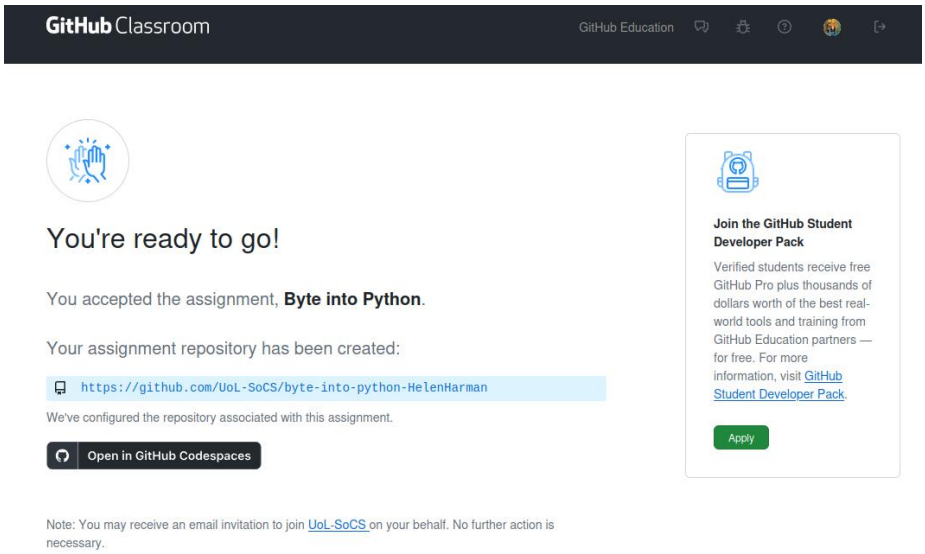
University of Lincoln

Getting started with GitHub classrooms and Codespaces

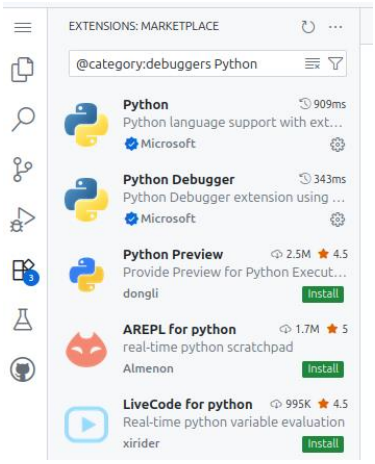
Below are the step-by-step instructions for getting started with GitHub classrooms and Codespaces.

1) Create a GitHub account using your university email address
2) Accept the assignment at: https://classroom.github.com/a/7rjzeZVk
3) Click “Open in GitHub Codespaces”

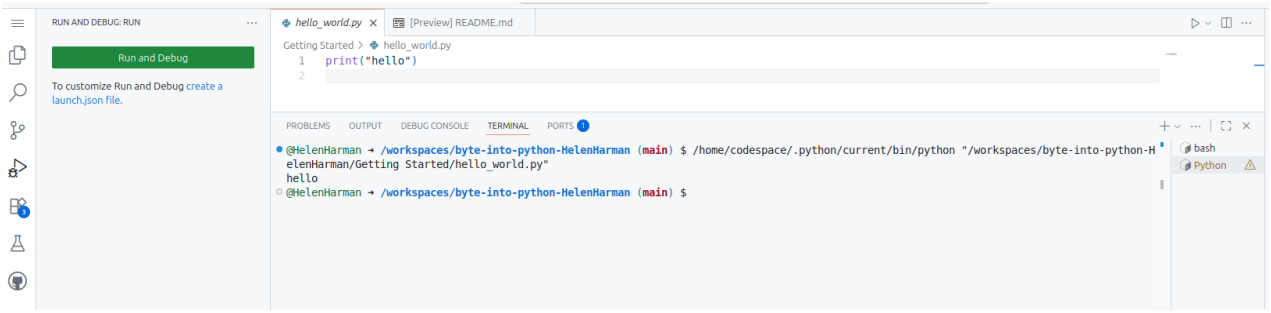


4) Open the “Getting Started/hello_world.py” file

5) Press the "Run and Debug” button (the play symbol with the bug next to it) -- located in the lefthand menu. Then, click the green “Run and Debug” button.
6) A pop-up will appear, asking you if you want to find the Python extension. Click “Find Python Extension”.
7) Click “Install” on the Python extension (it should be the first one in the list).



