"
# now your changes are on the correct branch
```

Git Cheat Sheet

Feature Flow



Feature start

git checkout develop

git pull –rebase origin develop

git checkout -b feature/*nomfeature*

Feature Share

git push origin feature/*nomfeature*

Feature finish

git checkout develop

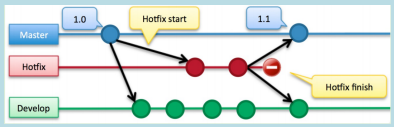
git merge –no-ff feature/*nomefeature*

git branch -d feature/*nomefeature*

git push origin develop

git push origin :feature/*nomefeature* (if pushed)

Hotfix Flow



Hotfix start

git checkout develop

git pull –rebase origin develop

git checkout -b hotfix/*hotfix-version*

Hotfix finish

git checkout master

git merge –no-ff hotfix/*hotfix-version*

git tag -a *hotfix-version*

git checkout develop

git merge –no-ff hotfix/*hotfix-version*

git branch -d hotfix/*hotfix-version*

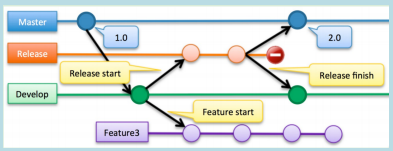
git push origin master

git push origin develop

git push origin –tags

git push origin :hotfix/*hotfix-version* (if pushed)

Release Flow



Release start

git checkout develop

git pull –rebase origin develop

git checkout -b release/*release-version*

Release Share

git push origin feature/*release-version*

Release finish

git checkout master

git merge –no-ff release/*release-version*

git tag -a *release-version*

git checkout develop

git merge –no-ff release/*release-version*

git branch -d release/*release-version*

git push origin master

git push origin develop

git push origin –tags

git push origin :release/*release-version* (if pushed)