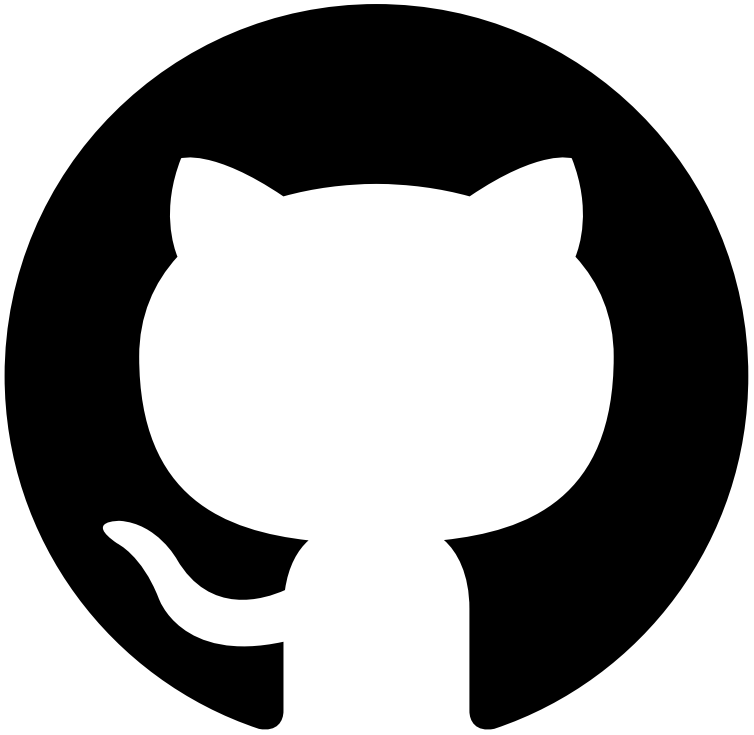
2021

# Introduction to github



TINEYI GIBBS CHIPOYERA

9/24/2021

# Configurign git for github

Now before we start using github, git needs to know who you are, and I'll show you 2 ways to do this.

1. With the command prompt

   In the command prompt you need to type in

```
C:\Users\TG Chipoyera>git config --global user.name "Your name"

C:\Users\TG Chipoyera>git config --global user.email "Your github email"
```

   To check if your details are correct

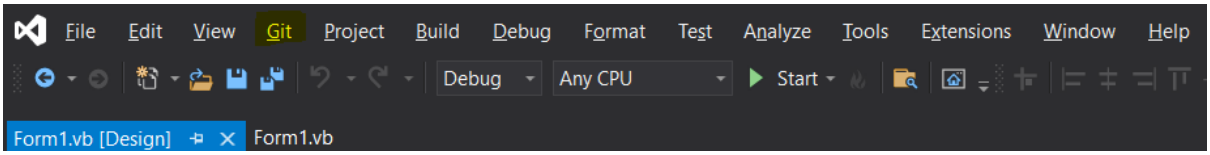
```
C:\Users\TG Chipoyera>git config --global user.name
ThaBeanBoy

C:\Users\TG Chipoyera>git config --global user.email
gtchipoyera@gmail.com
```

