Introduction to .git and GitHub

What is .git?

Store files

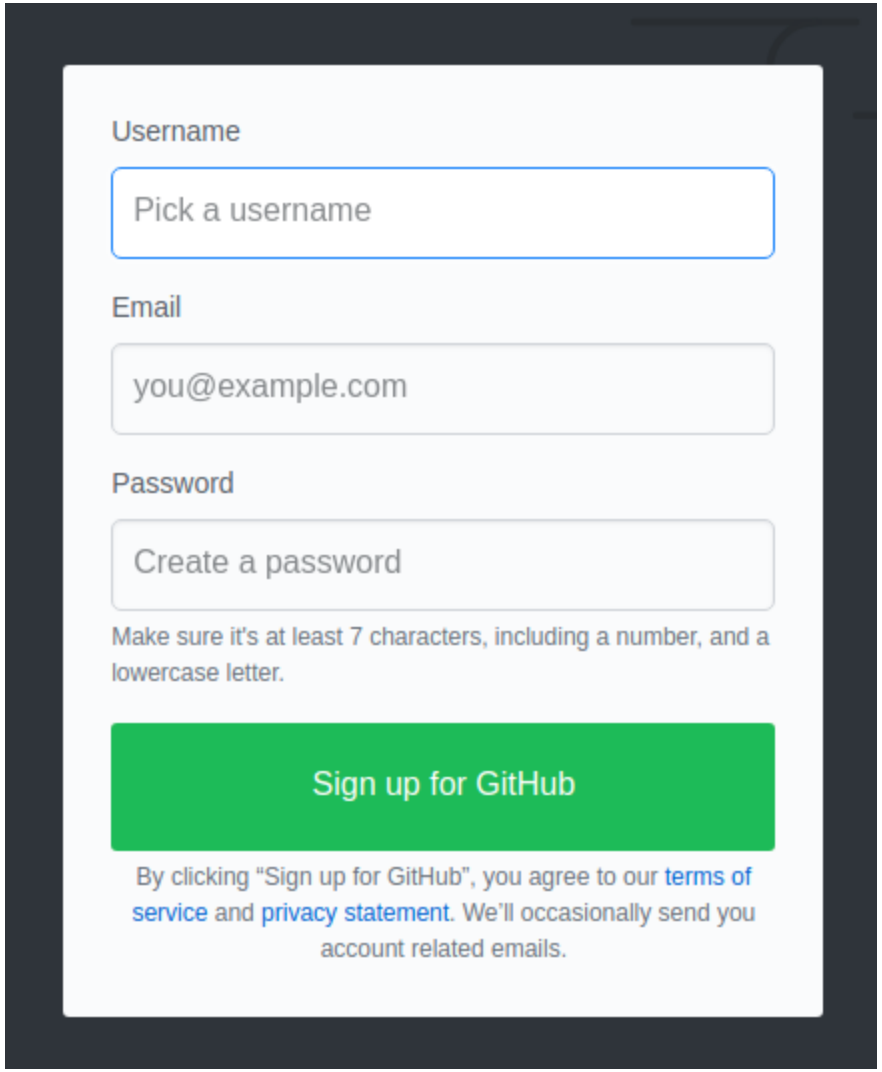
Share files

Version history

Getting started with GitHub

Install and get account

-> github.com



