

Workshop on Python Programming



"Life's better without braces and Semicolons"

Day -1

Topics	Session
Chapter 1: An Introduction to Python Basics of interpreter and compiler based languages pro's and con's	45 min
Chapter 2: Beginning Python Basics Datatypes with Example	45 min
Tea Break	10 min
Demo -1 With Raspberry Pi 3	10 min
Chapter 3: Python Program Flow Control Statements and Special cases related to Python	45 min
Chapter 4: Functions & Modules Anonymous functions List Comprehension Basics of *args and **kwargs	45 min
Lunch Break	45 min
Chapter 5: Exceptions and Classes Need for Handling run time anomalies Introduction to OOP's Concept	45 min
Assignment and Demo-2 with RPi3 and ESP8266	10 min

Day -2

Topics	Session
Chapter 6: Accessing API -1 Introduction to IoT MQTT and HTTP Protocol With Exposure Thingsboard IoT Platform	45 min
Chapter 7: Accessing the API-2 Introduction to and Adafruit IoT Platform Accessing Weather API's in Python Exposure REST API's in Python	45 min
Tea Break	10 min
Demo-3 RPi-3 with Image Processing	30 min
Lunch	45 min
Chapter 8: Flask in Python Running Headless Server in local machine Decorators in Python Basics of HTML and CSS for building Web Applications	45 min
Chapter 9: Deep learning and Introduction to Tensor Flow Introduction to Open CV Accessing Google's Tensor Flow API's for object recognition Face Detection and Recognition API's in Python Haar Cascade Classifiers in Python	60 min

Speaker's

- K M Vinayaka Swamy (Module Lead, Hewlett Packard Enterprise, Bangalore)
- S G Ravi Prakash (Lead IoT Consultant, Preva Systems Pvt, Bangalore)