CPSC Development Environment Setup - Windows

GitHub.com

Account Setup (if you do not already have a GitHub account)

1. Go to www.github.com
2. Click on "Sign Up"
3. Choose a username (can be anything), use your CNU email address, and choose a password. Verify and create your account.
4. Verify your email address (the email will be sent to you by GitHub).
5. Complete the profile questions

CPSC 250 Repository Setup

1. In your GitHub account, in a browser, go to your list of repositories, by clicking on your profile picture in the upper right corner, and choosing "Your repositories".
2. Click on 'New'
3. Choose 'cpsc250' as the Repository name
4. Put something appropriate in the Description
5. MAKE THE REPOSITORY PRIVATE!!!!!
6. Choose to add a README file
7. Click on 'Create repository'

Configuring GitHub.com Security

1. In your GitHub account, in a browser, go the Settings, by clicking on your profile picture in the upper right corner, and choosing "Settings".
2. In the long menu shown on the left side, choose "Developer Settings", which is all the way at the bottom of the list of options.
3. Choose "Personal access tokens" -> Tokens(classic) from the new menu on the left.
4. Choose Generate new token -> Generate new token (classic)
5. In the "Note" field, enter cpsc250
6. Choose "No expiration" for the Expiration time
7. Select ALL of the radio buttons in the "Select scopes" region
8. Click on "Generate token"
9. This will generate a new token that looks like 'ghp_******'. Copy this token to the clipboard!!! This is important, as you are going to need this in the next steps!
10. On your local computer, open up a simple text file, and copy this token into that file. Save the file, giving it some name of your choice.

Git and GitBash

1. Go to gitforwindows.org
2. Download and run the installer, following the default instructions

Python

1. Go to python.org
2. Click on Downloads
3. Click on 'Looking for Python with a different OS? Python for Windows
4. Download the Windows 64-bit Installer (and NOT the embeddable package!!!) for Stable Releases - Python 3.10.11
5. Run the installer, and follow the default instructions

PyCharm

1. Go jetbrains.com/pycharm/download/
2. Download the Community Edition installer
3. Run the installer and follow the default instructions
4. Start Up PyCharm

Configuring PyCharm

Step 1: Clone your GitHub.com repository, created above

1. In the "Welcome to PyCharm" window, click on: Get from VCS
2. In the URL area, enter the location of your GitHub.com repo … the format is as follows: https://edwardbrash:ghp_UZJZ2GUZORidXcg3wAfsUP1tUbCRt0Hdt5@github.com/edwardbrash/cpsc250.git

Where you need to:

- Replace 'edwardbrash' with YOUR GitHub.com username, in both places!
- Replace ghp_UZJZ2GUZORidXcg3wAfsUP1tUbCRt0Hdt5' with YOUR Personal access token
- If necessary, replace 'cpsc250' with whatever you called your repository

3. Choose to Trust this repository, and choose to trust all repositories in PyCharmProjects, when asked

Step 2: Create a new "Hello World" program, for testing

1. Highlight "cpsc250" in the Project window (left side of the main window)
2. Open a new file with File -> New -> File, and call it 'helloworld.py'
3. You should see that this new file has been opened in the editor window. Add the line: print ("Hello World!") to this new file

Step 2: Configure Local Interpreter

1. In the bottom left corner of the PyCharm window, you may (probably!) see that it says <No interpreter> … this means we have to tell PyCharm where the Python interpreter is located (the one that you installed above).
2. Click on <No interpreter> -> Add New Interpreter -> Add Local Interpreter

Step 3: Install useful Python packages

1. Click on View -> Tool Windows -> Python Packages
2. In the new bottom left window that opens, in the search area, look for: matplotlib … click on Install package, in the bottom right window
3. Repeat Step 2 for the following: numpy, pandas, scipy
4. We may need other packages at some point, and any package can be installed in this way! :)