IT Club | UXCAM

GIT WORKSHOP

Day 4: Working With Remotes

What is a remote?

Remote

remote

/rɪˈməʊt/

(of a place) situated far from the main centres of population; distant.

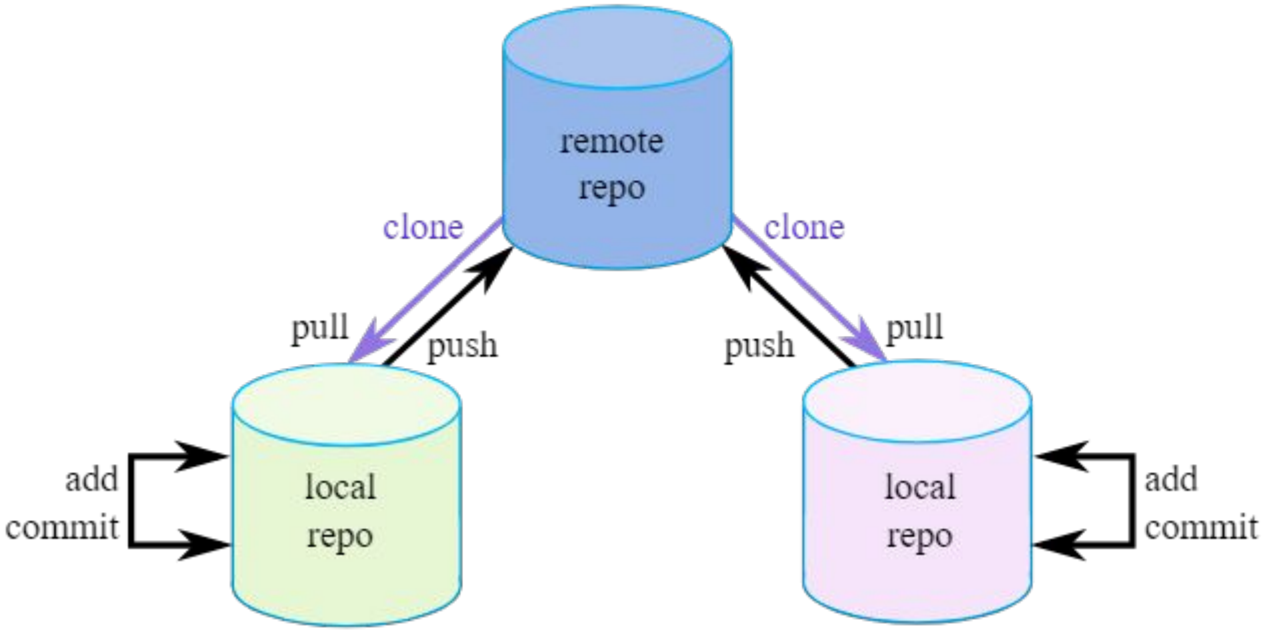
Remote (in our context)

remote

/rɪˈməʊt/

(of a git repository) hosted on the Internet or another network.

Remote (in our context)



```
xrandr --output HDMI1 --mode
1280x720 --same-as eDP1
```

Some services

Let’s set up GitHub

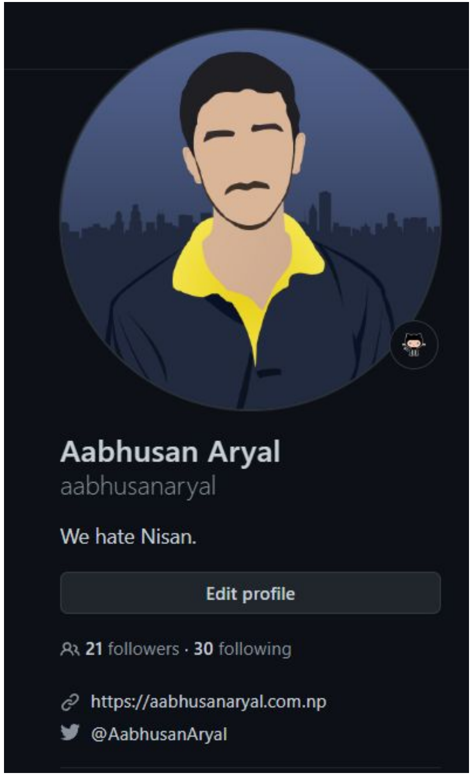
Setting Up

Sign up at https://github.com/

Set up SSH. I hope you followed the email instructions and did this already.

Right?

A quick ad from our instructor



Aabhusan Aryal

aabhusanaryal

We hate Nisan.

21 followers · 30 following

https://aabhusanaryal.com.np

@AabhusanAryal

Quick Setup (demo)

Verify ssh works

```
$ ssh -T git@github.com
```

Creating a repo in GitHub (demo)

Essential commands

git remote

```
$ git remote add <remote-name> <remote-url>
```

Adds a new remote for a repository

```
$ git remote set-url <remote-name> <remote-url>
```

To edit url for existing remote

```
$ git remote remove <remote-name>
```

To remove a remote

Git push

git push

IT Club | uxcam

```
$ git push <remote-name> <branch-name>
```

Push the specified branch to the specified remote. Will not allow push if there are merge conflicts.

```
$ git push <remote-name> --force
```

Forces the push even if it results in a non-fast-forward merge.

```
$ git push <remote-name> –all
```

Push all of your local branches to the specified remote.

git push

```
$ git push --set-upstream <remote-name> <branch-name>
```

–set-upstream flag sets the branch you are pushing to as the remote tracking branch of the branch you are pushing.

```
$ git push <remote-name> <local-branch>:<remote-branch>
```

Pushes a local branch to some a remote branch with different name.

Git clone

git clone

Creates a local copy of the remote repository.

git clone

```
$ git clone <remote-url>
```

Clones a repo completely (all commits).

```
$ git clone <remote-url> --depth 1
```

Git fetch

git fetch

Fetches the remote’s content without affecting your local repository.

You can checkout the fetched branch to look at the fetched code.

If you’re happy with it, you can merge it with your local branch.

git fetch

```
$ git fetch <remote-name> <branch-name>
```

Fetches the specified branch to the specified remote. Will not allow push if there are merge conflicts.

```
$ git fetch <remote-name> –all
```

Fetches all of your local branches to the specified remote.

```
$ git merge <remote-name>/<branch-name>
```

Git pull

git pull

It fetches and merges the code automatically.

May cause merge conflicts.

git fetch

IT Club | uxcam

```
$ git pull <remote-name> <branch-name>


$ git pull <remote-name> –all
```

Collaborating

Workflow

Say you are working on a project with multiple members, each working on a different feature.

Everyone creates a new branch for their feature.

Once they complete the feature, they push the code to the remote and create a pull request.

You review the request and merge the branch.

Forking

Forking

Creates a “copy” of a GitHub repository.

Doesn’t affect the original repository.

You can make your changes and create a pull request in the original repository.

Widely used for collaborating in open source applications.

Questions?