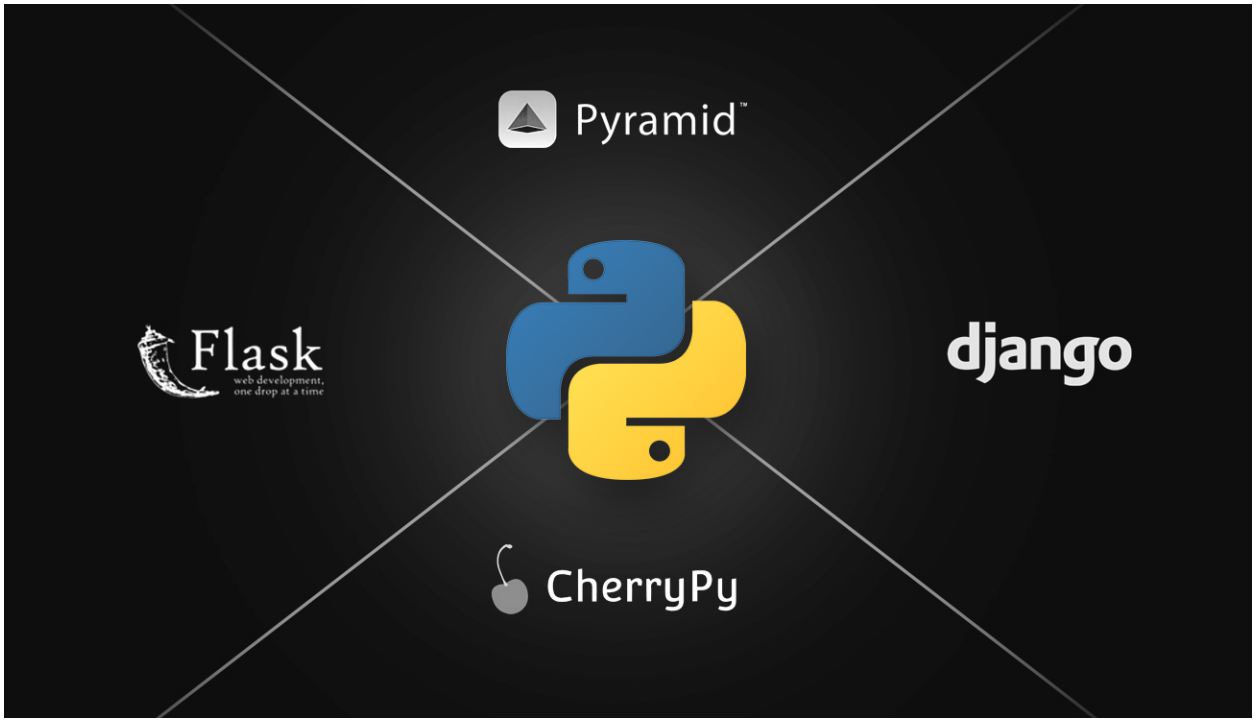
SYNNEFO SOLUTIONS
Delivering Experience

Python - Full Stack Web Development

Introduction to python



Start with Us

We offer intensive hands-on training that focuses on the capabilities of high-level, general-purpose programming language Python in data mining, data visualization and Machine Learning .

HYPERTEXT MARKUP LANGUAGE

Introduction

- HTML
- HTML Documents
- Basic structure of an HTML document
- Creating an HTML document
- Mark up Tags
- Heading-Paragraphs
- Line Breaks
- HTML Tags.
- Working with Text
- Working with Lists, Tables and Frames
- Working with Hyperlinks, Images and Multimedia
- working with Forms and controls.

CASCADING STYLE SHEET

- Concept of CSS
- Creating Style Sheet
- CSS Properties
- CSS Styling(Background, Text Format, Controlling Fonts)
- Working with block elements and objects
- Working with Lists and Tables
- CSS Id and Class
- Box Model(Introduction, Border properties, Padding Properties, Margin properties)
- CSS Advanced(Grouping, Dimension, Display, Positioning, Floating, Align,Pseudo class, Navigation Bar, Image Sprites, Attribute sector)
- CSS Color
- Creating page Layout and Site Designs.

