Python

Foundations - 3 days

Python is a versatile and easy-to-learn programming language with a large community of support. This course is designed for anyone who wants to learn more about programming with Python, using a practical and interactive approach.

Course Objectives

At the end of the course, the participant will be able to:

- Understand the benefits of Python and the concept of object-oriented programming.
- Use data types and variables, managing strings, lists, tuples, and dictionaries.
- Write cycles and logical conditions, using logical operators and functions.
- Create functions and manipulate text and CSV files.
- Write classes and understand the concepts of inheritance and exception handling.

Target Audience

This course is for anyone who wants to explore the world of programming with Python, even with no prior experience. It is suitable for students, professionals, and anyone who wants to learn how to develop with one of the most versatile and in-demand languages.

Course Duration

3 days

Course Program

Day 1 - Python Fundamentals

- **Introduction to Python**: Advantages, interactivity, libraries, object-oriented language.
- **Data Types and Variables**: Variables, Data Types, automatic casting, and constructor-based casting.
- **Importing Libraries**: How to use the import command and the main libraries (e.g.: os, with the getcwd and chdir methods).
- **Strings**: Manipulation of strings, main methods, and slicing.
- **Lists, tuples and dictionaries**: Creating and managing lists, tuples and dictionaries, focusing on the key methods (adding and removing elements).

Day 2 - Flow Control, Loops and File I/O

- **Logical conditions**: Conditional constructs with if, elif, else, logical operators (and, or, not), and logical functions (any, all).
- **Loops**: Creating for and while loops, using continue and break, and understanding list comprehension.
- **Built-in Functions**: Using Python Built-in Functions
- **File I/O**: Read and write to .txt and .csv files.

Day 3 – Functions, Object-Oriented Programming and Exceptions

- **Writing Functions:** Creating and using functions in Python, with an emphasis on syntax, parameters, and return values, to write structured, reusable code.
- **OOP (Object-Oriented Programming):** Introduction to the fundamental concepts of object-oriented programming.
- **Classes and inheritance**: Creating classes, managing inheritance, and code reuse principles.
- **Exception handling**: Identifying and handling exceptions, introduction to debugging and troubleshooting errors.

The Teacher

With years of experience in corporate training, I am well-versed in teaching advanced tools such as Power BI, Python and Tableau. Thanks to the practical and straightforward approach, course participants implement effective solutions right from the start.

Contact me for more information

Would you like to train yourself or your team in Power BI, Python, Tableau, or ChatGPT? Write to me for a free consultation or to receive more details on personalized courses.

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