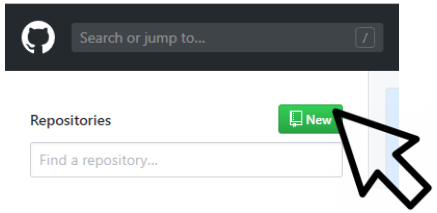
Install and get account

Create repo

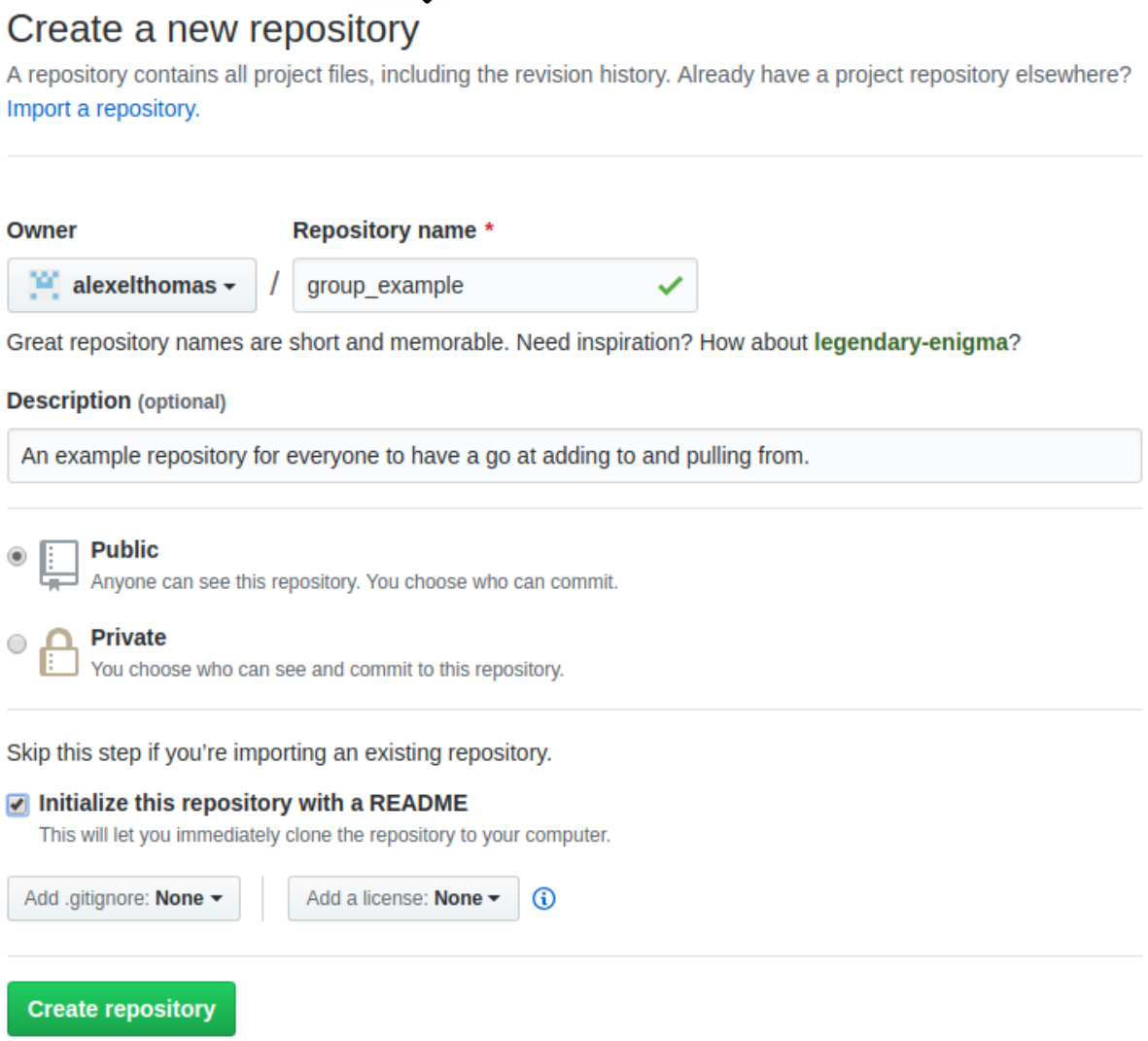
Either:

- Create a new directory
- Move into it
- Perform:

$ git init



Or:

