Exercise 1.4: File Handling in Python

Learning Goals

• Use files to store and retrieve data in Python

Reflection Questions

1. Why is file storage important when you're using Python? What would happen if you didn't store local files?

Storing files is important in python because in doing so, you are able to read and write data to files. You need to be able to preserve the data even after the program or application is closed. Failing to store your files would result in you losing your data.

2. In this Exercise you learned about the pickling process with the pickle.dump() method. What are pickles? In which situations would you choose to use pickles and why?

We use pickles when dealing with complex data. Pickles converts complex data into a packaged stream of bytes, known as pickles. These pickle files can't be read by humans, only machines. This is good for complex data structures that may be difficult to retain the structure of data in the form of regular text.

3. In Python, what function do you use to find out which directory you're currently in? What if you wanted to change your current working directory?

There is an os module that comes with Python, which has a host of features to manage files. The os.getcwd() command is used to find out which file directory you are currently working on. To change your current working directory, you would use the os.chdir() command. That allows you to navigate to the folder of your choice.

4. Imagine you're working on a Python script and are worried there may be an error in a block of code. How would you approach the situation to prevent the entire script from terminating due to an error?

I would try to use the try-except block. This allows you to try a block of code you would expect an error to occur. If there are no errors, the rest of the code executes like normal, however if there is an error, an except block appears to notify the user of the error and guide them in rectifying it. This prevents the

program to terminate when an error exists. Instead, it just reported the error and continued to run until the end.

5. You're now more than halfway through Achievement 1! Take a moment to reflect on your learning in the course so far. How is it going? What's something you're proud of so far? Is there something you're struggling with? What do you need more practice with? Feel free to use these notes to guide your next mentor call.

So far I have been able to come up with a few things that have helped me out. I am using my notes to go over things on downtime moments. I am trying to schedule a full read so I can take in the whole section at once. I feel like practice is key and CareerFoundry has done an excellent job with the Python course with allowing me to practice with the practice task. I feel like I understand everything so far, however I plan on using the Python Tutorial to go over as much as I can from this point on. I am enjoying learning about Python.