Lessons Learned

# Introduction

With very little background in coding, I was excited to take this class and see what I could learn. My end goal from taking the class was to complete the Python certificate course, and then the data analytics course. Over the last 9 weeks, I’m shocked with how far my coding abilities have come. It’s been very exciting to go from writing 5-10 lines of code at the start to over 100 lines of code.

# Things I Have Learned

It’s been amazing to see how much we can all learn in just a few short weeks. I started with no knowledge of Python other than it was in all the job descriptions I was looking at.

## Documenting Information and Thoughts

I remember during the first assignment and dreading the idea of having to describe what I learned and what I did to finish the assignment. I just wanted to code and see that it was working by running it and testing it out. By having to write a document for my knowledge really pushed me to really understand what I was doing. I also really appreciate the use of doc strings and commenting in my code. I think that has forced me to think about how I wanted to set-up my code and be thoughtful in what I’m trying to accomplish.

## PEP-8 Formatting

Thanks to help from Sophia, I have learned a ton about how to format my script to Pythonic. Sophia really helped me nitpick my code, so I learned to start script writing the right way. I have really enjoyed pushing myself to learn this new format. I’m now always looking for the PyCharm light grey underscores to make sure my formatting is correct.

## Finding Help

Python information is everywhere. I really appreciated the course notes, class videos, zoom discussions, and book chapters. While all these resources were great and very helpful, the internet also provided a lot of support when stuck on a topic. I used many internet searches along with the provided information to help me understand different topics. Learning how to find other sources of information has also been a great lesson.

## PyCharm

With no prior knowledge about IDLE’s, it’s been great to learn about PyCharm and its functionality. PyCharm is great for learning Python because it gives you pointers about what is going on with your code, and it also helps format the script into PEP-8 format. I really relied on PyCharm for helping to format my script correctly and point out errors in my code. The more and more I worked with it, I picked up on what it was trying to tell me faster and faster to help find errors in my code. I have used a debugger before when working with VBA code, but the PyCharm de-bugger was even more powerful and really helped me figure out what my code was doing.

## GitHub

I loved learning how to make my first webpage. After spending weeks working on homework, it was wonderful to be able to share some of my learnings with others, family and friends. I still have lots to learn when it comes to GitHub, but it’s been exciting to be able to share my work!

## Testing My Code

I know that my code won’t be perfect, especially when it gets to be hundreds of lines of code. The best thing we can do is to write the script, so it is robust and then test the code to make sure there are fewer bugs. I really enjoyed trying to push my code and figure out where the issues might arise. Then once we learned how to do error handling, that really helped me when debugging and trying to improve my code.

# Summary

With out script at the end of the course being hundreds of lines of codes, it’s important to remember to take it little bit by little bit. Start with one section, test it out, and then move on. Don’t take too much on at one time. If you aren’t sure test it out, print out information, use the debugger, and find the issues. A few of the assignments were a little stressful, but overall, I have really been impressed with just how far my skills have come in the last 9 weeks.