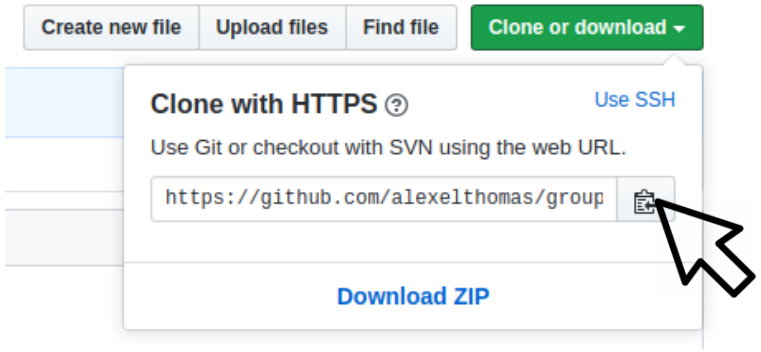


Install and get account

Create repo

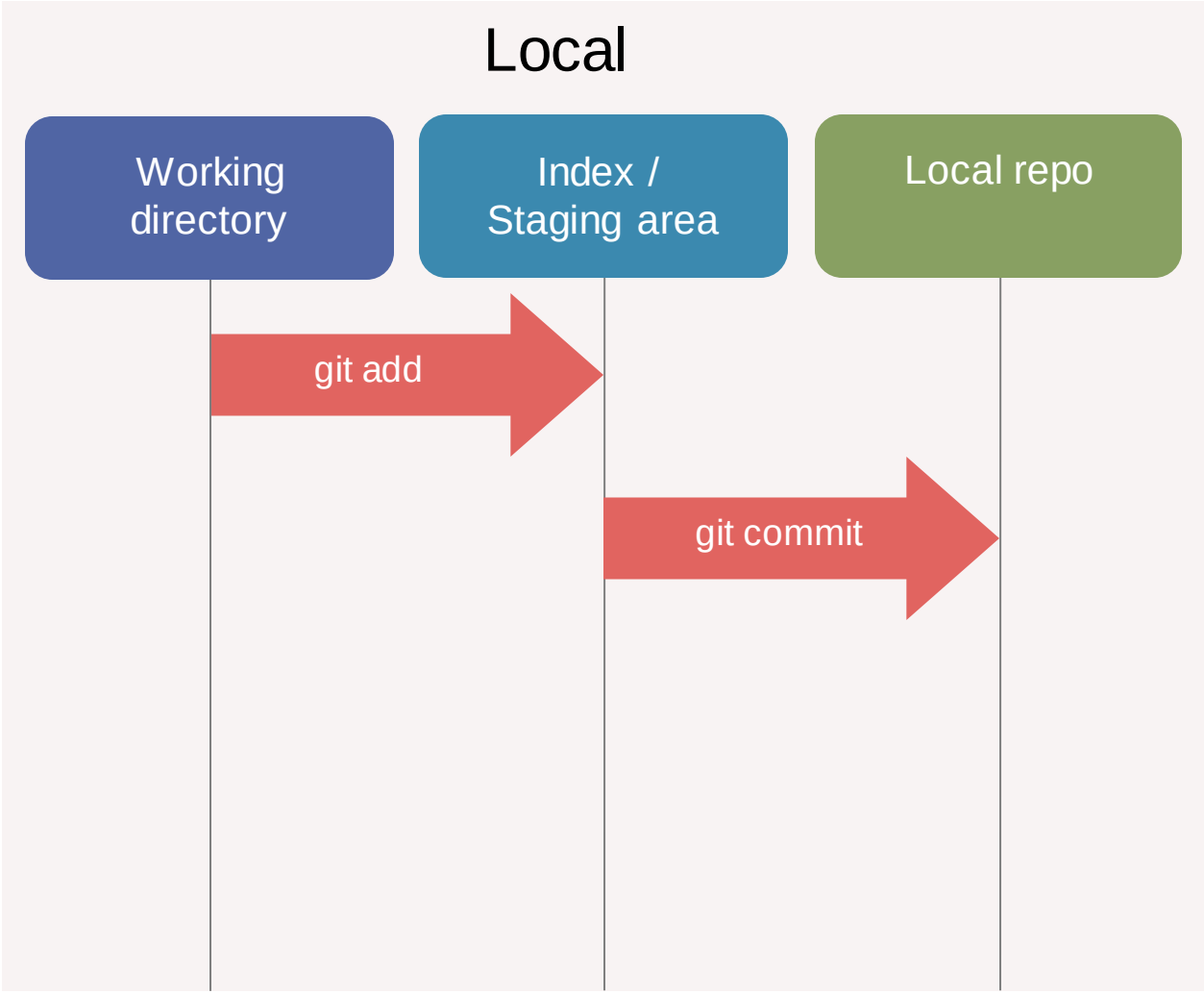
Clone repo

$ git clone




```
alex@alex-BOAMOT-489:~$ git clone https://github.com/alexelthomas/
group_example.git
Cloning into 'group_example'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
```

Basic commands


Local
Working directory
Index / Staging area
Local repo
git add
git commit

Install and get account

Create repo

Clone repo

Status

$ git status

```
alex@alex-BOAMOT-489:~/group_example$ git status
On branch master
Your branch is up-to-date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        GitHub_logo.png

nothing added to commit but untracked files present (use "git add"
 to track)
```

