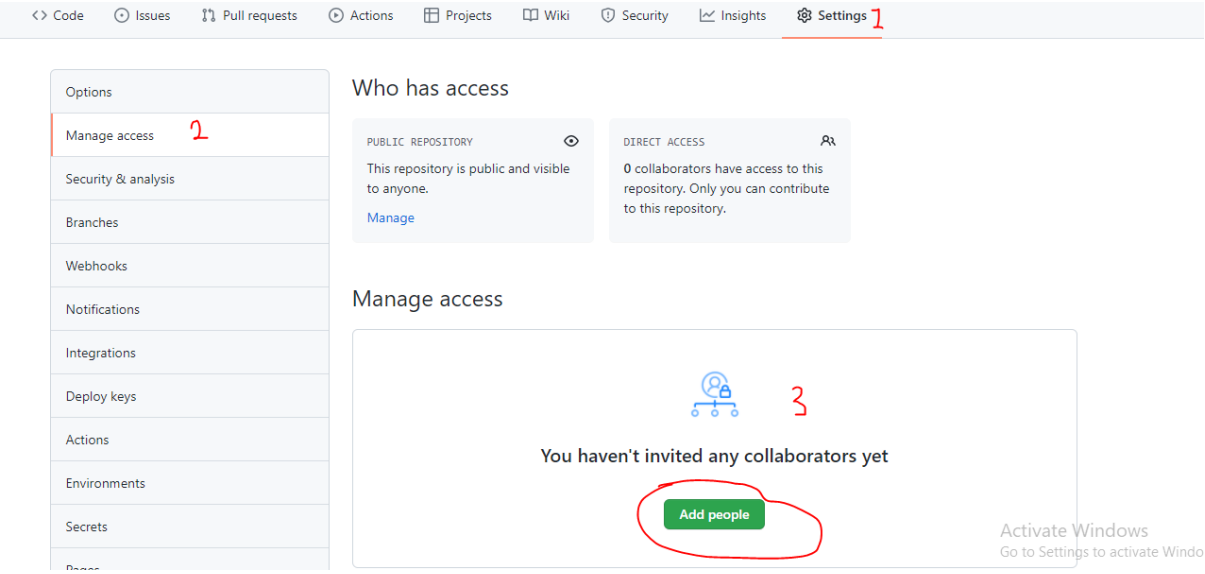
Sessions 6-10

#06 - Pull Changes From Remote Repository

- We can invite people to our repo



- Suppose that we added a new collaborator and made a change on our master branch, so to pull those changes in your local machine

```
git pull origin
```

#07 - Everything About Git Configurations

- To have a list of our git configurations

```
git config -l
```

- The first thing you should do when you install Git is to set your name and email address. This is important because every Git commit uses this information. By default this information will be used if none other specified.
- To show name and email

```
#for name
git config --global user.name
#for email
git config --global user.name
```

- To set name and email

```
git config --global user.name "Jane Doe"
git config --global user.email "jane.doe@example.com"
```

- To remove a property from the configuration

```
git config --global --unset user.name
```

#08 - Generate And Test Github Public Key

- We can generate a key for creating a secure layer or a shell to access our Github or a our server for example
- When using SSH key to connect to our Github repo, we don’t have to sign in with our credentials like when cloning our repo using https connection
- The solution is add a key on our computer and connect it to our Github, so it tells Github that we’re already authenticated
- To create a public key so we can add it on github