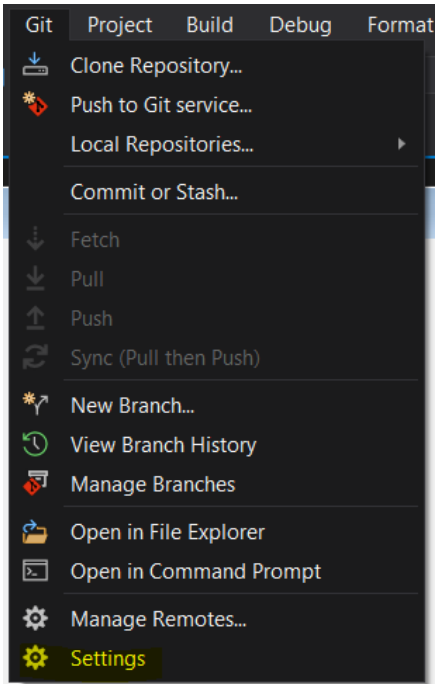
   Your details will be shown to you

2. In Visual Studio

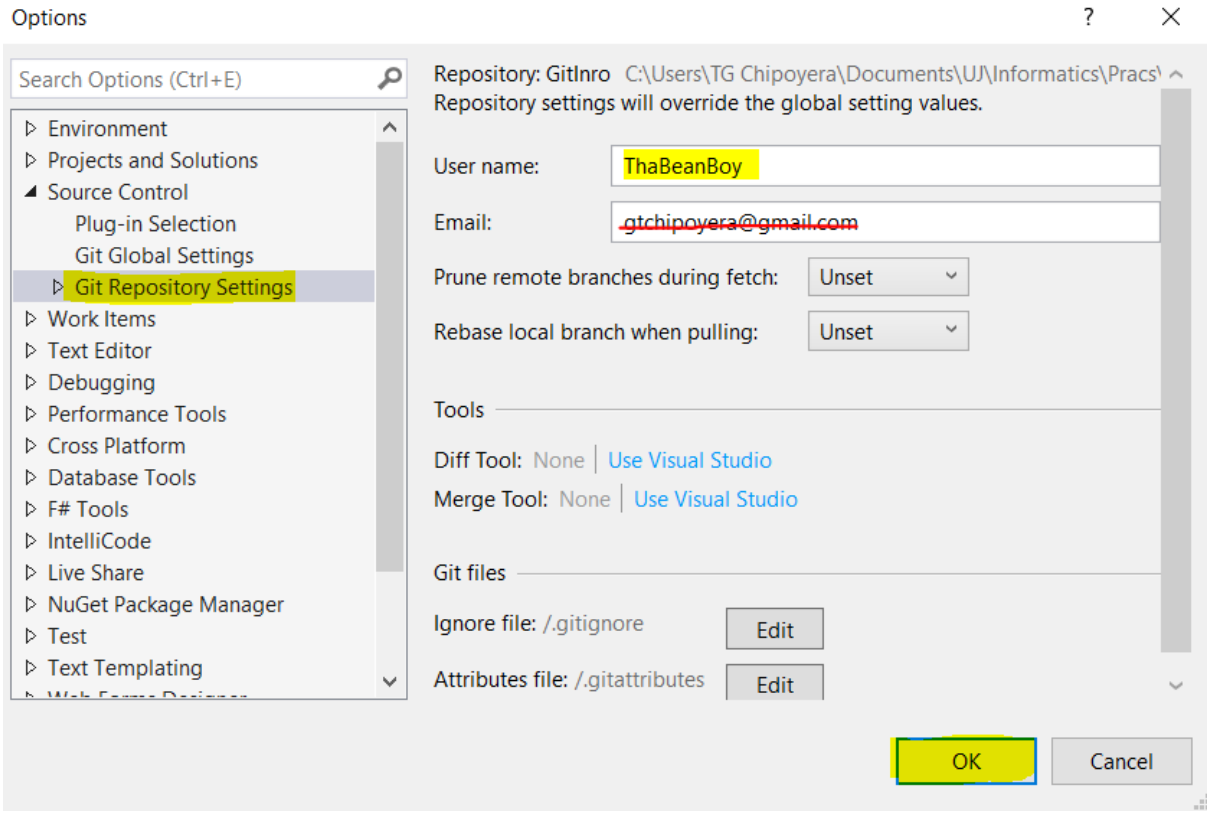
   In visual studio, click git at the very top




   Then click settings



A window like this will open up, click the ‘Git Repository Settings’. Enter your username and email, then click ‘OK’




# Geting started with github

To make things simple, github is just an online service where people and teams can store their repos, (repo is short for repository, a file where we store our source code).

