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Foundations of Programming: Python

Assignment 07

https://github.com/D500844/GitAssignments/tree/main/Assignment06

**Try Exception and Pickling**

**Overview**

In this assignment we were charged with finding our own resources for learning about Pickling and Try Exceptions. There were certainly many instances of both around, and while I had some difficulty finding the concepts using some additional books- I found it was exceptionally easy to find information using search engines like google and youtube. It definitely appears that different learning material will have different applications depending on our needs and current work at hand.

**Try-Exception Handling**

I found an excellent example of exception handling with the ProgrammingKnowledge youtube video titled Python tutorial for Beginners 38 – Raising Exceptions in Python.

In the example raising Exceptions is demonstrated as a quick and easy tool for discovering If a pizza is finished yet, or if it has been burnt or if it is not ready at all. The exceptions can be used to intercept information and display the line the raised exception was placed at, and any further information

class PizzaTime:  
 def \_\_init\_\_(self, pizza\_in\_the\_oven):  
 self.\_\_pizza\_in\_the\_oven = pizza\_in\_the\_oven  
  
 def digiornos(self):  
 if self.\_\_pizza\_in\_the\_oven > 85: #minutes  
 #print(Pizza is burnt)  
 raise Exception  
 elif self.\_\_pizza\_in\_the\_oven < 70:  
 #print("Pizza is not ready")  
 raise Exception  
 else:  
 print("It's Pizza Time")  
  
slice = PizzaTime(99)  
slice.digiornos()

**Pickling Saved**

Pickling our data can be done in quite a few ways, I learned how to do it using a technique from R3ap3rPy on youtube. In this way we can take our data and serialize it’s object structure. The purpose of this is primarily to convert the python object into a byte stream to store it in a file/database, maintain program state across sessions, or transport data over the network.

import pickle  
  
my\_dictionary = {  
 "name" : "Dave",  
 "Age" : 33,  
 "Gender" : "manBearPig"  
}  
  
with open("my\_dictionary.pickle", "wb") as my\_dictionary\_file:  
 pickle.dump(my\_dictionary, my\_dictionary\_file, pickle.HIGHEST\_PROTOCOL)  
  
  
input("Press Enter to Exit when you are done.")

**Pickle load**

When loading back our data we will use the pickle.load function and call the “rb”, and our file will be unpickled and our data will be accessible and ready to work with.

import pickle  
  
with open("my\_dictionary.pickle", "rb") as my\_dictionary\_file:  
 pickled\_list = pickle.load(my\_dictionary\_file)  
  
input("Press Enter to Exit when you are done.")

**Summary**

This week we learned about storing data more efficiently and catching our errors as they come. Hopefully these tricks will be able to help us save time in the future, and transfer information more professionally and efficiently.