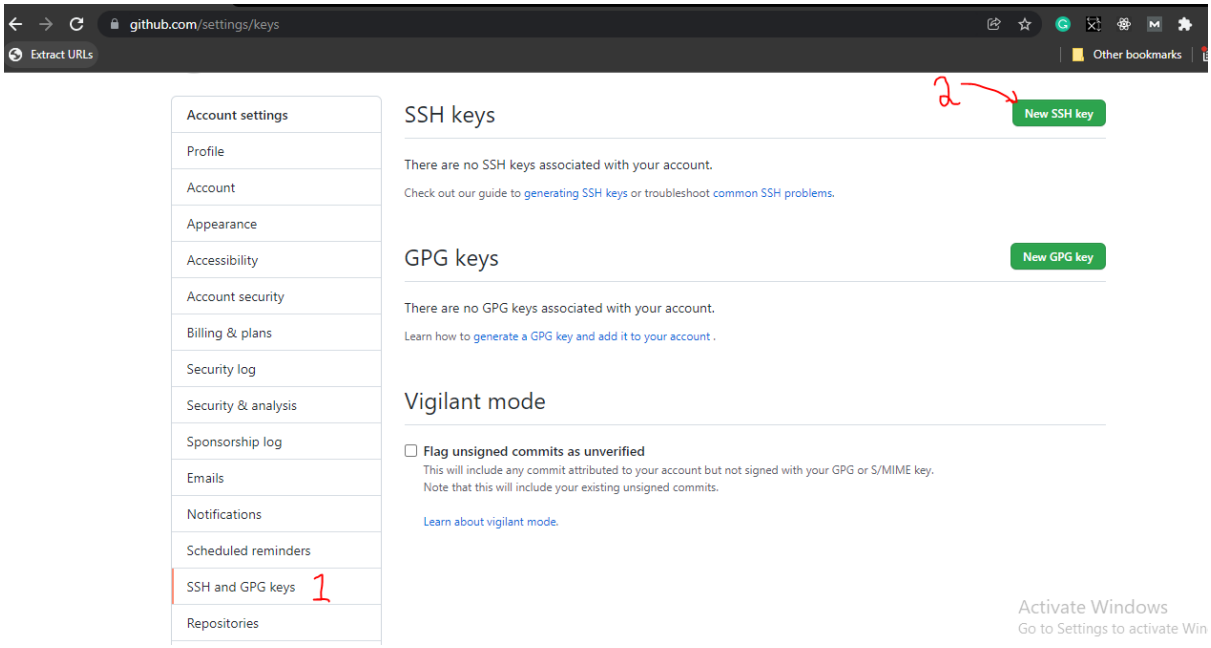
```
#ssh: secure sheel
#keygen: key generator
#-t: type of the algorithm
#rsa: RSA algorithm (Rivest-Shamir-Adleman) is the basis of a cryptosystem
#-C add a comment
ssh-keygen -t rsa -b 4096 -C "repo@repository.com"
```

- Then to preview the key

```
cat ~/.ssh/id_rsa.pub
```

- Copy the key from “ssh-rsa ..... repo@repository.com”

- Then inside Github paste the key you copied



- To check that your key worked

```
$ ssh -T git@github.com
Hi ahmadawji! You've successfully authenticated, but GitHub does not provide shell acc
ess.
```

- Note that its recommended to add a password while creating your SSH key. For, when others try to connect on that key, it would force them to enter that password

#09 - Create Repository From Existing Project

- In this lecture we will learn how to create a repo from our local machine and push it Github
- First you can start by creating a directory

```
mkdir repos
cd repos
```