The biggest advantage of having an online service store your repo is if your pc crashes, atleast you can know that all your hard work is not gone in an instant, and if you working in a team, everyone has access to it without any problems.

Maybe now you have a good idea of what github is, but there are some things that need explaining. So let me tell you what we will discuss in this doc,

1. Cloning
2. Pushing
3. Pulling

## Cloning

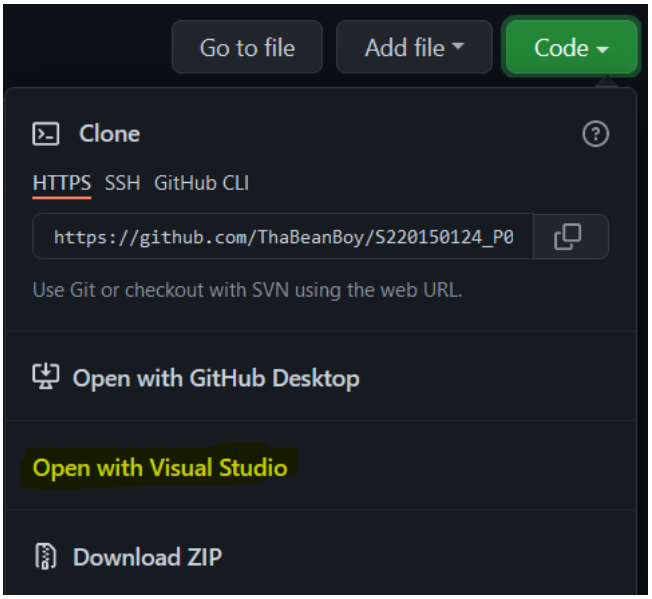
Alright dawg, we already discussed clonig in the previous doc, but here's a quick recap. When we have a git repo, that repo might have multiple branches, and those branches have been previously committed in. Basically, the repo has a lot of information of the development process, such as who worked on what, who changed files and so on.

So when you clone, you not only downloading files, but the information on the repo like branches and so on,

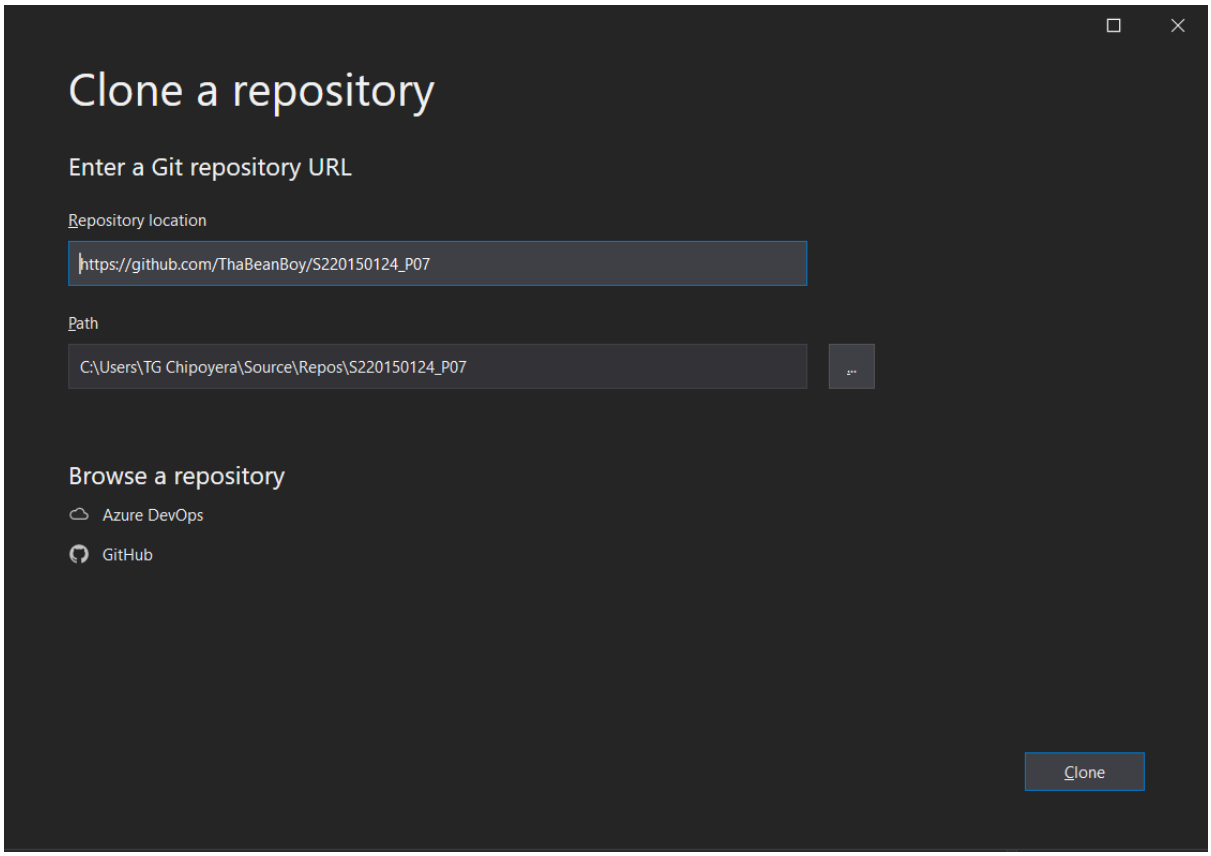
Here's a quck example on how to clone, in the previous doc, we used git gui, but here we'll use Visual Studio, Remember, whether you use git in the command prompt, git gui, visual studio's git interface or any other, you still achieve the same thing.

