
Temel Seviye Python Programming Eğitimi

Eğitim Hakkında

This course is designed for those wishing to learn the Python programming language. The emphasis is on the Python language, the core libraries, as well as on the selection of the best and most useful libraries developed by the Python community. Python drives businesses and is used by scientists all over the world – it is one of the most popular programming languages.

The course can be delivered using the latest Python version 3.x with practical exercises making use of the full power. This course can be delivered on any operating system (all flavours of UNIX, including Linux and Mac OS X, as well as Microsoft Windows).

Neler Öğreneceksiniz

- Use the Python interactive interpreter to write and run Python 3 programs
- Understand Python 3 language elements
- Exploit the rich library of Python libraries and modules
- Appreciate the differences between Python 2 and Python 3
- Recognize simple and complex variable types and select appropriately
- Use Python 3 operators and built-in functions
- Understand procedural control flow in Python 3
- Program file input/output, including persistent data objects.
- Create well organized and efficient code using functions and modules
- Use Object Oriented programming techniques in Python 3.
- Build robust applications with error trapping and reporting
- Run and control other programs from Python
- Take advantage of multi-core processors with multiprocessing

Eğitim İçeriği

Introduction to Python Programming

- Running Python code
- Using Python Development Tools (IDEs and command line tools)
- Working with Python and iPython shells as well as iPython Notebook

Data Types and Operations



- Integers and floats
- Strings and bytes
- Tuples and lists
- Dictionaries and ordered dictionaries
- Sets and frozen sets

Organizing and Distributing Code

- Creating modules and packages
- Distributing code to repositories

Object Oriented and Functional Programming

- Creating and using functions and classes
- Modifying functions and classes with decorators
- Introducing meta-classes

Error Handling and Testing

- Handling and raising exceptions
- Writing and executing tests (doc tests and unit tests)
- Checking code coverage by tests

Working with Files and Directories

- Accessing different types of files and file handling principles
- Creating, reading, updating and deleting files (including regular text files, csv, as well as Microsoft Word and Microsoft Excel files)
- Extracting data from text files using Regular Expressions
- Creating and deleting directories, listing and searching for files

Accessing Databases

- Selecting, inserting, updating and deleting data
- Generic database API based on SQLite 3, PostgreSQL and MySQL
- Using the Object Relational Mapper (SQLAlchemy)
- Working with NoSQL databases

Conquering The Web

- Retrieving web pages
- Parsing HTML and XML
- Filling web forms automatically

- Creating web applications in Python