**Assignment: GitHub Repository Setup**

For this module’s assignment, we will be creating a GitHub repository using git and the command line interface (CLI). The repository we create in this assignment will be used throughout the course to host the coding assignments. If you have not already [installed git](https://www.atlassian.com/git/tutorials/install-git), please do so before continuing. Make sure that you include the steps to set the global username and global email address.

There are resources available in the Git/GitHub Resources menu item to the left on installing and configuring Git.

**Instructions:**

1. Click on each instruction box below to expand the instructions.
2. Complete the setup instructions and save the following items into a single word document:
   * + **Link to your GitHub repository**
     + **Screenshot of your GitHub repository**
     + **Screenshot of your local directory, following the structure format provided in the instructions below.**

**1. Local Directory Setup Instructions**

* Open a command prompt window
  + If you are on a windows machine, use PowerShell or cmd (press the windows key and start typing the name of the command prompt you want to use)
  + If you are on macOS, use the Terminal
  + If you are on Linux, use the Terminal
* Navigate to your user directory
  + If you are on windows enter: **cd \**
  + If you are on macOS/Linux enter: **cd ~**
* Create a new directory and name it **csd**
  + **mkdir csd**
* Change directory into the csd directory
  + **cd csd**

**2. Repository Setup Instructions**

* Go to <https://github.com/> and sign up
* Sign into GitHub
* Create a new GitHub repository and name it csd-310
* Enter a description
* Make the repository public and “Initialize this repository with a README.md” file
* Add .gitignore file (Python)
* Choose “Create repository”

**3. Clone Instructions**

* Open a command prompt window
  + If you are on a windows machine, use PowerShell or cmd (press the windows key and start typing the command prompt you want to use)
  + If you are on macOS, use the Terminal
  + If you are on Linux, use the Terminal
* Sign-in to GitHub (if you are not already)
* Click on your csd-310 repository.
* Click on the green Code button and copy the URL for csd-310’s repository
* In the command prompt or terminal window, verify you are in the correct working directory (you should be in the **csd** directory) and enter **git clone <copied URL>**
* Verify the repository was created
  + For windows enter: **dir**
  + For macOS/Linux enter: **ls**

**4. Git Stage, Commit, Push**

One thing to keep in mind is that Git/GitHub needs to stay in synch. If you make changes to your local directory, you need to push them to GitHub. If you make changes to GitHub, you need to pull them into your local directory. If you make changes to GitHub, and then try and push new changes from your local directory without pulling the first change from GitHub, you will get an error message telling you just that.

For this assignment:

* Navigate to your CSD-310 directory.
* Create a new directory named module-1
  + **mkdir module-1**
* Do a directory listing of your CSD-310 directory and verify the new changes.
  + For windows C:\CSD\CSD-310>dir
  + For macOS/Linux enter: CSD-310>ls
  + Take a screenshot of the results.
* Open up a Word document, put your name and assignment number at the top. Paste the screenshot into Word. Save the document as yourlastname\_assignment number (ex. Sampson-Assignment1\_2) to the new module-1 directory you made in CSD/CSD310.
* You should always check the status of your git/GitHub. Start at the CSD310 directory. All changes will be in subfolders. At this point, you should be up to date.  
  **C:\CSD\CSD-310>git status**  
  On branch main  
  Your branch is up to date with 'origin/main'.
* Stage: Adding files. We want all changes (new directory, new file in directory) to be staged, so instead of typing the individual filenames, we just use **one** of the following.. they do the same thing, adding all changes.  
  **C:\CSD\CSD-310>git add --all**  
  **C:\CSD\CSD-310>git add -A**  
  **C:\CSD\CSD-310>git add .**
* Check the status again, you should see files to commit.  
  **C:\CSD\CSD-310>git status**  
  On branch main  
  Your branch is up to date with 'origin/main'.  
    
  Changes to be committed:  
  (use "git restore --staged file.." to unstage)  
  new file: module-1/Sampson-Assignment1\_2.docx
* Time to commit. Always a good idea to add a comment, or message to the commit. Helps keep track of when activity occurred.  
  **C:\CSD\CSD-310>git commit -m "Pushing 02/19/23"**  
  [main 013884b] Pushing 02/19/23  
  1 file changed, 0 insertions(+), 0 deletions(-)
* Next, time to push the changes to your GitHub repository..  
  **C:\CSD\CSD-310\module-1>git push origin main**  
    
  Enumerating objects: 7, done.  
  Counting objects: 100% (7/7), done.  
  ... additional details
* Note:  
  You may encounter authentication issues when pushing to GitHub...  
  1. It asks to complete authentication in browser, which results in a pop up window asking for user name and password. Completing that gets you back on track.  
  2. It asks for authentication in command line, and when you type in user name and password, you see a message that GitHub no longer uses passwords, is now using token IDs. If so, go to your GitHub account and follow the steps at: <https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token>Then in command line log in using user name and token ID.
* Check your GitHub remote repository for the push. Might take a little time, so be patient. When you see module-1, click it to open, and take a screenshot. Add the screenshot to your Word document, and copy the URL of your repository into the Word document and save.

**Deliverables:**

1. Link to your GitHub repository.
2. Screenshot of your GitHub repository.
3. Screenshot of your local directory (properly formatted).
4. Combine all 3 items into a single word document and title it <your-last-name>-<assignment-name> .docx.

**Assignment Requirements and Grading:**

1. This assignment is due by **Sunday, 11:59 p.m., CST**.
2. Submit your assignment by clicking on the **Assignment Link** above, then scroll down to the **Attach Files** section and click on **Browse My Computer**. Select your assignment file, add any links or comments as appropriate, and then click on **Submit**.
3. To view the rubric grading criteria, click on the following link: [General Assignment Grading Rubric](https://content.bellevue.edu/cst/csd/rubricgeneralassignmentv1.pdf)