Install and get account

Create repo

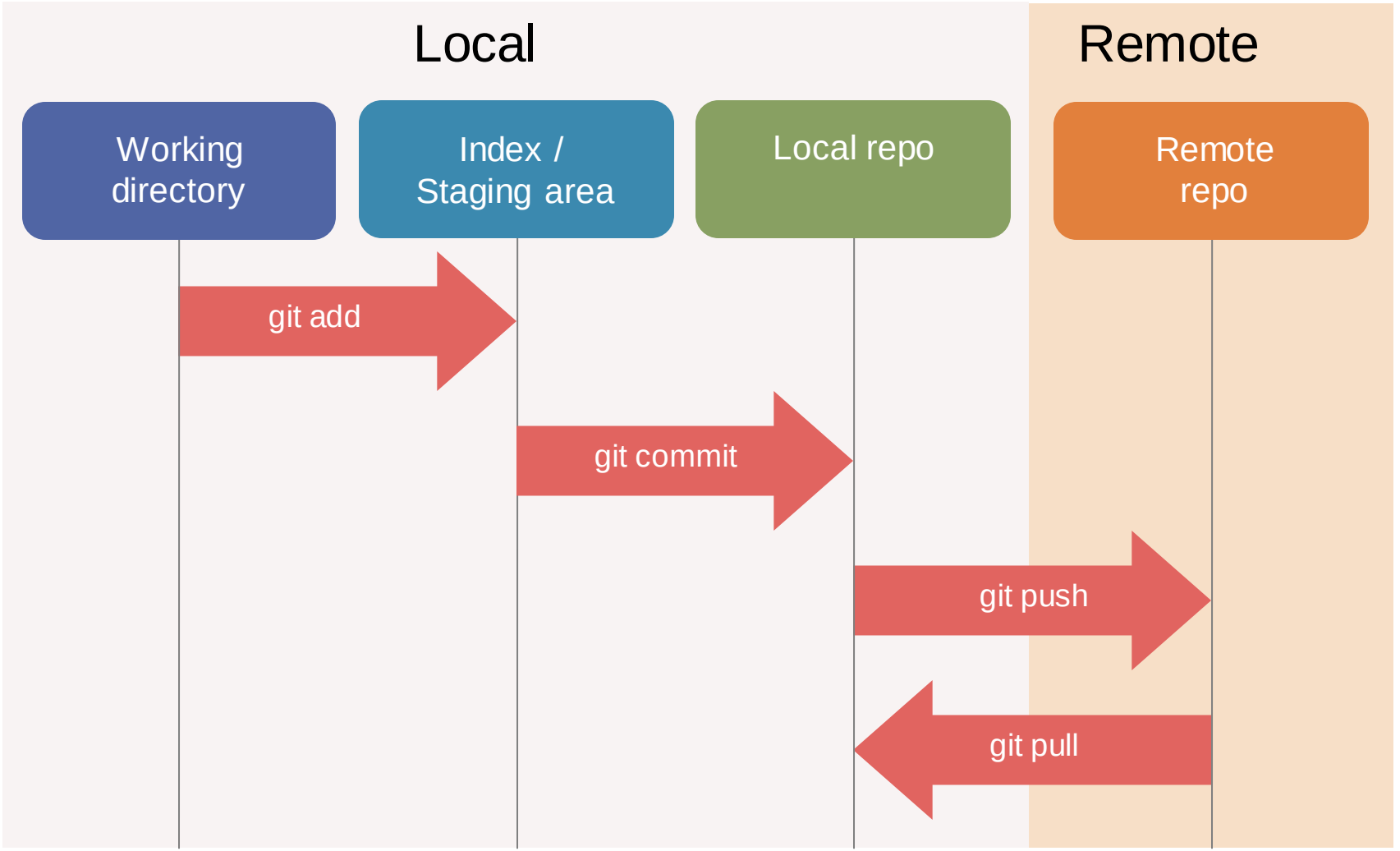
Clone repo

Status

```
alex@alex-BOAMOT-489:~/group_example$ git add GitHub_logo.png
alex@alex-BOAMOT-489:~/group_example$ git rm GitHub_logo.png
rm 'GitHub_logo.png'
alex@alex-BOAMOT-489:~/group_example$ git commit -m "added github
logo"
[master 8297b50] added github logo
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 GitHub_logo.png
```

Add/Remove -> commit

$ git add
$ git rm
$ git commit -m “”


Local
Remote
Working directory
Index / Staging area
Local repo
Remote repo
git add
git commit
git push
git pull

Install and get account

Create repo

Clone repo

Status

Add -> commit

Push

$ git push

```
alex@alex-BOAMOT-489:~/group_example$ git push origin master
Username for 'https://github.com': alexelthomas
Password for 'https://alexelthomas@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 7.19 KiB | 7.19 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/alexelthomas/group_example.git
   0c167e8..8297b50  master -> master
```

Install and get account

Create repo

Clone repo

Status

Add -> commit -> push

```
alex@alex-BOAMOT-489:~/group_example$ git pull
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/alexelthomas/group_example
   8297b50..e8ea706  master     -> origin/master
Updating 8297b50..e8ea706
Fast-forward
 gitkraken.svg | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 gitkraken.svg
```

