Python Part 2: Tools, Modules, and JSON

Modality: On Demand

Duration: 4 Hours

About this course:

This course teaches about Python Tools, Modules and JSON. In this course, students will get the opportunity of learning the advanced concepts of writing and running Python scripts. This course is an extension to the Python Fundamentals course. This is an advanced level of that and it teaches complex concepts like, iterators and generators, regular expressions, introspection and lambda functions, meta-classes and decorators, and using the extensive functionality of Python modules. Extra focus is given to the Python-specific features like metaprogramming and JSON. When completing this course successfully, students will be expertly able to tackle real-world scenarios using Python.

This Python Tools, Modules and JSON course will extensively cover the advanced-level topics of Python programming language, having its key focus on the various different tools of the program, modules and JSON. This course gives adequate training to the students in coding effectively and solve real-life problems with the use of the advanced features of Python.

Learning objectives:

The course has the following learning objectives:

- Making functional Python scripts through adequate methods
- Making use of python iterators and generators adequately
- Making use of regular expressions, lambda functions and decorators
- Searching and replacing text with regular expressions
- Working with modules and packages including APIs
- Learning metaprogramming
- Gaining good comprehension of the structure of XML and JSON

Audience:

The course is devised for the following groups:

- Advanced level programmers
- System administrators: those who wish to use Python to assist server installations
- Website administrators: those who wish to use Python to assist web-servers
- IT professionals: those who wish to automate or simplify regular tasks by using Python scripts

Requirements:

The Python Tools, Modules and JSON is the second part in the Python series. In order to take this course, it is important that these requirements are fulfilled prior to taking it:

- Students must have completed the Python Fundamentals course
- It is recommended that students also have fundamental understanding of the Python language and standard library

Course Outline:

- **Chapter 01 - Programming Tools**
- **Chapter 02 - Modules and Packages**

- **Chapter 03 - Metaprogramming and JSON**