Python Programming 2

Cursusduur: 3 Dagen **Cursuscode: PYP2**

Beschrijving:

Python Programming 2 Course Overview

English - Please note this course is only available in English.
Nederlands - Let op: deze training is alleen in het Engels beschikbaar.
Français - Veuillez noter que ce cours est uniquement disponible en anglais.
The Python Programming 2 course comprises sessions dealing with advanced object orientation,iterators and generators,comprehensions,decorators,

Doelgroep:

Who will the Course Benefit?

The Python Programming 2 course is designed for existing Python developers who have a good grounding in the basics and want to exploit some of the advanced features of the language.
For the delegate for whom Python is their first programming language,we recommend taking the Python Programming 1 course first,then taking some time to practice the skills gained,before returning to take the Python Programming 2 course.

Doelstelling:

- Course Objectives

- This course aims to provide the delegate with the knowledge to be able to interpret,write,and troubleshoot complex Python applications exploiting inheritance and polymorphism,mixins,composition and aggregation,iterators,generators,decorators,comprehension,concurrency,functional programming,and RESTful web services.

Vereiste kennis en vaardigheden:

Delegates should be able to build Python applications that exploit all fundamental elements of the language including variables and expressions,conditions and loops,functions,objects,and lists. This knowledge can be gained by attendance on the pre-requisite Python Programming 1 course.

Cursusinhoud:

Python Programming 2 Training Course
Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: ADVANCED OBJECT ORIENTATION

- The self Keyword
- Constructors and Destructors
- Encapsulation
- Inheritance
- Introspection with __dict__,__name__,__module__,__bases__
- The hasattr(obj,attr),dir(obj),help(obj) functions
- Polymorphism
- Abstract Classes
- Multiple Inheritance and Mixins
- Composition and Aggregation
- Static Members

Session 2: ITERATORS ; GENERATORS

- Iterables
- Iterators
- Custom Iterators
- Generators
- Yield vs. Return

Session 3: COMPREHENSIONS

- List Comprehension
- Set Comprehension
- The zip Function
- Dictionary Comprehension Python Programming 2 Training Course Course Contents - DAY 2

Session 4: DECORATORS

- Decorators
- Decorator Functions
- Decorator Annotations
- Decorator Use Cases
- Labs

Session 5: FUNCTIONAL PROGRAMMING

- Functional Programming
- Lambdas
- Immutability
- Mapping
- Filtering
- Reducing

Session 6: MULTITHREADING

- Threads
- Multithreading
- Thread Construction
- Thread Execution
- Thread Sleep
- Joins
- Data Sharing
- Synchronisation
- Multithreading vs. Multiprocessing Python Programming 2 Training Course Course Contents - DAY 3

Session 7: WEB SERVICES

- RESTful Web Services
- JSON Data
- CRUD and HTTP
- RESTful Clients
- RESTful APIs

Session 8: UNIT TESTING

- Unit Testing Terminology
- Test Classes
- Test Fixtures
- Test Cases
- Assertions
- Test Runners

Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444

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