

using Git ✱

- Command line (Most popular)
- IDE / code Editor (like Vscode)
- GUI (like GitKraken)

% Git → To view the commands or flags in git

Configuring Git

↪ git config --global user.name "My Name"
 git config --global user.email "_____@gmail.com"
 -- local
 -- System
 ↪ git config --list

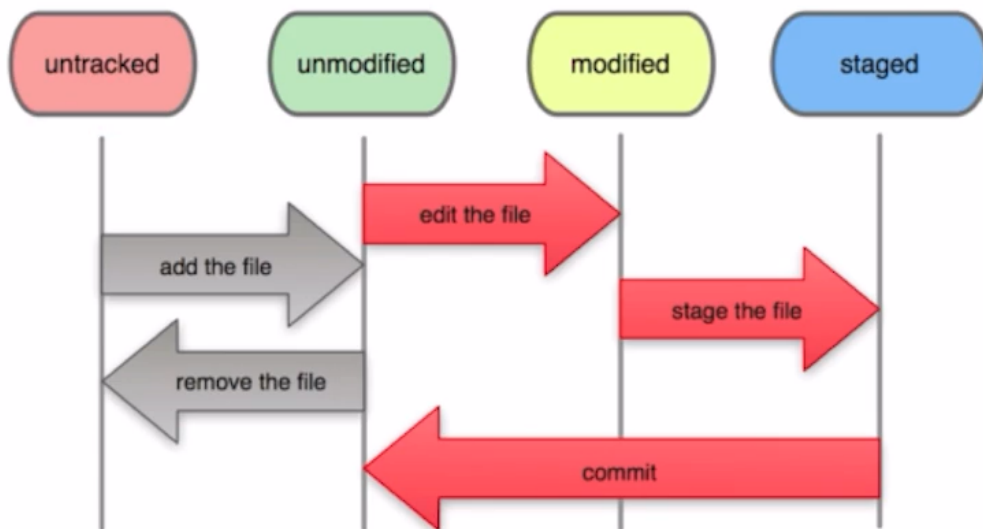
Basic commands ✱

- clone → Cloning a repository on our local Machine
- status → displays the status of the code

↪ HTTPS
 git clone - link ->

git status

File Status Lifecycle



Add & Commit Commands

modified → add → commit
 ↓
 staged
 ↓
 final changed stamp

- `add` → adds new or changed files in your working directory to the Git staging area

`git add <- file name ->`

`git add.` → To add all

- `commit` → it is the record of change

`git commit -m "some message"`

- `push` → upload local repo content to remote repo

`git push` origin main
 ↳ link ↳ Branch

init Command ★

↳ init → used to create a new git repo
git init

- git remote add origin <—link—>
- git remote -v (to Verify remote)
- git branch (to check branch)
- git branch -M main (to rename branch)
- git push origin main
- git log → show log of Commits
- git push -u origin main
- git push -set --upstream origin main