Click the green button written 'Code'


Then click 'Open with Visual Studio'




A window like this will open



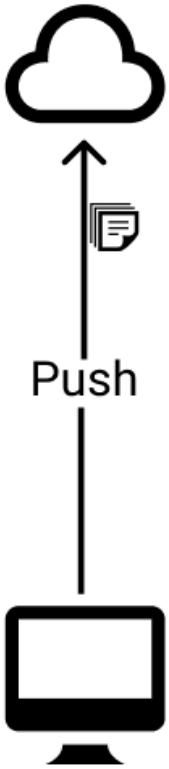

Don’t temper with the Repo location, it’s just cloning from github.

During cloning, all directories in the directory you selected will be checked, there should not be a directory with a similar name

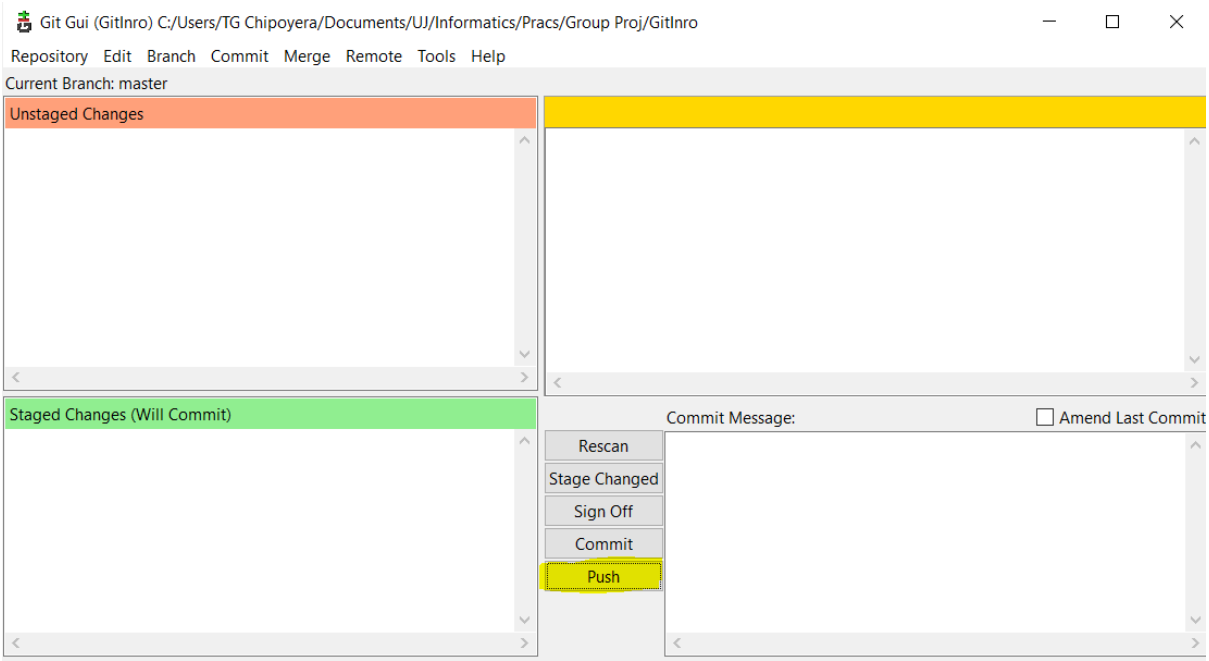
If hell breaks loose, in the directory you selected, make sure that there are no other files. If you find any errors, just notify the team