Pull

$ git pull

More advanced commands

Branching

Make a new branch

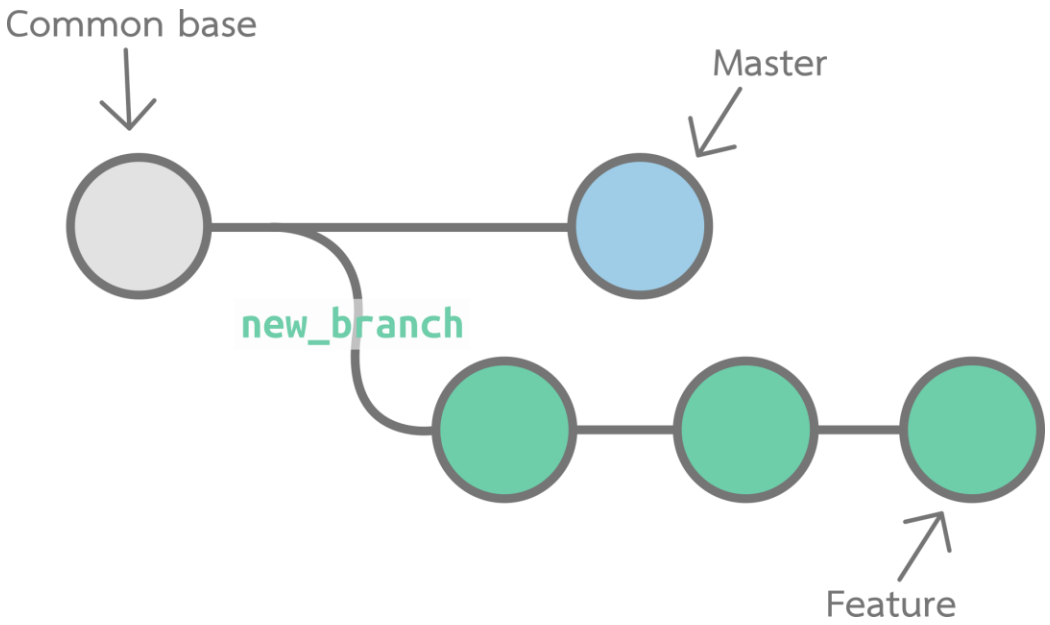
```
$ git checkout –b new_branch
```

