

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?**

Frontend web development focuses on the visual elements of the front-facing interface that users see and interact with. Backend web development, on the other hand, focuses on the behind-the-scenes logic such as user authentication and database management. As a backend developer, I'd expect to work on creating/maintaining databases, ensuring the secure exchange of data between servers and user information.

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")

JavaScript and Python are similar in that they both utilize dynamic typing and understandable keywords to help with readability. However, Python comes pre-installed with common web operations such as URL routing and form handling so it can help developers move quickly through app development. Python also makes it incredibly easy to install and manage packages that are available through the Python Package Index.

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?**

One obvious goal for this Achievement is to have a strong grasp and understanding of the syntax used by Python. I've found having a good grasp on the syntax not only makes it easier moving forward with other Achievements, but also makes it easier to look something up if I get stuck or need help because I know how to word it. Going hand in hand with the first goal, I want to be able to feel confident in my understanding of Python so I don't feel unready when it comes to looking for my first developer job. Lastly, I want to feel more confident in my backend developing skills at the end of this course; right now I feel super good about my frontend skills and I want to feel the same about the backend.