Pushing

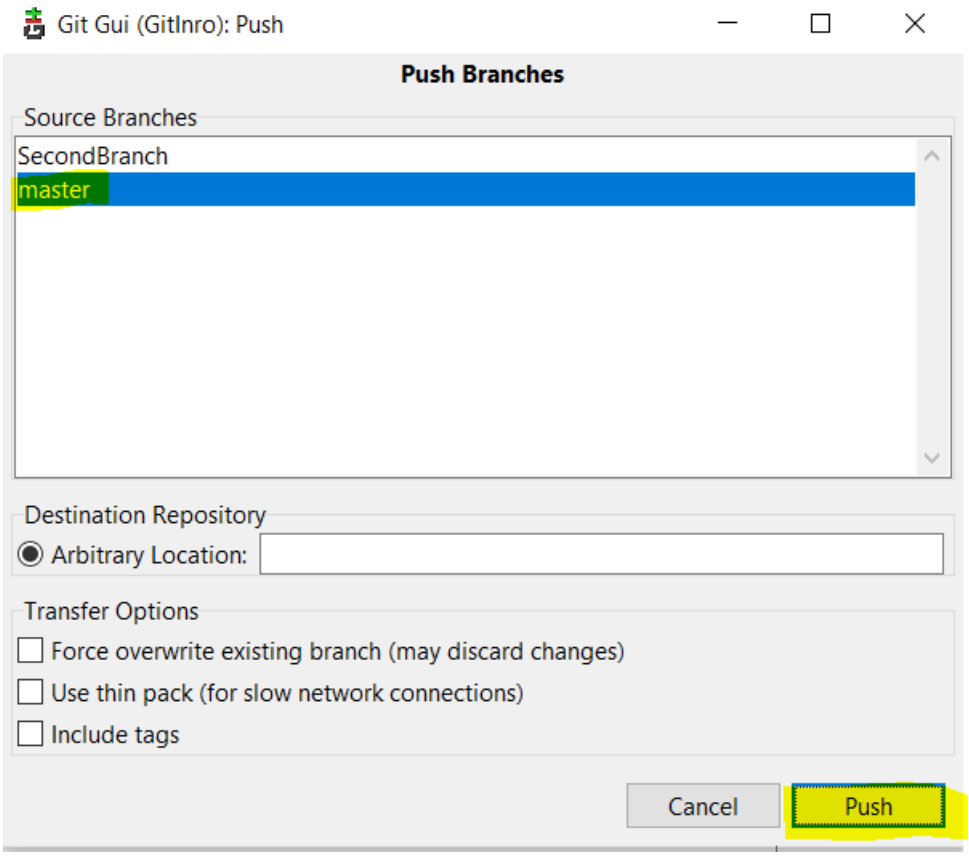
Now let's say you are done with adding a feature or debugging your code, Everythings is all good because it's working on YOUR pc, but here's the problem, the online repo still has the old code, but you have the new and improved code, you need a way to make sure the online repo has all the goodstuff you came up with on you local pc, this is where git push comes in.