Make available to others

```
$ git push origin new_branch
```

Move between branches

```
$ git checkout master
```



Branching

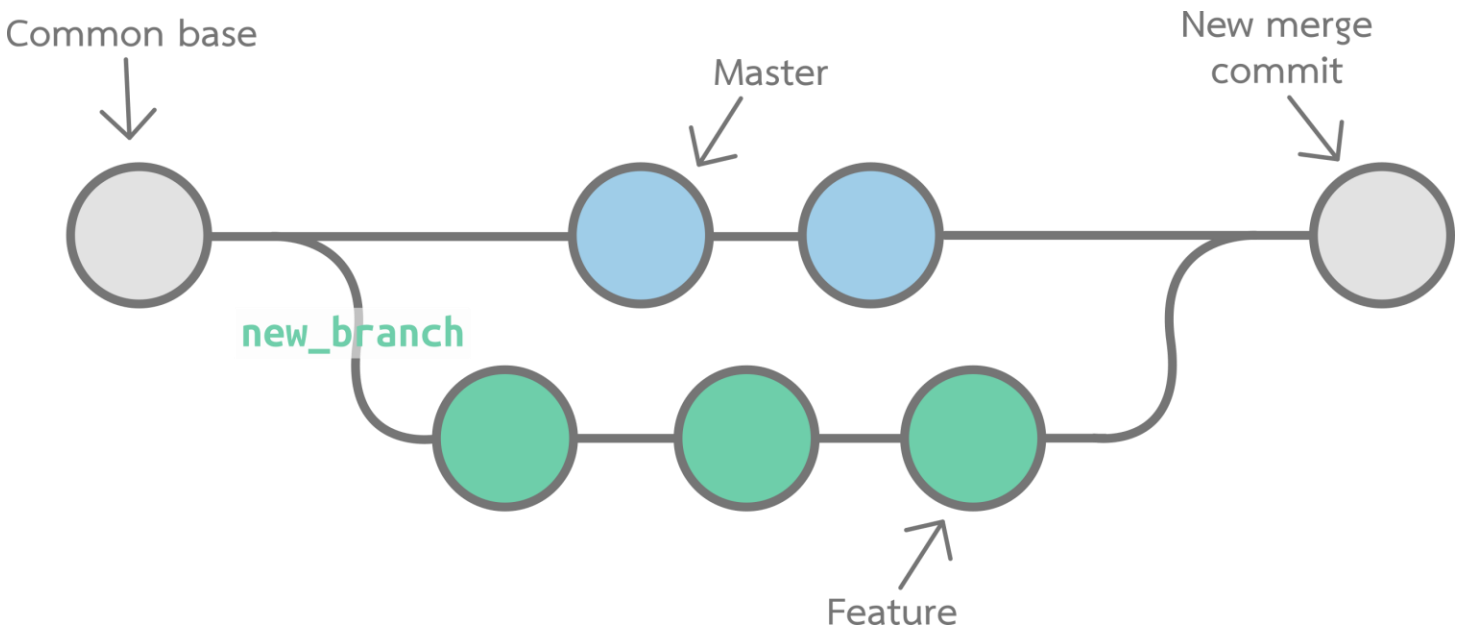
