Python

Course Title/Training Name

Python

Objectives

This is an hands-on course, designed to help the developers to speedup in Python, as quickly as possible. The participant's in this course, will experience the following:

* Architecture
* Input and output
* Controlflow
* Error handling.
* Function
* Garbage collection

Prerequisites

The participants should have prior programming experience and should be familiar with basic programming constructs. Prior exprience to object-oriented programming would definitely add advantage

Target Audience

This course is designed for developers, system administrators, and test engineers, who wish to develop, automate, and test applications and systems using Python

Contents

3. Python Scripting

* Python Scripts in Linux/Unix & Windows
* Whitespace Significance
* Line Termination
* Comments in Python
* Basic Output Generation
* Simple User Input
* Python Modules
* Module Search Paths
* Determining the System Search Path
* input()
* raw_input()

4. Working with Variables in Python

* Python Variables
* Naming Conventions & Rules
* Types as Objects
* Variable References & Garbage Collection
* Sequence Types
* Membership Statements
* List Iteration
* Sequence Assignments
* Mutable vs Immutable Objects

* Multi Target Assignments

5. Numeric Operations in Python

* More About Python's Numeric Types
* Numeric Tools
* The Decimal Module
* Operator
* Arithmetic
* Logical
* Relational
* Bitwise
* Special Operators
* Operator Precedence

6. Python Compound Statements

* Python Nesting Recap
* Comparison Operations
* The if Statement
* The if Ternary Expression
* The while Loop
* The for Loop
* Traversing Parallel Sets

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8. Python String Types

* Generating Strings in Python
* Immutable
* Common String Methods
* Type Conversion in Python
* Formatting String Output
* Format Specifier
* Variable Substitution
* String Indexing
* String Slicing
* String Iteration

[Day 2]

9. Python's Tuples

* Immutable
* Common Tuples Methods
* Tuples Operations
* Tuples Indexing
* Tuples Slicing
* Tuples Iteration
* Multi-Dimensional Tuples (Matrices)

10. Python's Lists

* Common List Methods
* The range() Function
* List Operations
* String Indexing
* String Slicing
* String Iteration
* Multi-Dimensional Lists (Matrices)

11. Python List Comprehension

* Basic List Comprehensions
* Compound List Comprehensions

12. Python Dictionaries

* Python Dictionaries
* Assigning Values to Dictionaries
* Dictionary Methods
* Dictionaries vs Lists & Tuples
* Dictionary Indexing
* Dictionary Iteration

13. Basic Input/Output with Files

* Opening Files
* Working with Files
* Controlling Output Location

14. Creating Python Functions

* Function Basics
* Defining Functions
* Argument Defaults
* Local Variables
* Understanding __builtins__
* Argument Matching Methods
* Keyword Argument Methods

15. Exceptions

* About Exceptions
* Exceptions Handling

16 Regular Expression in Python

* Meta Characters
* re module
* Search
* Match
* Split

Duration

2 Days, 8 hours a day [16 hours]

Trainer

Ravi Jaya

Provider name

SpringPeople Software Private Limited