Introduction to Web Publishing

- Creating the Web Site
- Saving the site
- Working on the web site
- Creating web site structure
- Creating Titles for web pages
- Themes-Publishing web sites.

Bootstrap

- Introduction to bootstrap
- Grid System
- Forms
- Components
- Utilities

VCS

- Introduction to VCS
- Implementation

Introduction to Python

- Python introduction
- What is Python and why python

Python Basics

- Data Types
- Variables
- Input output operations
- Basic Operators
- List, Tuples Sets Dictionaries

- Conditional statements
- Looping statements
- Functions
- Arrays

Object Oriented Concepts

- Classes in Python
- Principles of Object Orientation
- Creating Classes
- Instance Methods
- File Organization
- Special Methods
- Class Variables
- Inheritance
- Polymorphism
- Type Identification
- Custom Exception Classes

Functions and Modules

- Introduction
- Defining Your Own Functions
- Parameters
- Function Documentation
- Keyword and Optional Parameters
- Passing Collections to a Function
- Variable Number of Arguments
- Scope

- Functions – “First Class Citizens”
- Passing Functions to a Function
- Mapping Functions in a Dictionary
- Lambda
- Modules
- Standard Modules – sys
- Standard Modules – math
- Standard Modules – time
- The dir Function

Functions

- What Are Functions?
- Calling Functions
- Creating Functions
- Passing Functions
- Formal Arguments
- Positional Arguments
- Default Arguments
- Why Default Arguments?
- Default Function Object Argument Example
- Variable-length Arguments
- Non-keyword Variable Arguments (Tuple)
- Keyword Variable Arguments (Dictionary)
- Calling Functions with Variable Argument Objects
- Functional Programming
- Anonymous Functions and lambda
- Built-in Functions: apply(), filter(), map(), reduce()
- apply()
- Lines 1 – 4
- Lines 6 – 7
- Lines 9 – 28

- Lines 30-41
- filter()
- map()
- reduce()
- Variable Scope
- *Recursion
- Exercises

Modules

- What are Modules?
- Modules and Files
- Namespaces
- Importing Modules
- Importing Module Attributes
- Module Built-in Functions
- Packages
- Other Features of Modules
- Exercises
- 13. Classes and OOP
- Introduction
- Object-oriented Programming
- Classes
- Class Attributes
- Instances
- Safari | Core Python Programming
- http://safari.oreilly.com/main.asp?bookname=0130260363&mode=1 (4 of 6) [6/2/2002 12:13:55 AM]
- Instance Attributes
- Binding and Method Invocation
- Composition
- Subclassing and Derivation
- Inheritance
- Built-in Functions for Classes, Instances, and Other Objects
- Type vs. Classes/Instances
- Customizing Classes with Special Methods

- Privacy
- Delegation
- Related Modules and Documentation
- Exercises

Exception handling

- Data Streams
- Creating Your Own Data Streams
- Access Modes
- Writing Data to a File
- Reading Data From a File
- Additional File Methods
- Using Pipes as Data Streams
- Handling IO Exceptions
- Working with Directories
- Metadata
- Errors
- Run Time Errors
- The Exception Model
- Exception Hierarchy
- Handling Multiple Exceptions

File handling

- File handling
- Read/write/create/delete

Network Programming

- Introduction
- Sockets: Communication Endpoints
- Network Programming in Python

- Related Modules
- Exercises

Multithreaded Programming

- Introduction/Motivation
- Threads and Processes
- Threads and Python
- thread Module
- threading Module
- Exercises

GUI Programming with Tkinter

- Introduction
- Tkinter and Python Programming
- Tkinter Examples
- Related Modules and Other GUIs
- Exercises

Web Programming

- Introduction
- Web Surfing with Python: Creating Simple Web Clients
- Advanced Web Clients
- CGI: Helping Web Servers Process Client Data
- Building CGI Application
- Advanced CGI
- Web (HTTP) Servers
- Related Modules
- Exercises

MySQL

- Data Definition Language
- Data Manipulation Language
- Data Control Language

Frameworks

- Introduction to Frameworks
- Django

Mini Project in Python

Web Hosting and Testing