Workflow ★

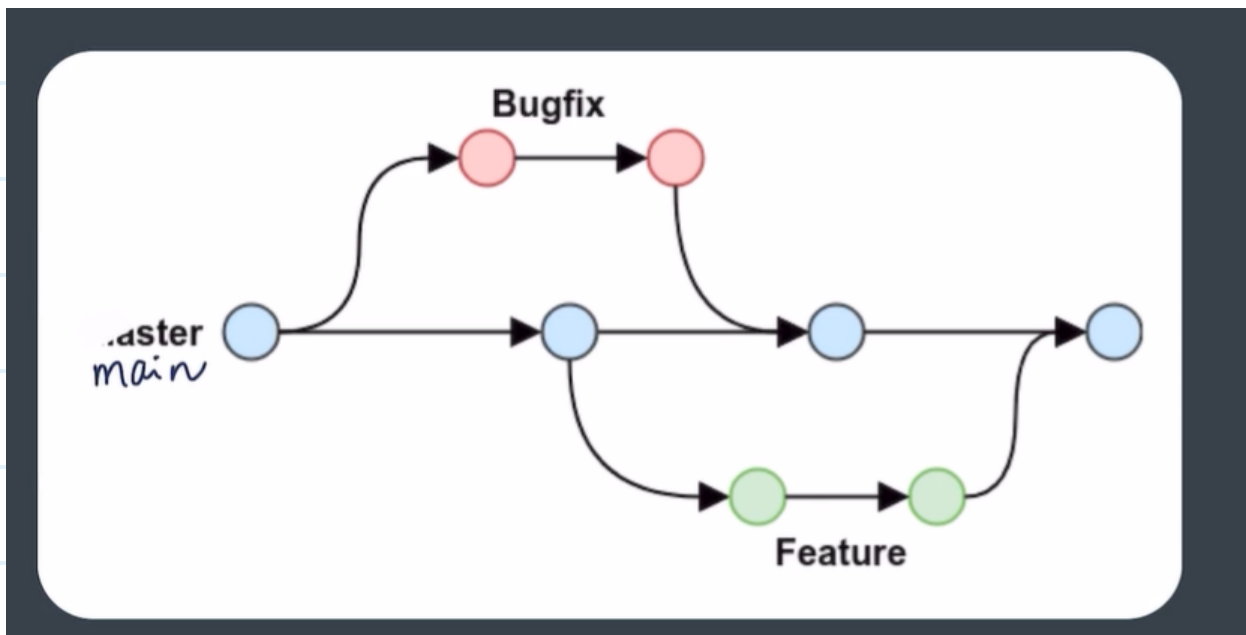
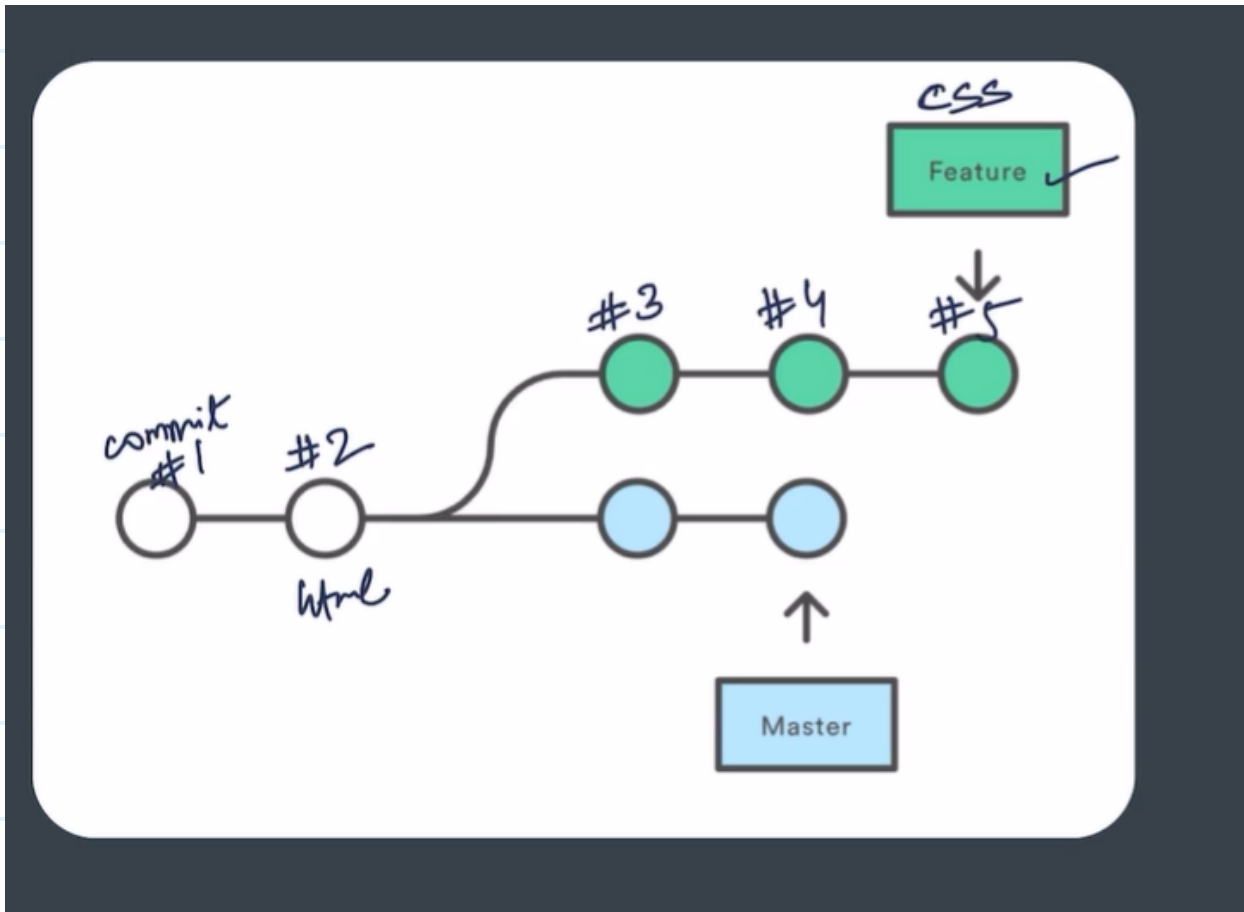
GitHub

↓
code changes
↓
commit

Local Git

↓
code changes
↓
add (staged a change)
↓
commit (commit a change)
↓
Push

Branch *



Branch commands ★

- `git branch` (to check branch)
- `git branch -M main` (to rename branch)
- `git checkout <-name->` (to navigate)
- `git checkout -b <-name->` (to create a new branch)
- `git branch -d <-name->` (to delete branch)

Merging Code ★

`git diff <-Bname->` (To compare commits, branches, files and more)

`git merge <-Bname->` (To merge 2 branches)

OR

Create a PR → Pull Request

Pull Request ★

↳ It lets you tell others about changes you've pushed to a branch in a repository on Github.

- `git pull origin main`

↳ used to fetch and download content from a remote repo and immediately update the local repo to match the content

merge Conflicts ✱

↳ An event that takes place when Git is unable to automatically resolve difference in code b/w two commits.

Fixing Mistakes ✓

Case 1 : staged changes

```
git reset <- file name ->
```

```
git reset
```

Case 2 : committed changes (for one commit)

```
git reset HEAD~1
```

Case 3 : committed changes (for many commits)

```
git reset <- commit hash ->
```

```
git reset --hard <- commit hash ->
```

What is Forking?

A fork is a new repository that shares code and visibility settings with the original "upstream" repository.

Fork is a rough copy.