

## بوت کمپ نوروزی پایتون

### مروری بر دوره

در این دوره با مقدمات مربوط به زبان برنامه‌نویسی پایتون آشنا خواهید شد.

### سرفصل‌ها

#### **BASICS**

- Introduction
- Interpreter vs. Compiler
- Understanding and Getting to Know Python
- Storing Items in Variables
- More on Variables and Strings
- String Formatting
- Displaying Numbers, Variables and Strings

#### **PROGRAM FLOW CONTROL**

- Conditions with IF ELIF ELSE
- FOR Loops



- Understanding CONTINUE and BREAK
- Augmented Assignments
- WHILE Loops
- Nesting Conditions and Loops
- LISTS, RANGES AND TUPLES

## Lists in Python

- Understanding Iterators
- Using Ranges
- Ordered Sets With Tuples

## DICTIONARIES AND SETS

- Binary and Hex Numbers in Python
- Dictionaries and More
- Sets in Python

## INPUTS AND OUTPUTS

- Reading and Writing Text Files
- Appending to Files



- Writing Binary Files Manually
- Using PICKLE to Write Binary Files
- Shelves
- Manipulating Data with Shelves
- Updating With Shelves

## MODULES AND FUNCTIONS

- Modules and Import
- Standard Python Library
- WebBrowser Module
- Time and Date in Python
- Timezones
- Checking Path in Windows/Mac
- Installing the PYTZ Module
- Using Timezones
- Introduction to TKINTER
- TKINTER – Pack Geometry Manager



- TKINTER – Grid Geometry Manager
- Functions in Python
- Scope in Functions
- Global Variables
- Global Keyword
- Importing Techniques
- Underscores in Python
- Namespaces and Recursion
- Recursion with OS Module
- Nonlocal Keyword
- LEGB

## OBJECT ORIENTED PYTHON

- OOP and Classes
- Instances, Constructors, Self and More
- Class Attributes
- Methods



- Non Public and Mangling
- DocString and Raw Literals
- Compile Files and Algorithm Flowchart
- Getters and Properties
- Getters and Setters
- Data Attributes and Properties
- Encapsulation
- Inheritance
- Subclasses and Overloading
- Calling Super Methods
- Overriding Methods
- Polymorphism
- Duck Test
- Composition
- Aggregation
- Delegation



## مخاطبان دوره

Developer ها

## پیش نیاز ها

آشنایی کلی با زبان های برنامه نویسی

