# Students working with Git Hub and Visual Studio

## 1- GitHub register

To register with Git Hub:

https://github.com/join

Note: you must provide a username containing part of your name otherwise it will be difficult to recognize you: e.g., John_Brown, Andy2001

Note: you must provide a serious email because that is how the teacher will communicate with you.
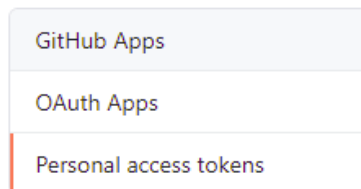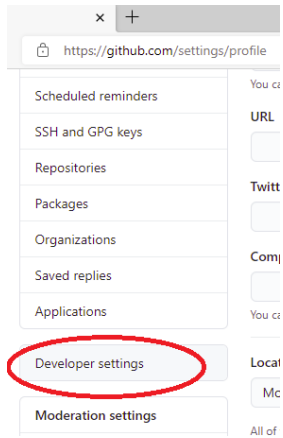
Make sure you are logged in to GitHub.

## 2- Create Personal Access Token

To generate the access token, from your Github account, go to Settings
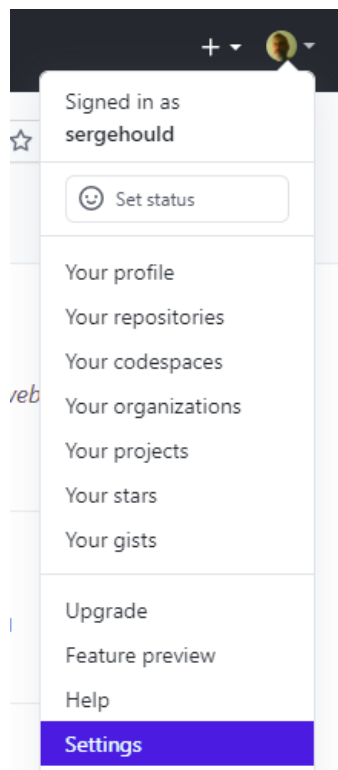


Developer Settings:

Generate token by configuring **ALL** privileges on the token and provide meaningful name. (Check every single item of the list:)

☑ write:repo_hook     Write repository hooks
☑ read:repo_hook     Read repository hooks

☑ admin:org_hook     Full control of organization hooks

☑ gist     Create gists

☑ notifications     Access notifications

☑ user     Update all user data
☑ read:user     Read all user profile data
☑ user:email     Access user email addresses (read-only)
☑ user:follow     Follow and unfollow users

☑ delete_repo     Delete repositories

☑ write:discussion     Read and write team discussions
☑ read:discussion     Read team discussions

☑ admin:pre_receive_hook     Control enforcement of pre-receive hooks for an organization or repository

☑ admin:gpg_key     Full control of user gpg keys (Developer Preview)
☑ write:gpg_key     Write user gpg keys
☑ read:gpg_key     Read user gpg keys

**Generate token**    Cancel

Preserve the newly generated token and **use it as password** for subsequent logins



Settings / Developer settings

OAuth Apps

GitHub Apps

Personal access tokens

Personal access tokens

Generate new token    Revoke all

Tokens you have generated that can be used to access the GitHub API.

Make sure to copy your new personal access token now. You won't be able to see it again!

✓ 1622155132722935828781452737382634288985

Edit    Delete

Personal access tokens function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to authenticate to the API over Basic Authentication.

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GitHub Enterprise 2.13.1

API    Training    Shop    Blog    About

**3- Visual Studio clone and commit**

Copy-paste the following URL to accept an invitation for laboratory-1:
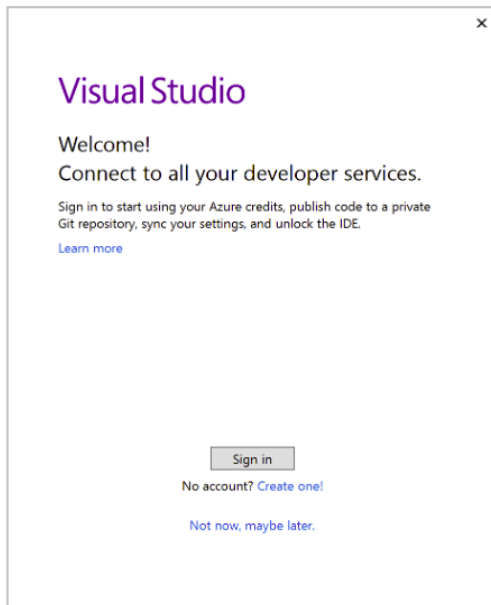
https://classroom.github.com/a/92TZWj1E

You will get a private new repository for all Allegro labs

https://github.com/System-Programming-Vanier/allegro_labs-YourName

Open VS 2019

When you open Visual Studio for the first time, you're asked to sign in and provide some basic registration information.



Choose a Microsoft account or a work or school account that best represents you. If you don't have any of these accounts, you can create a Microsoft account for free by clicking the link under the sign in button.

To verify whether you're signed in, look for your name in the upper-right corner of the Visual Studio environment.

Click File -> Clone Repository
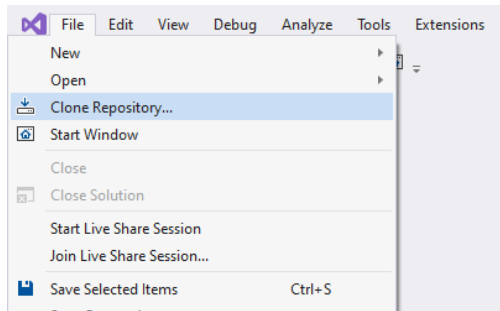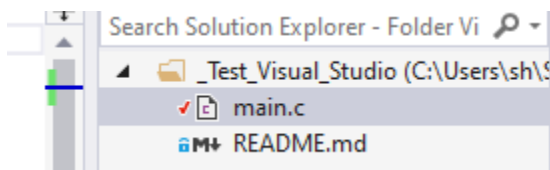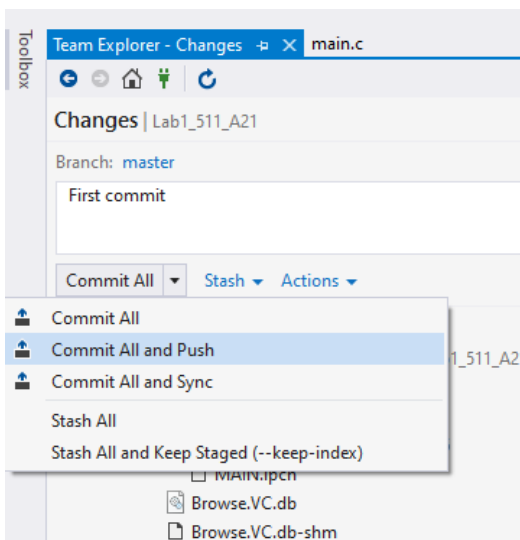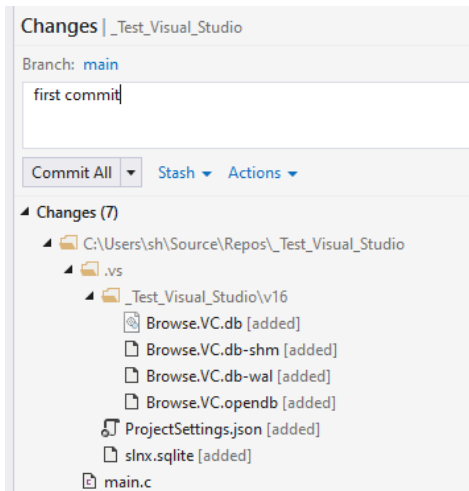
Click on View -> Team explorer
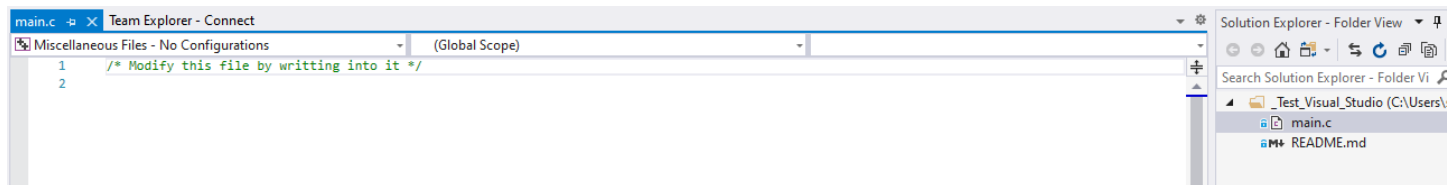


Modify main.c file by writing a few words into it.
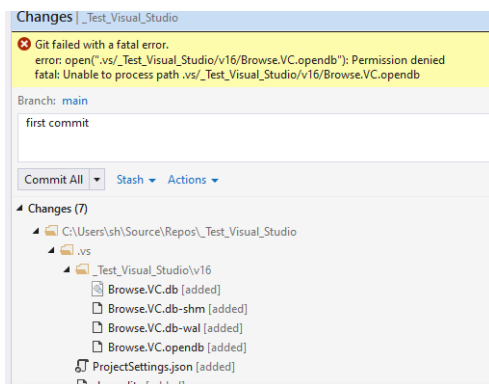
Then, save it.

You should see a red check on the left side of the file:
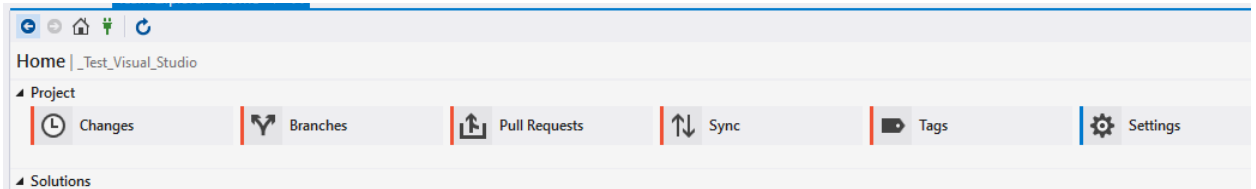
And then commit and push it:





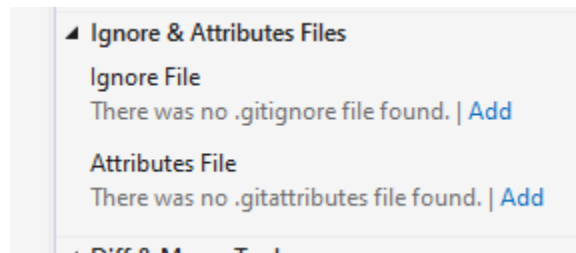You will most likely get the following message:



To fix it, there are two options:

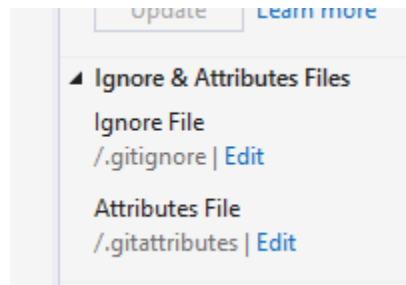**4a- Add gitignore and gitattribute files Option 1:**

Select Setting -> repository Setting
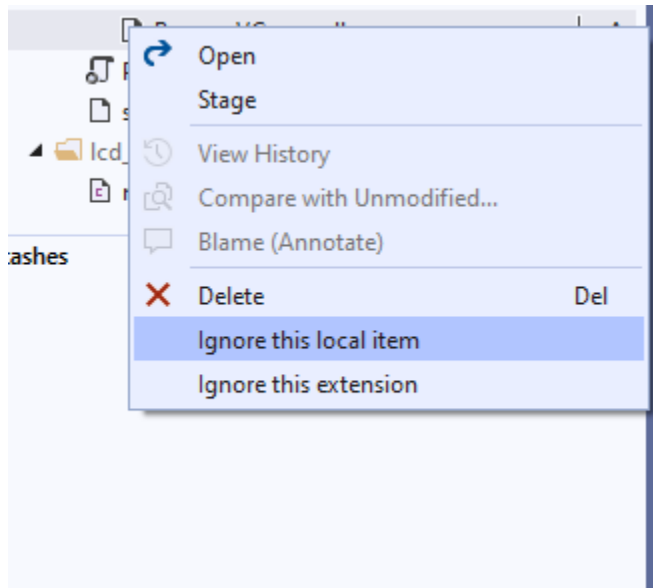


Click on both Add:



Two files .gitignore and .gitattributes will be created:

**4b- Add gitignore and gitattribute files Option 2:**

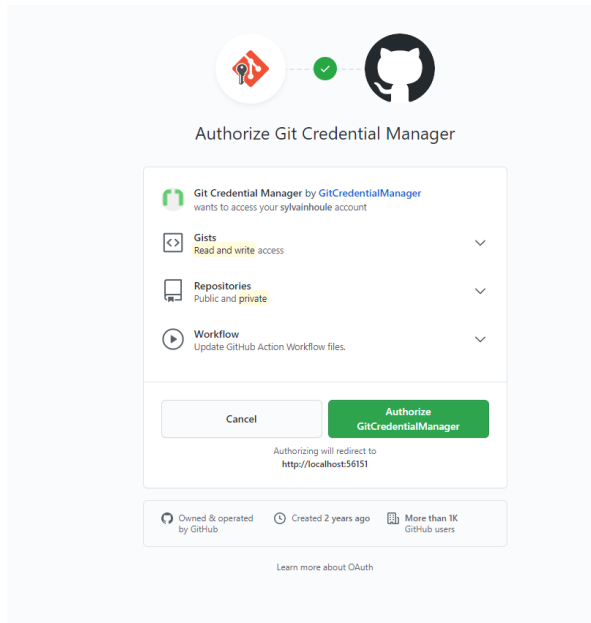You must disable the VC.opendb file:

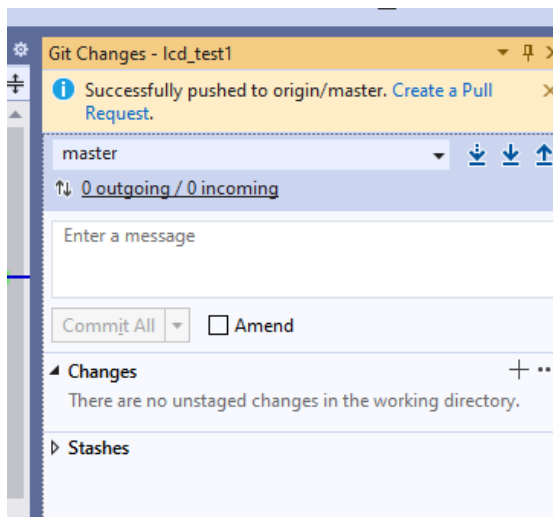Right click on the file:



And then select Ignore this local item.

## 5- Final push

If you try to commit and push, it will then ask you to authorize the Git Credential Manager.  Use your new token as a password.
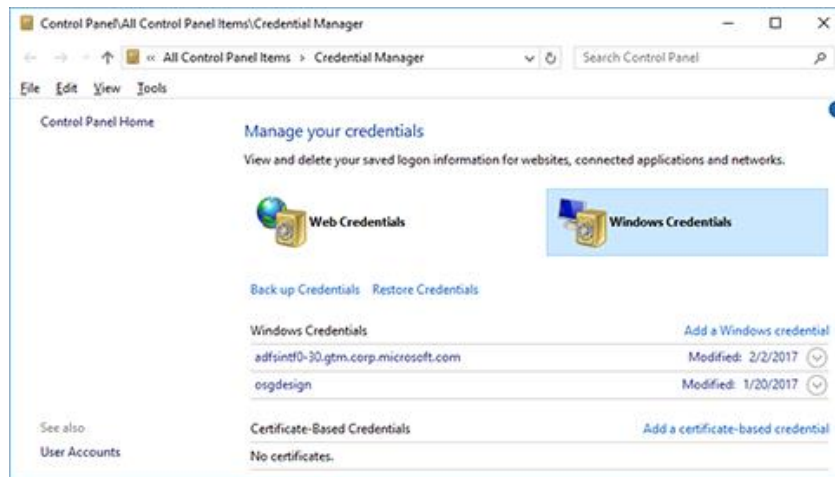


Then it will push successfully:
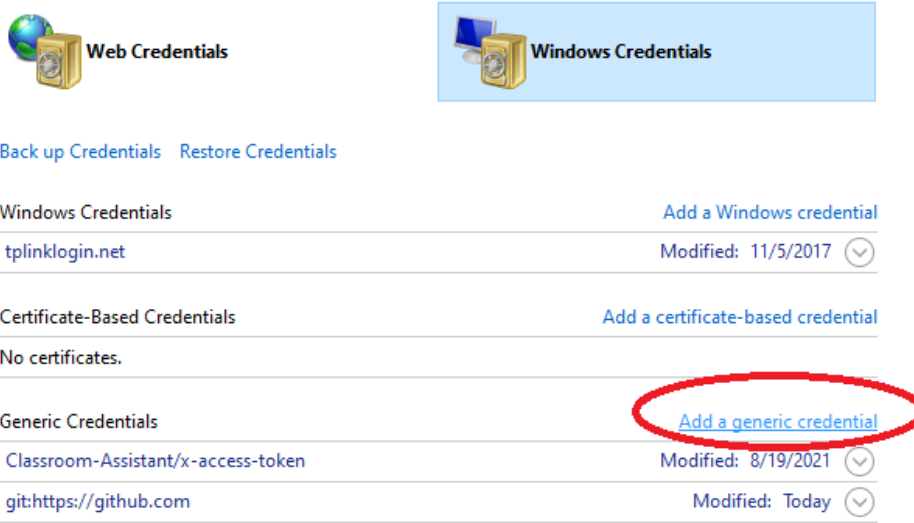
## 6- Credential Manager

If the Git Credential Manager does not work, use the Windows Credential Manager.

To open Credential Manager, type credential manager in the search box on the taskbar and select Credential Manager Control panel.

Select Windows Credentials to access the credentials you want to manage.



.      Click on Add a generic credential:

Enter git:https://github.com, your user name and your access token.

Type the website address and your credential information

Make sure that the user name and password that you type can be used to access the location.

Internet or network address:     git:https://github.com

User name:     your user nam

Password:     ●●●●●●●●●●●●●●●

OK     Cancel

Retry to commit and push