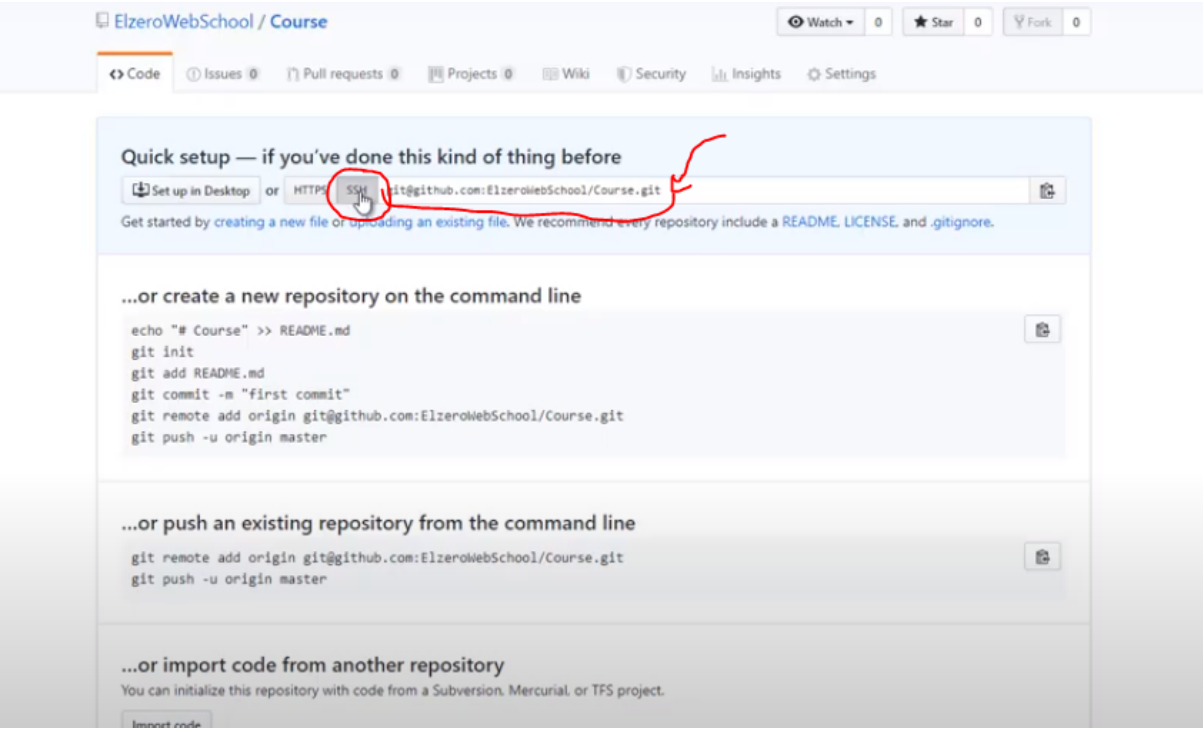
- Initialize a repo inside the new directory

```
git init
```

- Create a file and track it

```
touch index.html
git add index.html
git commit -m "I have created the main file"
```

- Go create a repo with the name “course” for example on Github
- Remember that we created an SSH key, so now you can connect you remote repo with the ssh link Github give you.



- Now connect you local repo with the remote ssh link

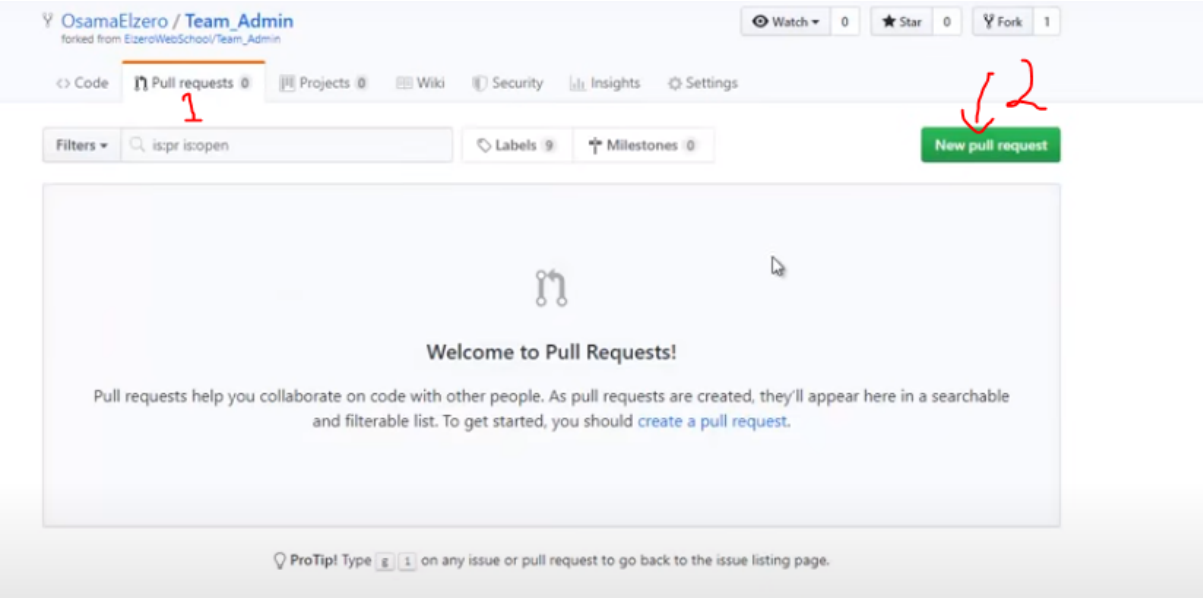
```
git remote add origin git@github.com:USERNAME/Course.git
```

