Python Advanced

Course description

In this advanced Python course, students already familiar with Python programming will learn advanced Python techniques such as Jupyter Notebook, the Collections module, mapping and filtering, lamba functions, advanced sorting, working with regular expressions in Python, working with databases, CSV files, JSON and XM, writing object-oriented code, testing and debugging and learning about Unicode and text encoding

Student Take away

Study Material
Learning stuff
Sample project for practice

Python Advanced online training curriculum

Python Advanced Training

More on Functions
Functions with variable argument
Function with keyword argument
Function closure
Inner function
Nested function
Anonymous function (lambda)
Function introspection
Delayed evaluation
Generator functions
Higher Order function

Functional Programming in Python

Functional programming concept
Iterators
Generator Expression and List Comprehension
Generators
Built-in functions (map, reduce, filter)
Built-in module functional tool

Meta programming using Functions

Decorators
Function decorators
Advanced function decorators

More on Classes
Classes
Name spaces
Inside Python objects
Dot operator explained
Class and instance variables
Private variables and private methods in class
Special methods like __str__
Inheritance in Python
Super method in Python
Descriptor protocol

Meta programming using Classes
Extending decorators to class - Class decorators
Static method
Class method
Properties

Modules and Packages
How to organize large program
Import statement and its internal working

Some Important Python Modules
- Subprocess
- Re
- Pexpect
- Paramiko
- Logging
- Json
- Multiprocessing
- Socket
- Request

Testing and Debugging
- How to write unit tests to test your code
- Introduction to built-in module unit-test, doc-test
- Assertion in unit tests
- How to use debugger from command line and from IDE

Python tools
- pep8
- pylint
- 2to3
- profiler