Reflection Questions (before 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?**

   Prior to this Python course, my main coding/programming experience was the CareerFoundry Full Stack Immersion course. Before that I had only played around a bit with HTML and CSS, but nothing serious there.

2. **What do you know about Python already? What do you want to know?**

   I don't know much about Python, but I'm eager to add a different programming language to my arsenal, especially because right now I only know JavaScript. Even if I don't end up using it as much in the immediate future, I see it as an important opportunity to get a different perspective on web development and coding overall.

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.**

   The first hurdle for me will always be to get used to new syntax and new problem-solving approaches that always come with learning a new language. Being familiar with JavaScript will certainly help as I won't be starting entirely afresh, however I'm sure there are key differences between the two languages that will take getting used to. Beyond this, my biggest challenge has been and will be, juggling the rest of my life with this course. I want and need to succeed in this learning opportunity. However, there are many factors at play, including a job, my home life, and at this point – the job seeking process I'm starting. My plan to cope with all these factors is to keep a focused schedule by setting weekly goals in each area: academic, social, and professional.

Reflection Questions Exercise 1.1

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?**

   The main difference between frontend and backend development is how much the work deals with client interactions. If it's visible and accessible to the client/ user, it's frontend. This mainly

deals with UI performance and appearance. Information needs to be displayed properly and any interactive features in an app have to be clear and easy to use. A backend engineer has a lot more to do with data transfers/storage, communication between server and client to retrieve that data, and the security of these interactions. Backend development products are usually never seen directly by the user.

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?**
   Both JavaScript and Python have their advantages like dynamic typing. However, when working on a tight timeline, Python might be a good choice because of how many out-of-the-box essentials it comes with, making application set up fast and easy.
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?**
   Because I'm so new to Python and coding in general, my main goals are simple.
   - Expand my development horizons by learning a new language and a different approach to backend development
   - Beef up my resume with a new programming language
   - Take the logic I learn from using Python and apply it to further language learning like C++ or C#, if I'm still interested in pursuing game development further down in my career

   As mentioned above, I am considering progressing into game development later in life. It's an area that interests me for its connection to the art world, something I've been a part of professionally. Learning Python will be a good exercise in the logic necessary to learn further languages like C++ that are more directly involved with game development.