- Note that the flag ‘-u’ in the command below means that I want to pull any changes on the repo before I push my changes

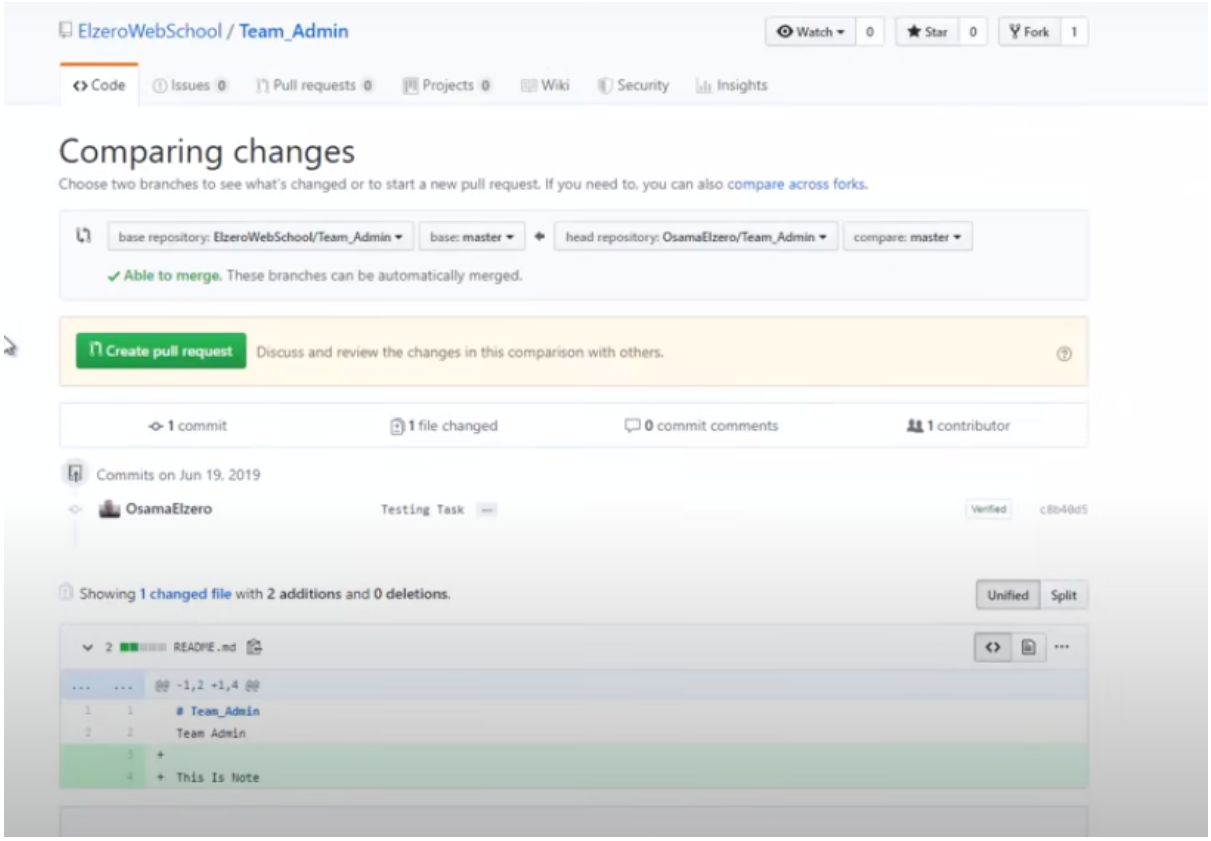
```
git push -u origin main
```

#10 - Learn Pull Request

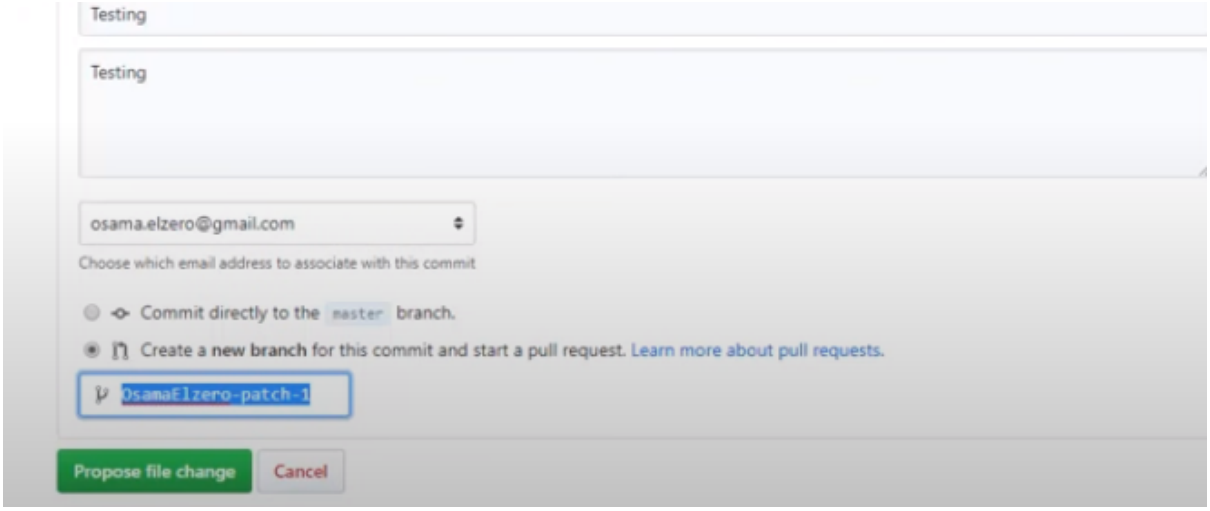
- Pull request is a request that comes from a user which can’t push directly to the main branch asking the admin or the decentralized server of a repository, to accept the change the user did and merge it with the main branch.
- To make a pull request, go to the repo you need and fork that repo
- Click on ‘Pull Requests’ then ‘new pull request’ inside the forked repo



- Notice how it’s going to take you to the main repo again



- You can notice how the base repository (ElzeroWebSchool/Team_Admin)is going to take from your forked repo
- Then you can click on the ‘Create pull request’ in green
- There another option on creating pull requests, suppose you forked a repo.
- In the forked repo, and after you make any changes, you can create a new branch which would merge to the main branch in the forked repo
- And the main branch inside the forked repo would be the one that will be merged with main branch inside the original repo



- So let’s summarize, first a member inside the forked repo will create a pull request
- The owner of the forked branch will accept the changes the member made from another branch
- After the owner accepts the changes and merge the member’s branch with the main branch in the forked repo, he can create a pull request
- Now the pull request that the owner of the forked branch will create will be the one that will be merged with original repo