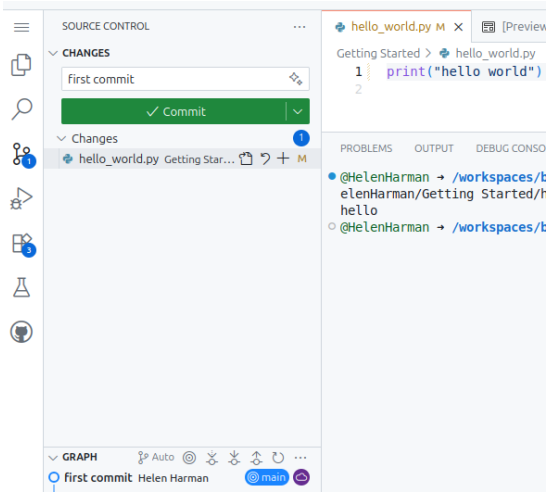
8) Once Python has finished installing, click back onto the “hello_world.py” file. Now try clicking “Run and Debug”. Click “Python Debugger” > ”Python file” in the dropdown menus that appear. After the code has run, “hello” should appear in the Terminal:



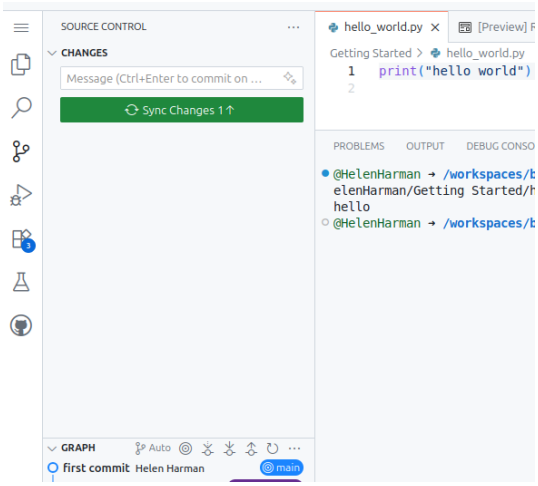
9) Make a change to the file (e.g. change the string that is printed). The file name should turn orange/yellow, and the source control menu item should indicate a file has been changed.

Let's commit that change to git (the local code repository) and push the change to GitHub (the remote code repository).

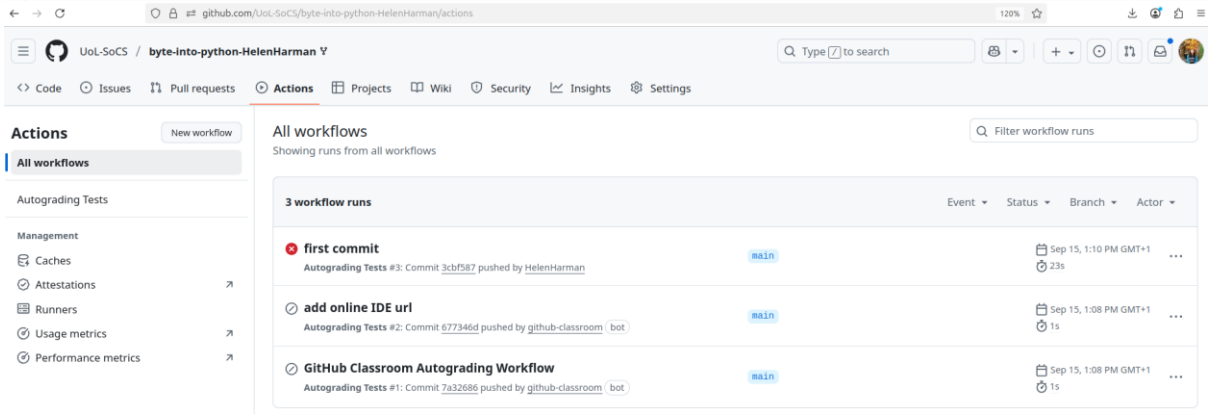
10) Click on the “Source Control” menu item (should have a “1” on it).
11) Type a commit message (e.g. “first commit”) and click the “Commit” button. Click “yes” on the pop-up window.