Merging

Merge to your new branch

```
$ git merge new_branch
```

or

```
$ git pull
```



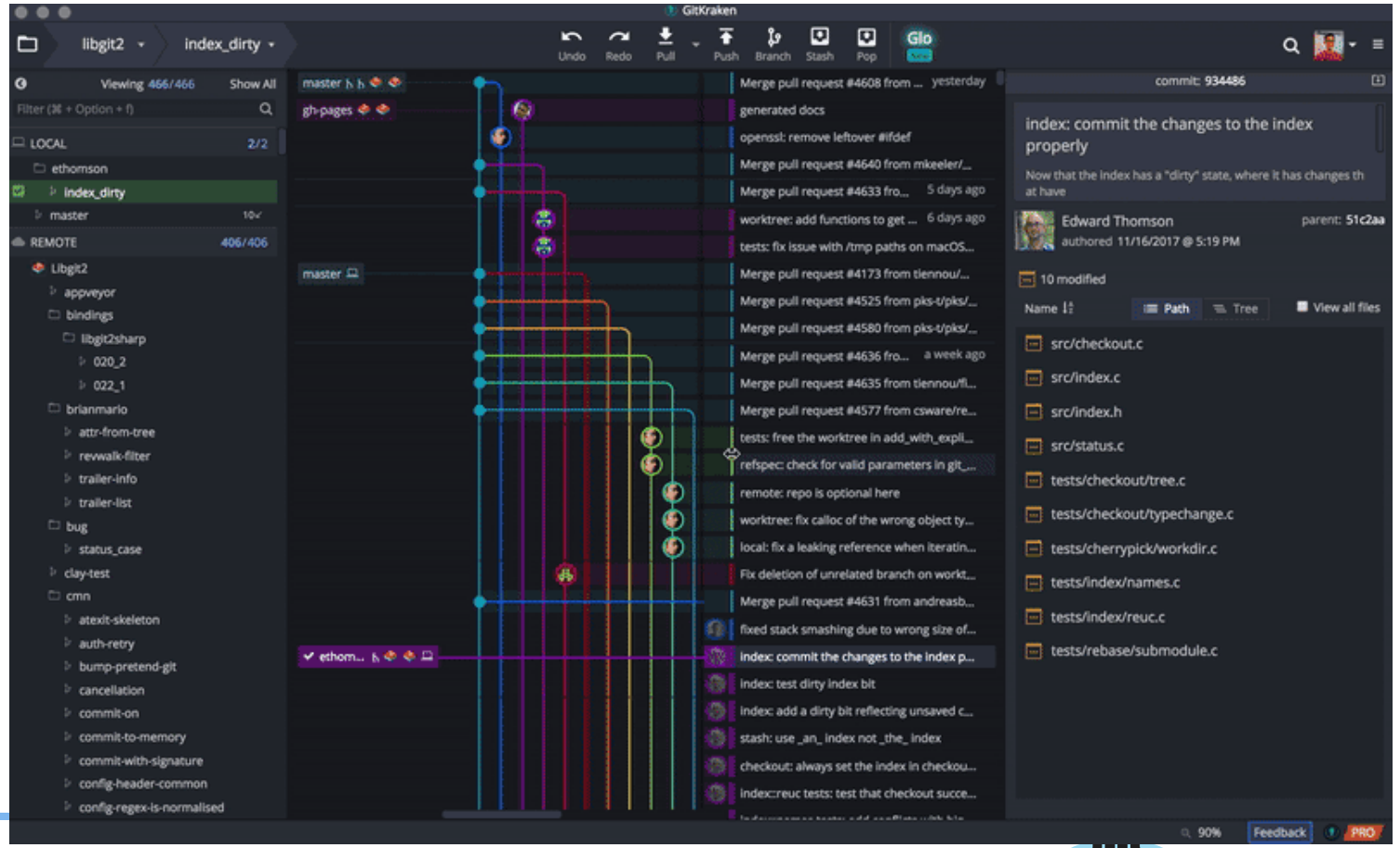
Plus more...