Remember, the branch you updated has to be clean, so press Rescan, back to the subject, press 'push'




Now you have to select the branch you worked on and push your new and improved code, in this case, I made improvements in the master branch, so in the master branch of the GITHUB repo will be updated with your code.



Pull

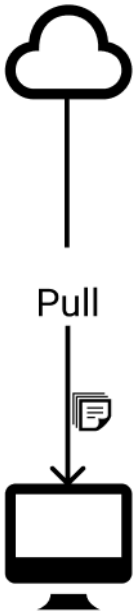
Now we know how to get a repo from an online repo like github, not only that, YOU can update the code on the online repo too. But here's the problem, just like your team members, they also constantly updating.

Unfortunately, your pc doesn't have a connection to your team members' pcs, but you do have a connection to the online repo though.

So here's the problem, it's wonderful you are improving the app we working on, but how are YOU gonna see the results of our hard work too? Throu pull requests.

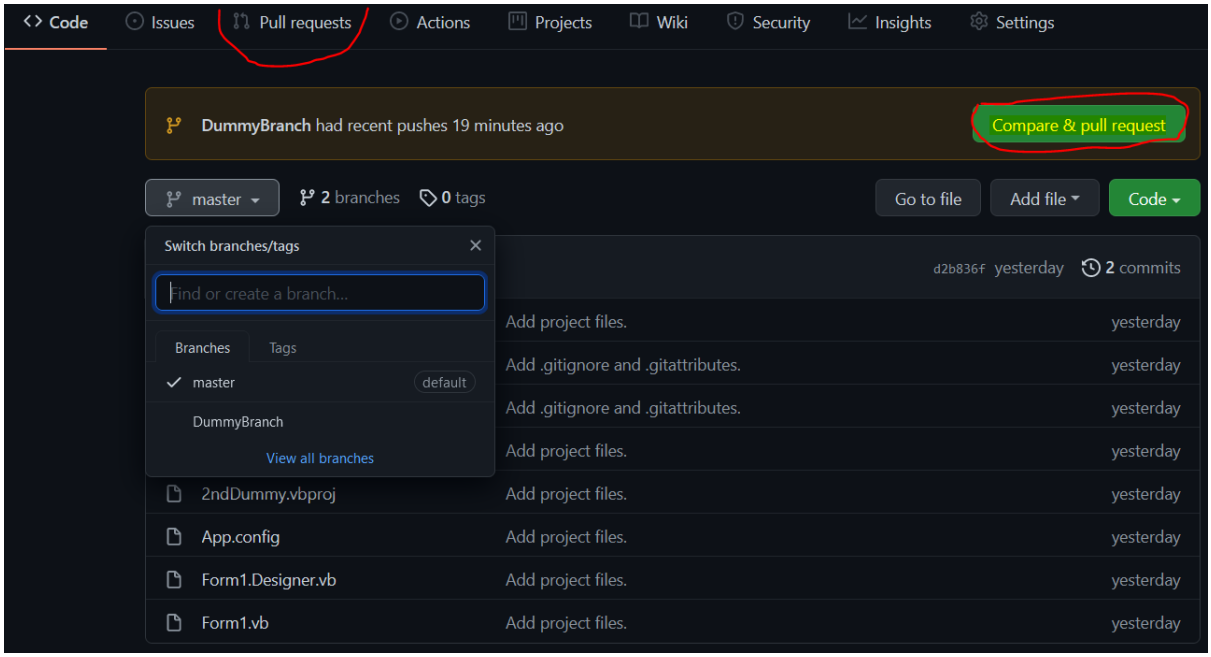
A pull requests is similar to a clone request, the difference this time is that you already have the repo on your pc. So instead of repeatedly cloning the whole repo from github, pull requests basically as the online repo if there were any changes made to it that your local repo doesn't know about.