12) Click “Sync Changes”. Click “OK” on the pop-up.



13) Go to your Github repository within a web browser. This will be located at https://github.com/UoL-SoCS/byte-into-python-<YOUR GITHUB USERNAME> and open the Actions tab:



You should see a red cross next to the commit message you typed.

14) Click on your commit message (e.g. “first commit”). You should see an autograding report showing that 0 out of 40 points have been scored. Click on “Autograding report” to see a table of which tests have failed.

Let’s make the Getting Started tests pass! (You can check out the tests by opening test_hello_world.py file.)

15) Copy the following block of code into hello_world.py (if you have not done Python before, read through it and check you understand it).

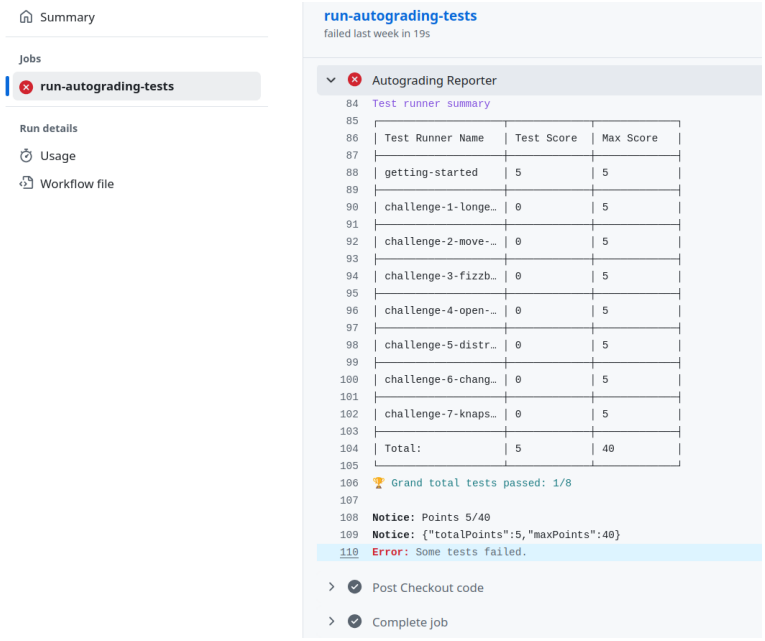
```
# We use "def" to define a function.
# This sum function takes two parameters, a and b.
def sum_two_values(a, b):
    return a + b

# create two variables and assign integer values to them:
first = 2
second = 3
# call our sum function and store the result in "result":
result = sum_two_values(first, second)
# print the result to the console:
print (result)
```

```
def sum_all(values):
    total = 0
    # loop through all values and add them to total
    for value in values:
        total = total + value
    return total

values = [3,4,5]
# You should call the sum_all function, pass it "values".
# Then print the result
```

16) Try running the code.
17) If there are no errors when running the code, commit and push your change. Check the Getting Started test now passes:



Codespaces is great for small projects. When it comes projects that require more processing power or specific hardware, we want to run the code on the Desktop machines.

If you have finished the above steps, start looking at the Generative AI activity: https://lncn.ac/WW-AI

When everyone has finished the above Getting Started steps, we will split you into groups to continue with the Generative AI activity and the Python Challenges.