
EXERCISE 1.1: GETTING STARTED WITH PYTHON

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 deals with the user-facing aspect of a website or web application, such as its layout and design, while backend web development deals with the server-side logic and functionality that is not visible to the user, such as data processing and database management.

If I were hired to work on backend programming for a web application, I would be working on tasks such as creating and maintaining the application's server-side logic, building and interacting with databases, and creating APIs that the frontend can use to access the application's functionality. I might also be responsible for implementing security measures and handling performance optimization.

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 are relatively easy to learn and have a large number of libraries and frameworks available to help developers build web applications.

One of the main differences is that JavaScript is primarily used for frontend development, while Python is often used for both frontend and backend development. JavaScript is a scripting language, designed to be run in the browser, whereas Python is a general-purpose programming language that can be used for a wide variety of tasks.

Another difference is that Python has a more "human-readable" syntax, making it more beginner-friendly and easy to learn. Python is also can be used for various tasks such as artificial intelligence, machine learning and data analysis.

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?

I hope to learn how to perform various tasks with Python, but most importantly, I want to gain a comprehensive understanding of the language and its capabilities, which will allow me to create efficient and maintainable code. In the future, I would like to work as a Full-stack developer where I can utilize my knowledge and skills for real-world projects.