Exercise 1.7: Finalizing Your Python Program

Learning Goals

- Interact with a database using an object-relational mapper

- Build your final command-line Recipe application

Reflection Questions

1. What is an Object Relational Mapper and what are the advantages of using one?

   An Object Relational Mapper allows you to interact directly with a database by converting the contents and structure into classes and objects. This makes it easier for you as a developer if you need to move from one DBMS to another. On top of that, you no longer have to worry about SQL syntax or how SQL queries work with different DBMS's.

2. By this point, you've finished creating your Recipe app. How did it go? What's something in the app that you did well with? If you were to start over, what's something about your app that you would change or improve?

   Something I feel like I did well with for this app is the error handling and trying to account for any input the user may put in. I'm sure there's stuff I missed but everything I could think of, I feel is well covered or at least won't break the app. Something I would improve if I were to start over is the layout / format of the app and how things are presented to the user. I'm a very visual person so the end result isn't something I'm super happy with, but I opted for readability over creativity.

3. Imagine you're at a job interview. You're asked what experience you have creating an app using Python. Taking your work for this Achievement as an example, draft how you would respond to this question.

   For my most recent project, I developed a Python application that utilized SQLAlchemy for object relational mapping. The application allows users to create and store recipes, which can then be edited, searched, or deleted by the user. One key feature of the app is that it allows the user to dynamically search recipes by choosing multiple ingredients to narrow their search. This project solidified my skills in Python, especially with how to handle error handling and validate user input.

4. You've finished Achievement 1! Before moving on to Achievement 2, take a moment to reflect on your learning in the course so far:

   a. What went well during this Achievement?

   The way everything was laid out in the reading and exercises helped with the absorption of the information. I was able to get through the reading without feeling confused or getting overwhelmed and needing to break it up over days. Some of the reading in the Immersion course was harder to get through, so I think this time around went a lot better.

b. What's something you're proud of?

Something I'm proud of is how easy and fast it was for me to develop the final app for this achievement. I feel like I've been able to absorb a lot of information over these exercises and that really helped with completing the final app without having to rely on internet searches to troubleshoot or complete the code.

c. What was the most challenging aspect of this Achievement?

The most challenging part of this achievement was having to learn how to handle and avoid errors using Python. Throughout the achievement, I was consistently looking up how to troubleshoot errors whenever they occurred. Actively thinking of error handling and how to keep the apps from crashing while also learning a new syntax was a challenge.

d. Did this Achievement meet your expectations? Did it give you the confidence to start working with your new Python skills?

I wasn't sure what to expect from this achievement, but I do think it met and exceeded any expectations I had. It did really well to lay out and explain the syntax and logic behind developing with Python. Because of this, I feel a good beginner confidence to working with Python on future projects.

e. What's something you want to keep in mind to help you do your best in Achievement 2?

For achievement 2, I want to keep error handling and potential user inputs in mind to prevent any app crashes. The user interface will also be at the forefront of my mind since I wasn't able to have as much control over it with the CLI version of the application in achievement 1.

Well done—you've now completed the Learning Journal for Achievement 1. As you'll have seen, a little metacognition can go a long way!