

Week 0: Introduction Part 2

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Plan for Today

- ◆ Outstanding questions from last class
- ◆ Run through the setup tutorial steps again + how to get an access token
- ◆ How to check your submission on Canvas
- ◆ Let's talk about variables
- ◆ Things to do for next week

Questions from Last Class

- ◆ The terminology is confusing. Can we go over it again?
- ◆ Do I have to download Jupyter?
- ◆ What are the “Practice Module ____ Pre-Lecture” assignments?
- ◆ Where do I find the slides?
- ◆ Where do I find office hours?

Terminology

- ◆ Jupyter — The application we program in
- ◆ Python — The programming language we are learning
- ◆ Syzygy — The system that gets us the files we need and allows us to use Jupyter without downloading / configuring anything
- ◆ Canvas — We love it! (Maybe)

setup.ipynb

- ◆ Go to Canvas -> Jupyter/Syzygy OR Canvas -> Module 1 -> Setup Tutorial
- ◆ Click into the bottom cell (you should see a green box around it) and then click the “Run” button at the top

```
1 print("Starting setup...")
2 print("\x1b[33m" + "You may see various messages during setup; this is normal!")
3 print("Look for \x1b[36m\x2713\x1b[33m or \x1b[31m\x2717\x1b[33m to indicate success")
4 print()

5
6 %matplotlib inline

7
8 try:
9     %pip install --user python-dotenv --no-warn-script-location
10    import dotenv
11    from cs103 import *
12    custom_init()
13    print("\x1b[36m\x2713 Setup succeeded! :)")
14 except Exception as e:
15     print("\x1b[31m\x2717 Unexpected error! Please contact course staff\n" +
16           "Please include the entire text above and below in your message.")
17     raise
```

```
Starting setup...
You may see various messages during setup; this is normal!
Look for ✓ or ✗ to indicate success or failure.

Requirement already satisfied: python-dotenv in /opt/conda/lib/python3.8/site-packages (0.15.0)
Note: you may need to restart the kernel to use updated packages.
✓ Setup succeeded! :)
```

Getting_Started_with_Python_and_Jupyter_Star ter.ipynb

- ◆ Scroll all the way to the bottom and run the very last cell

```
1 # NOTE: You should not be able to edit this cell. Just run it to start the process.
2 from cs103 import submit
3
4 COURSE = 58946
5 ASSIGNMENT = 750799
6
7 submit(COURSE, ASSIGNMENT)
8
9 # If your submission fails, check to see that you have specified a value for the
10 # cell above AND have run that cell. If you have done so and your submission is still
11 # failing, then you may need to re-upload your files. You can learn how on the
12 # "How to submit your Jupyter notebook" on our Canvas site.
```

We can't seem to find your token, if you need help finding it please see:
<https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A5a18408c-2102-4dc5-8f50-f8205f9b85bf>
Please copy and paste your token here and then hit enter:

Getting an Access Token

- ◆ We only have to do it once!
- ◆ Click on the link shown in Jupyter OR Canvas -> “How To” Documents -> How to generate a token for submitting your work on Canvas
- ◆ Enter your token into the box and hit enter

```
1 # NOTE: You should not be able to edit this cell. Just run it to start the process.
2 from cs103 import submit
3
4 COURSE = 58946
5 ASSIGNMENT = 750799
6
7 submit(COURSE, ASSIGNMENT)
8
9 # If your submission fails, check to see that you have specified a value for the
10 # cell above AND have run that cell. If you have done so and your submission is still
11 # by downloading your files and uploading them to Canvas. You can learn how on the
12 # "How to submit your Jupyter notebook" on our Canvas site.
```

We can't seem to find your token, if you need help finding it please see:

<https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Asclds%3AUS%3A5a18408c-2102-4dc5-8f50-f8205f9b85bf>

Please copy and paste your token here and then hit enter:

You should see your token listed here

Token ✓

Files Getting_Started_with_Python_and_Jupyter.ipynb

✓ submit

Checking Your Submission

- ◆ Scroll through the result that you are given after clicking “Submit”. Look for any messages that say ERROR. If there is an error, you may have to download the file and submit it manually on Canvas.
- ◆ Double check your submission on Canvas
 - ◆ Go to the assignment and you should be able to see that there were two files submitted (one HTML and one IPYNB)
 - ◆ Click on the HTML file to see if everything looks as expected

Downloading Jupyter Files

- ◆ There is a “how to” document on Canvas
- ◆ Canvas -> Modules -> “How To” Documents -> [How to submit your Jupyter notebook](#)
- ◆ Students who have downloaded Jupyter to use on their computers will also need to do this before starting to code in the file

What is a Variable?

- ◆ Placeholder that represents a piece of information
- ◆ Good programming practice: give descriptive names.
- ◆ Good programming practice (in Python): if your variable has a multi-word name, separate the words with an underscore!

What is a Function?

- ◆ A set of operations that has a name.
- ◆ **Terminology:** “calling a function” means to use the function
- ◆ Benefits:
 - ◆ Saves time
 - ◆ Better organization
- ◆ We can write our own functions but there are also many built in functions
(see `Getting_Started_with_Python_and_Jupyter_Starter.ipynb` for examples)

To Do List

- ◆ **Reminder:** Karina has a list of announcements and to dos at <http://www.cs.ubc.ca/~mochetti/CPSC103.html>
- ◆ The Canvas sidebar also has a list of upcoming due dates
- ◆ Read the syllabus + do the syllabus quiz
- ◆ Do the module 1 pre-reading and the pre-reading assignment
- ◆ Finish the questions in
`Getting_Started_with_Python_and_Jupyter_Starter.ipynb`