Exercise 1.1: Getting Started with Python

Learning Goals

- Summarize the uses and benefits of Python for web development
- Prepare your developer environment for programming with Python

Reflection Questions

1. In your own words, what is the difference between frontend and backend web development? If you were hired to work on backend programming for a web application, what kinds of operations would you be working on?
    a. Frontend Development deals with the code that displays, interacts with and is controlled by the visual interface the user engages with on the "customer" end. The GUI is coded within the frontend programming, button functions, modals, and every visual indicator that a user can interface with, all fall under frontend development. Backend development is the code that controls the conversation between databases, business logic, server logic, etc and the frontend of any application. Backend code is necessary for retrieving and storing data, as well as interacting with APIs & Libraries.

2. Imagine you're working as a full-stack developer in the near future. Your team is asking for your advice on whether to use JavaScript or Python for a project, and you think Python would be the better choice. How would you explain the similarities and differences between the two languages to your team? Drawing from what you learned in this Exercise, what reasons would you give to convince your team that Python is the better option?
    (Hint: refer to the Exercise section "The Benefits of Developing with Python")
    a. While Python & Javascript are similar, in that they both use dynamic typing for variables, the advantages of Python are not to be undersold. Python is an easy-to-interpret language, who's frameworks come pre-installed with packages that allow them to function out-of-the-box. It has simple built-in package management, which when combined with its readability means that it is efficient and easy for teams to collaborate on, as well as to onboard new members or employees onto.

3. Now that you've had an introduction to Python, write down 3 goals you have for yourself and your learning during this Achievement. You can reflect on the following questions if it helps you. What do you want to learn about Python? What do you want to get out of this Achievement? Where or what do you see yourself working on after you complete this Achievement?
    a. My three goals for this achievement are to try to figure out as much of this as possible without relying too heavily on other people's work. I want to be able to create Python code from scratch and I want it to look clean and efficient. I want to make my recipe application look elegant and inviting, because recipes are very near and dear to my heart, and I hope to become great at Python by the end because I believe it's a valuable tool for

my career. After this achievement I'd like to see myself back in Berlin, working wherever I can to escape the modern hell that is the United States.