If there are updates, like a team member added a ujgrid to the form, the your local pc will see that update



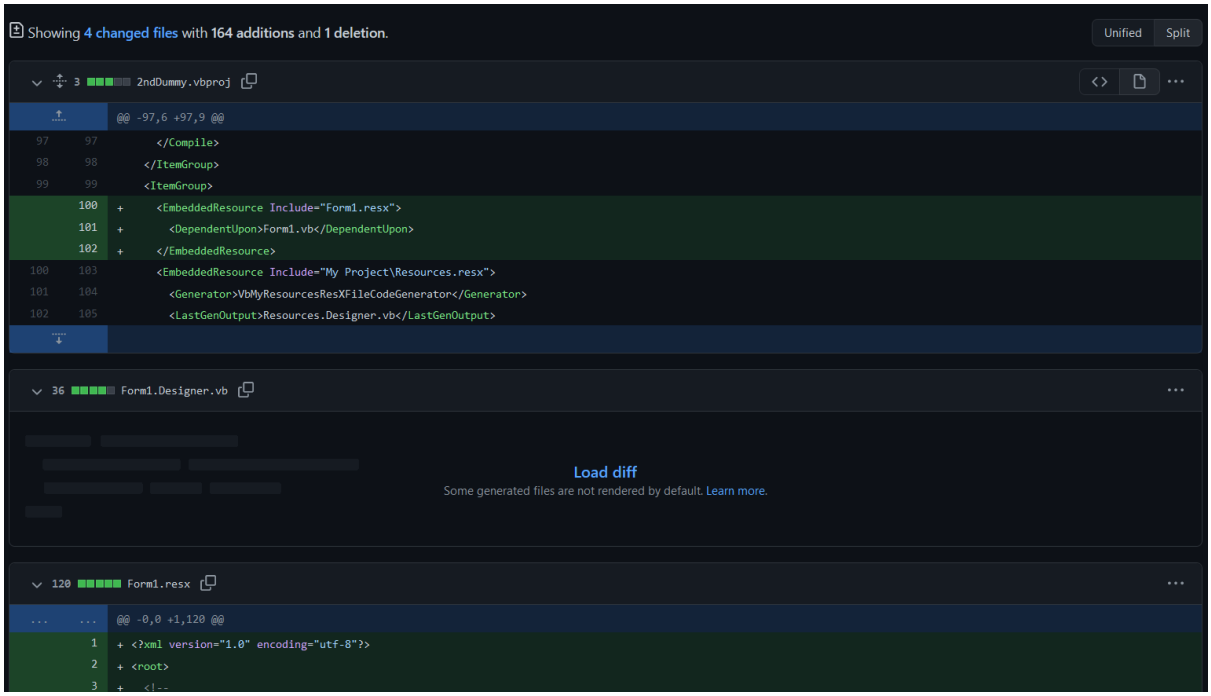
It’s highly advised to always make a pull request everytime you about to start coding, because you will get every update to the app, when you constantly make pull requests before working on the app, it will decrease the number of merge conflicts, (Don’t worry about merge conflicts)

To make  a pull request, press ‘Pull request’ or if someone recently committed, the option to pull is there to.




Honestly, I’m new to pull requests, so from here We’ll stumble and fumble together

But, get to a page where it shows you the difference in files, something like this image below




At the top, you see a green button showing you that you can make a pull request. Basically press it, guess we'll learn how to use pull requests together