## **Learning Journal**

## 1.1 Reflection Questions

- 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?
  - Put simply, a frontend developer handles the client and everything user-facing.
     They will use information from the backend and create interfaces for the user to be able to interact with the backend data. A backend developer will be responsible for the server-side programming which includes server management, database interactions, and application logic.
  - If I were hired to work on backend programming for a web application my tasks might include managing databases, writing server-side logic, API development, integrating various systems and third-party services, performance optimization, etc.
- 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?
  - The similarities between Python and JavaScript are their versatility and are relatively easy to learn and use due to them being high-level, interpreted languages. They differ in a few areas. JavaScript is primarily used for web development, especially on the client-side. Python is a general-purpose language with strengths in backend programming. Python is also known for its readable and clean syntax which is great for rapid development. Javascript can be faster in a web environment but Python often offers better performance in computational tasks, data manipulation, and analytics.
  - Due to Python's Out-of-the-Box essentials, efficient development flow, and strong community support, I believe Python would be the better fit for this project.
- 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?

- I am excited to learn a new language and I am especially excited to see how this helps me create new websites and applications. Here are my 3 goals:
  - Grasp the important concepts of Python covered in the course and be able to implement them in personal projects.
  - Create something cool on my own on the side while working through this achievement.
  - Doing more than just the bare minimum for each task.