To get help:

- Simple beginner's guide
- Oh Shit, Git!?!
- Cheat sheet
- Look for step-by-step tutorials.

Interfaces

- Terminal
- GitKraken
- gitforwindows



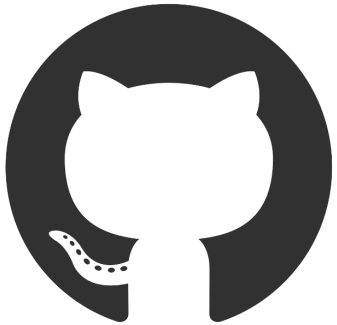
Alternatives

OneDrive

Dropbox

BlueBEAR

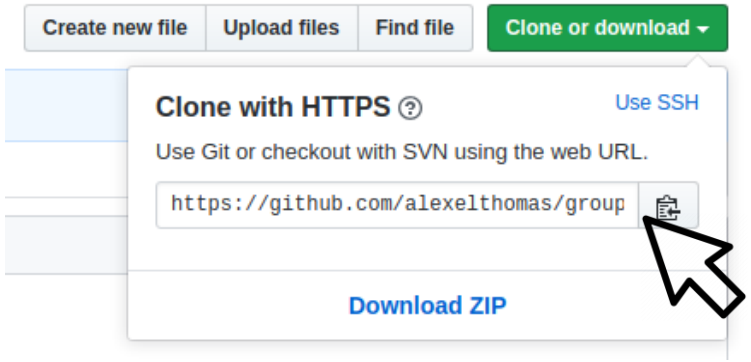
RDS...



Have a go...

Clone repo:

https://github.com/alexelthomas/group_example.git




```
alex@alex-BOAMOT-489:~$ git clone https://githu
b.com/alexelthomas/group_example.git
```

Add, commit, push:

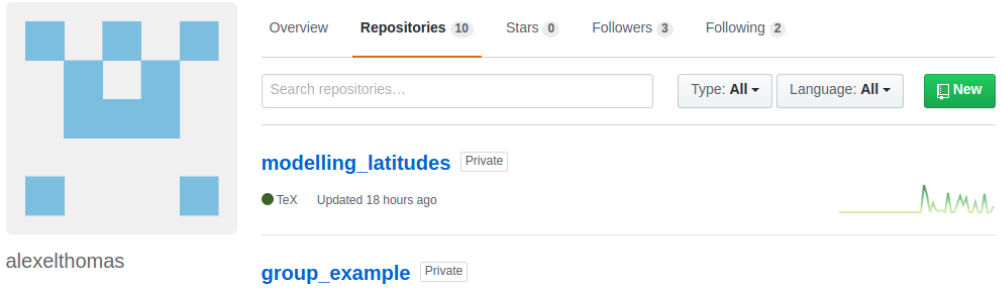
```
alex@alex-BOAMOT-489:~/group_example
$ git add GitHub_logo.png
alex@alex-BOAMOT-489:~/group_example
$ git commit -m "added github logo"
On branch master
Your branch is up-to-date with 'orig
in/master'.

nothing to commit, working tree clea
n
alex@alex-BOAMOT-489:~/group_example
$ git push
Username for 'https://github.com':
```

Click to add text

Pull:

```
alex@alex-BOAMOT-489:~/group_examp
le$ git pull origin master
Username for 'https://github.com':
```



Create repo: