

COP 4005 – Committing to GitHub with Git Bash

Introduction

The purpose of this document is to provide the necessary information to commit to a GitHub repository using Git Bash. There are many ways of committing to a repository, this being one of them. This guide will show step by step how to install Git Bash and make your first commit.

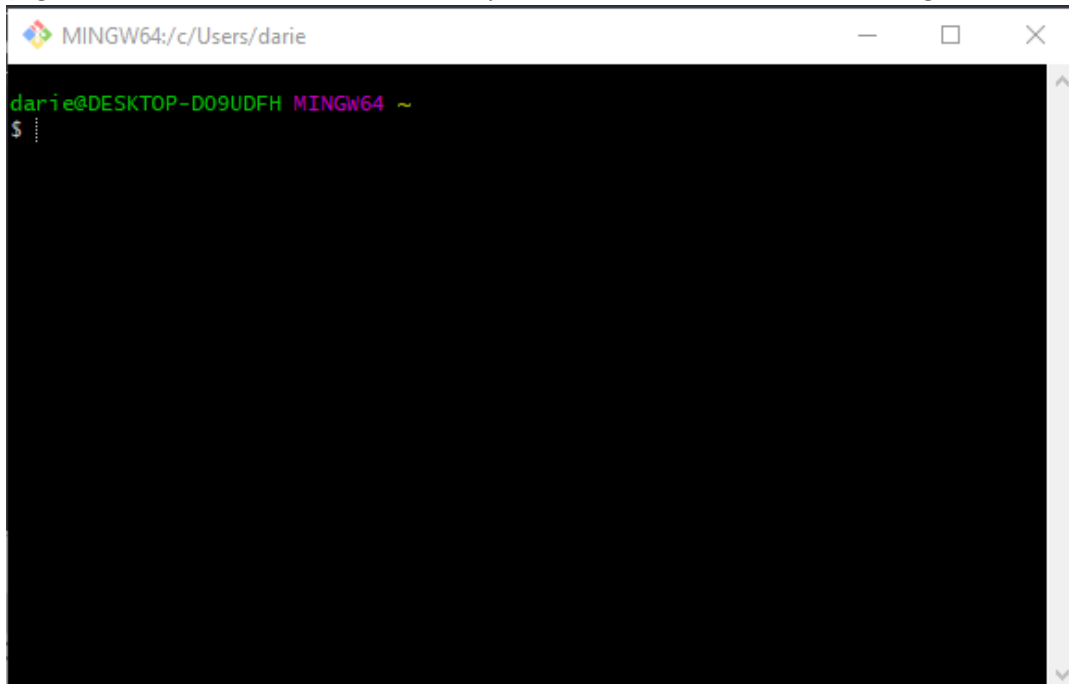
Instructions

- 0) Make sure you have a GitHub account using your FIU email address <https://github.com/>
- 1) Download the Git dependency on their website at <https://git-scm.com/downloads> - This is a client that will allow you to run Git commands from Mac, Windows, and Linux. – **USE THE DEFAULT INSTALLATION OPTIONS** for an easier experience.
- 2) The download will install Git Bash and Git GUI, we will be using Git Bash

(Figure 1)

Name	Date modified	Type	Size
Git Bash	1/11/2020 2:11 PM	Shortcut	2 KB
Git CMD (Deprecated)	1/11/2020 2:11 PM	Shortcut	2 KB
Git GUI	1/11/2020 2:11 PM	Shortcut	2 KB

(Figure 2 - For those familiar with Linux, you can use Linux commands to navigate the directories)



- 3) Before committing you must configure Git Bash to have your username and email (this can be found in your GitHub profile) using these commands – Use the global flag if you do not want to do it for every repository

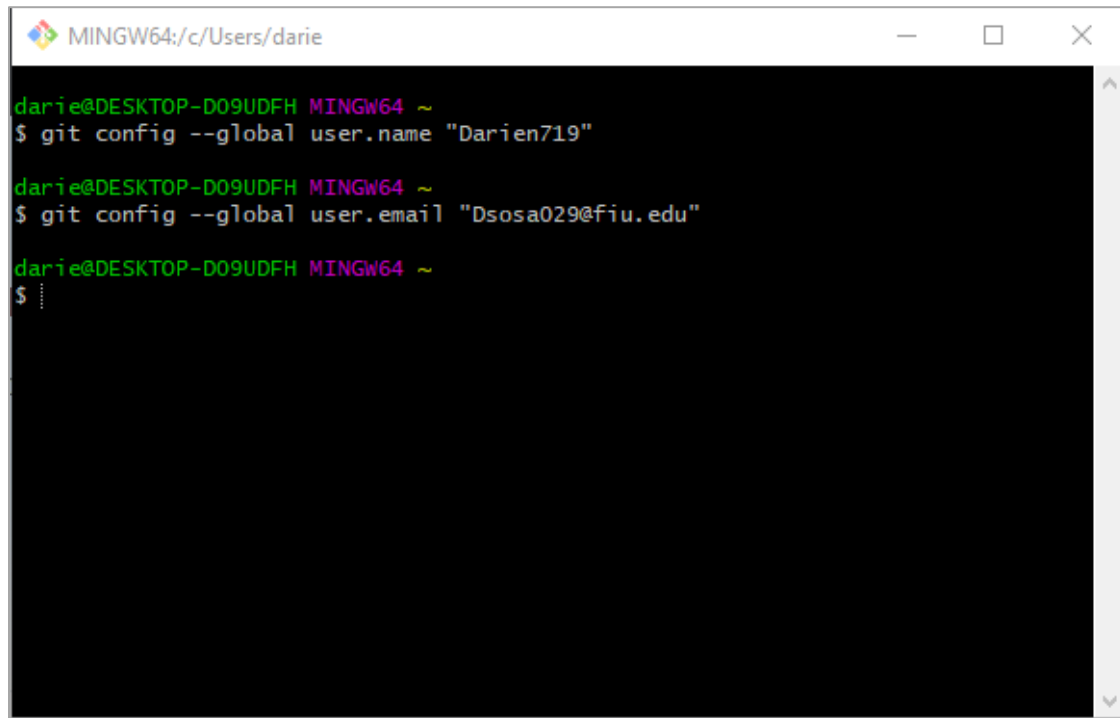
Set your username:

```
git config --global user.name "FIRST_NAME LAST_NAME"
```

Set your email address:

```
git config --global user.email MY\_NAME@example.com
```

(Figure 3)



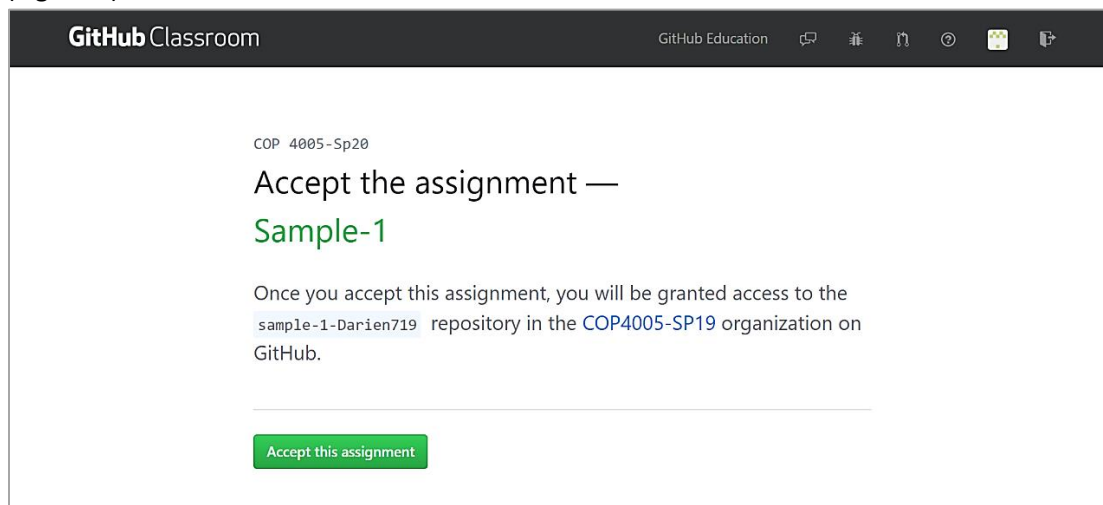
```
MINGW64:/c/Users/darie
darie@DESKTOP-D09UDFH MINGW64 ~
$ git config --global user.name "Darien719"

darie@DESKTOP-D09UDFH MINGW64 ~
$ git config --global user.email "Dsosa029@fiu.edu"

darie@DESKTOP-D09UDFH MINGW64 ~
$
```

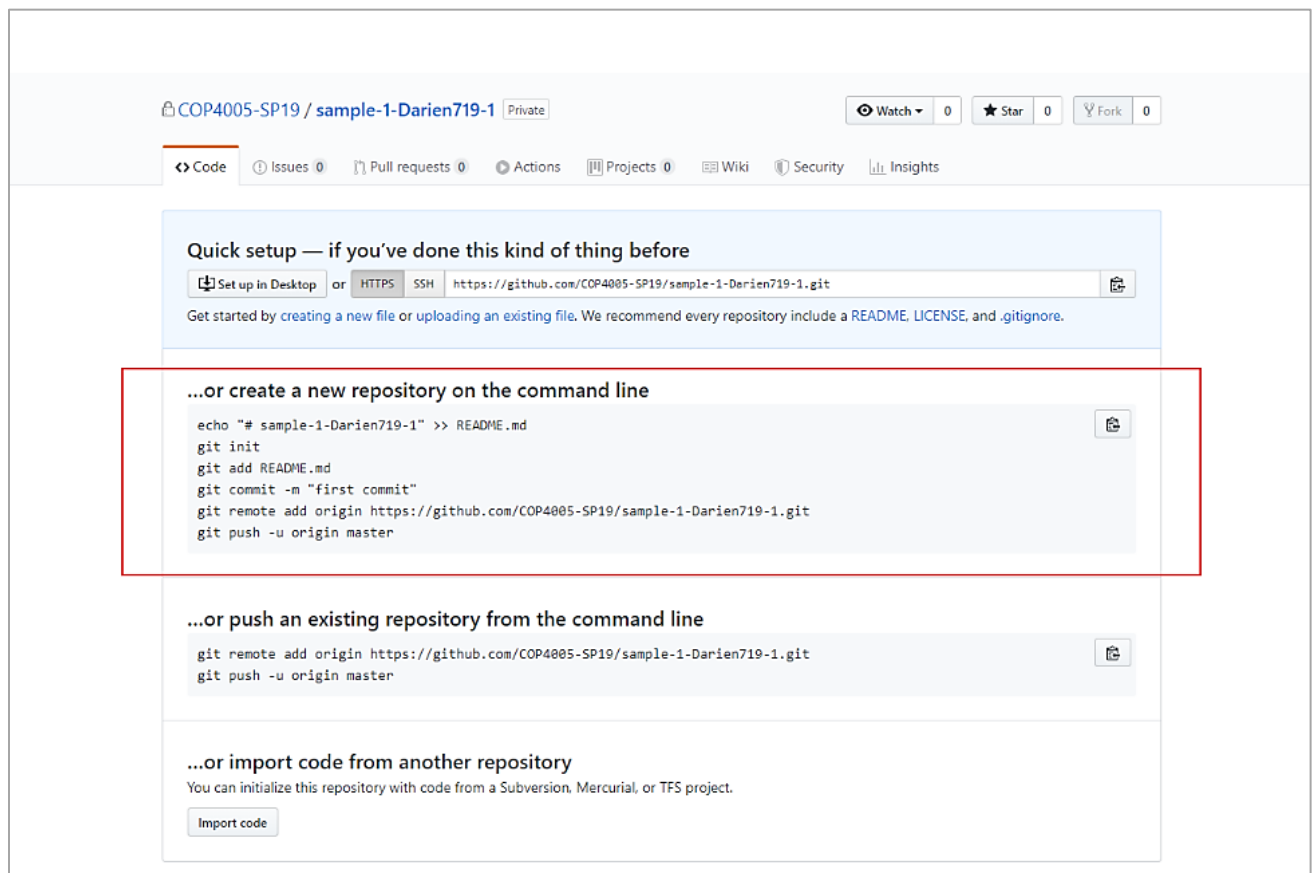
- 4) You will receive invitations to create your repository. Click the accept button on the link.

(Figure 4)



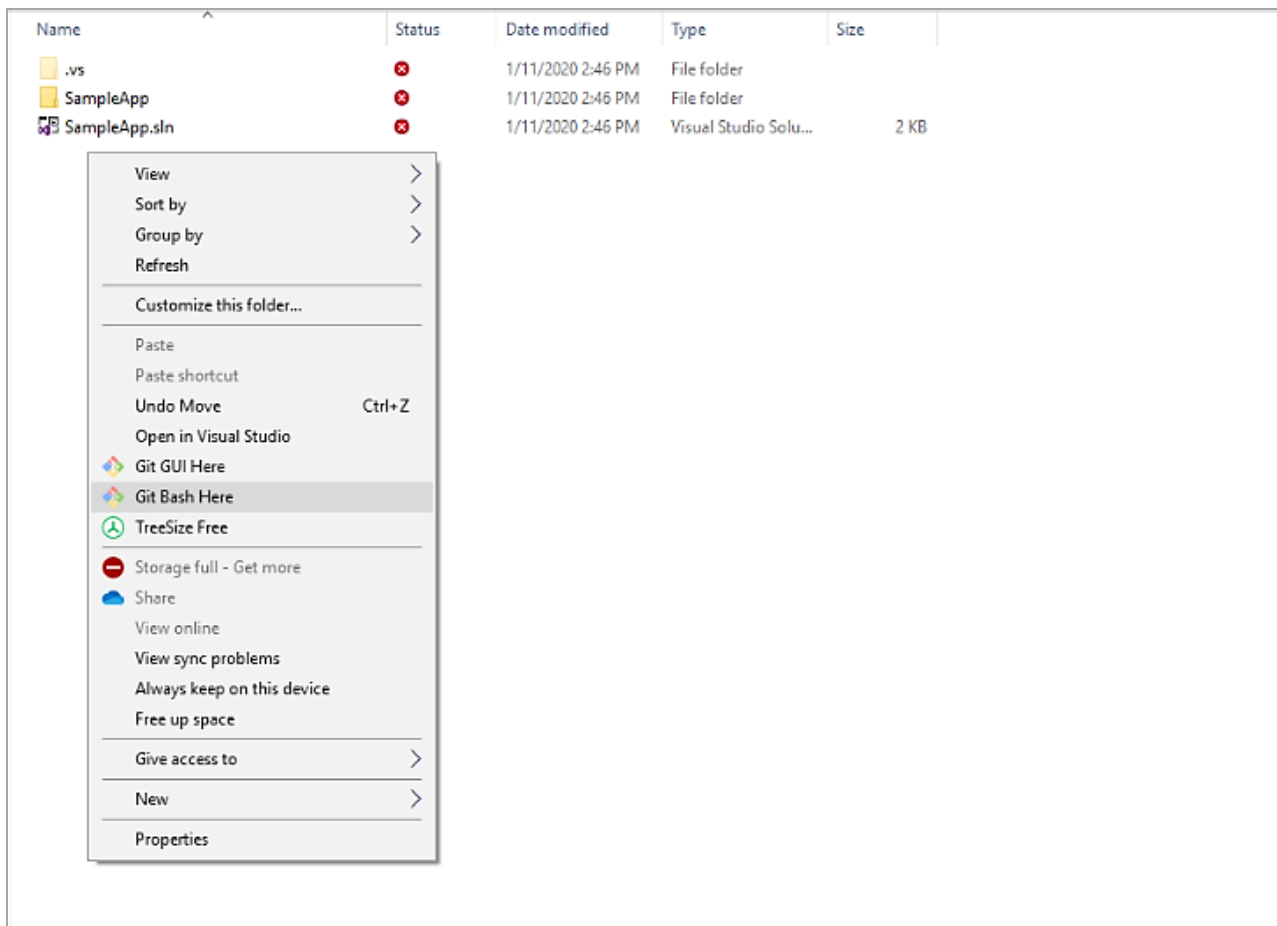
- 5) You will receive a link to access your repository, click it. The first time you open your repository you will be presented with a list of commands that you will run on Git Bash to create and link the directory on your PC to the GitHub repository

(Figure 5)



- 6) Before running these commands, we need to open the directory where we want to create this repository using Git Bash. This will be the folder where your project is located. Navigating to the folder using the Windows File Explorer and right clicking will prompt you with the option to open Git Bash here. Click it or alternatively navigate to the directory using the Git Bash command line

(Figure 6)



- Copy and run the commands highlighted in Red in Figure 5 (Your version of the commands) – If it asks for your password with a prompt, enter your GitHub password.

(Figure 7 – Running the Commands)

```

MINGW64:/c:/Users/darie/OneDrive/Desktop/VB Git Example/SampleApp
r)
$ git commit -m "first commit"
[master (root-commit) 39a43f1] first commit
1 file changed, 1 insertion(+)
create mode 100644 README.md

darie@DESKTOP-D09UDFH MINGW64 ~/OneDrive/Desktop/VB Git Example/SampleApp (master)
$ git remote add origin https://github.com/COP4005-SP19/sample-1-Darien719-1.git

darie@DESKTOP-D09UDFH MINGW64 ~/OneDrive/Desktop/VB Git Example/SampleApp (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 231 bytes | 231.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/COP4005-SP19/sample-1-Darien719-1.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.

darie@DESKTOP-D09UDFH MINGW64 ~/OneDrive/Desktop/VB Git Example/SampleApp (master)
$

```

(Figure 8 – File after the creation of the repository)

Name	Status	Date modified	Type	Size
.git	✖	1/11/2020 3:11 PM	File folder	
.vs	✖	1/11/2020 2:46 PM	File folder	
SampleApp	✖	1/11/2020 2:46 PM	File folder	
README.md	✖	1/11/2020 3:11 PM	MD File	1 KB
SampleApp.sln	✖	1/11/2020 2:46 PM	Visual Studio Solu...	2 KB

- 8) Once the repository is created, we can make commits to it. This will keep a remote copy of our program. From this point on, we will primarily use 3 commands, making sure we are on the directory that has the repository set up.

Add all the files to the staging area –

“Git add .”

Commit the file to changes

“Git Commit -m “Commit Comment” “

Push the changes to Git Hub

“Git push”

