

# CareerFoundry Learning Journal

## Python for Web Developers

### Pre-Work: Before You Start the Course

#### Reflection questions (to complete before your first mentor call)

1. What experiences have you had with coding and/or programming so far? What other experiences (programming-related or not) have you had that may help you as you progress through this course?
  - a. I have completed the CareerFoundry Full Stack Web Development Immersion course, in which I became familiar with HTML, CSS, JavaScript, and the MERN stack (MongoDB, Express, React, and Node), plus other frameworks and libraries. I also dabbled in Python a year before beginning CareerFoundry, building small, simple applications for my boss' video game (automating an attack outcome, possibilities, etc.)  
I think having completed the previous CareerFoundry course will help me in this course, programming aside. I understand how many hours I need to put in each week in order to complete assignments, how to stay organized and focused, and the general flow of CareerFoundry fitting into my current life and job.
2. What do you know about Python already? What do you want to know?
  - a. I know that it is an easy to read/understand language, and that many jobs specifically ask for Python. I want to know more about the frameworks and libraries that come with Python, especially compared to JavaScript now that I have experience with that language as well.
3. What challenges do you think may come up while you take this course? What will help you face them? Think of specific spaces, people, and times of day of week that might be favorable to your facing challenges and growing. Plan for how to solve challenges that arise.
  - a. I think the biggest challenge that might arise in this course (which I sincerely hope does not come to fruition) is having to change mentors. This occurred four separate times in my Immersion course, which led to me waiting for a new mentor so I could move on in the course and caused me to get behind in the program/my timeline. Another issue could be me falling behind on my own, but I believe I am diligent and will keep on track.

# 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 web development is everything that the user sees and interacts with, whether that be a browser or application interface or client, on the computer, a mobile device, or another device. The backend of web development is essentially everything else that makes the frontend work: servers and APIs, databases, files, compiling, processing, requests, and communicating with servers.  
If I was working on the backend programming for a web app, I would be working on data and user requests (such as HTTP requests), configuring databases (relational/non-relational), and other server and API configurations.
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?
  - a. A big difference between Python and JavaScript is that Python is used to develop only the back-end of an app, whereas JavaScript is used to develop both front-end and back-end. Assuming this is a back-end project, Python would be a better choice. Python is also extremely simple to read and maintain, whereas JavaScript's flexibility makes it a little more complicated. Python also offers built-in package management through pip, which makes integrating external resources far more simple than would be with JavaScript.
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?

4.

- a. I want to learn Python well enough to write my own programs easily. I want to go into an interview for a job that requires Python and feel good completing the technical interview, and be ready to contribute to a team working with Python. After this Achievement, I'd like to add more Python projects to my portfolio to make myself competitive in Python-required job opportunities.