(Figure 9 – Git Bash Running the Commands)

```
MINGW64:/c/Users/darie/OneDrive/Desktop/VB Git Example/SampleApp
e
create mode 100644 SampleApp/obj/Debug/DesignTimeResolveAssemblyReferencesInput
.cache
create mode 100644 SampleApp/obj/Debug/SampleApp.vbproj.CoreCompileInputs.cache
create mode 100644 SampleApp/obj/Debug/SampleApp.vbprojAssemblyReference.cache
create mode 100644 SampleApp/obj/Debug/TempPE/My Project.Resources.Designer.vb
.dll
darie@DESKTOP-D09UDFH MINGW64 ~/OneDrive/Desktop/VB Git Example/SampleApp (maste
r)
$ git push
Enumerating objects: 35, done.
Counting objects: 100% (35/35), done.
Delta compression using up to 16 threads
Compressing objects: 100% (27/27), done.
Writing objects: 100% (34/34), 185.51 KiB | 4.88 MiB/s, done.
Total 34 (delta 2), reused 0 (delta 0)
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/COP4005-SP19/sample-1-Darien719-1.git
39a43f1..92803bf master -> master
darie@DESKTOP-D09UDFH MINGW64 ~/OneDrive/Desktop/VB Git Example/SampleApp (maste
r)
$
```

Run these 3 commands on Git Bash every time you want to make a change to the repository, and you will see it reflected in your Git Hub repository.

(Figure 10 – Files saved on GitHub Repository)

The screenshot shows the GitHub repository page for 'COP4005-SP19 / sample-1-Darien719-1'. The repository is private and has 2 commits, 1 branch, 0 packages, 0 releases, and 1 contributor. The 'Code' tab is selected, showing a list of files: '.vs/SampleApp/v15', 'SampleApp', 'README.md', and 'SampleApp.sln'. The 'README.md' file is expanded, showing the text 'sample-1-Darien719-1'.

File	Commit	Time
.vs/SampleApp/v15	Example Commit	17 seconds ago
SampleApp	Example Commit	17 seconds ago
README.md	first commit	11 minutes ago
SampleApp.sln	Example Commit	17 seconds ago

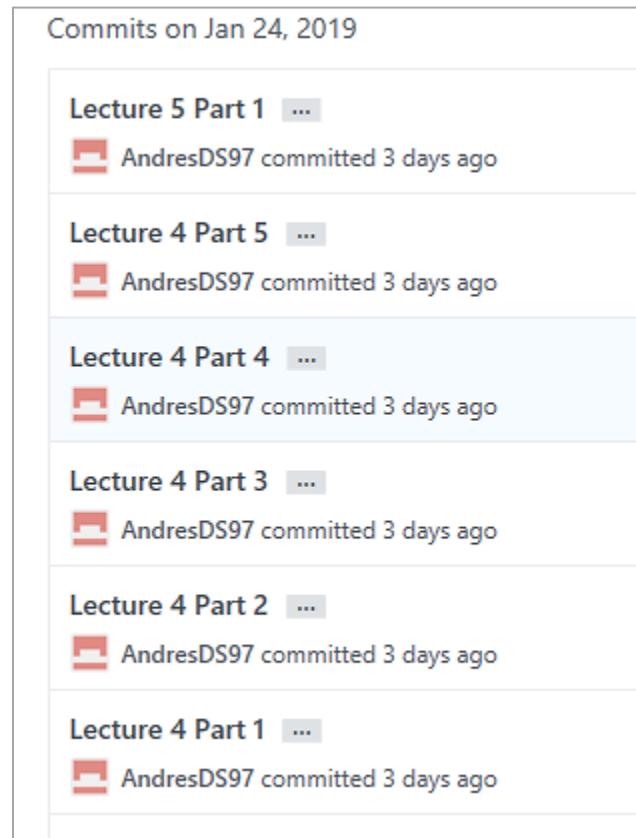
(Figure 11 – Commit History)

The screenshot shows the commit history for the 'sample-1-Darien719-1' repository. The 'Code' tab is selected, and the 'Commits on Jan 11, 2020' section is visible. The history shows two commits: 'Example Commit' (92803bf) and 'first commit' (39a43f1).

Commit	Hash
Example Commit	92803bf
first commit	39a43f1

Naming the Commits

Name each commit with the name of the video to which your project corresponds. Here is a sample:



Conclusion

From this point on, for every assignment that will be submitted, we simply need to accept the invitation from Step 4. Copy and paste the commands on the correct directory and run the 3 commands from Step 8 to make changes. Good luck!