

2018

CONSULTADD

2300 Valley View Ln. Suite 410, Irving, TX 75062
SANKET PATEL & RIYAZ UL HAQUE

[PYTHON – DETAILED AGENDA]

Come learn python in just three weeks with regular coding exercise and interested quiz competition.

PYTHON-DETAILED PLANNING

WHY PYTHON?

Python is a general-purpose, versatile and popular programming language. It's great as a first language because it is concise and easy to read, and it is also a good language to have in any programmer's stack as it can be used for everything from web development to software development and scientific applications.

This is weekly based training agenda; we will be covering all the basic track of python programming language along with coding exercise and quiz question. At the end of this training there will be a detailed discussion on few most commonly used libraries of python.

This entire training is gets divided into three weeks of sessions as follows. Consisting core Python and web development with Django.

SYALLABUS

STAGE 1 – CORE PYTHON

DAY – 01: INTRODUCTION OF PYTHON PROGRAMMING LANGUAGE (WWW)

- **SESSION 1**
 - History
 - What is PythonS
 - Why Python
 - Who Is using Python
- **SESSION 2**
 - Running program from console
 - Running program from IDE
 - Different IDE for Python
- **SESSION 3**
 - Print Statement
 - Numbers & Variables
 - Boolean Expression
 - Operators
- **SESSION 3**
 - Help in python
 - Exercise

DAY – 02: DECISION MAKING STATEMENT AND LOOPING

- **SESSION 1**
 - Decision Making Statement (if.. else... and elif..)
- **SESSION 2**
 - Basics of Looping
 - Types of Looping
 - While Loop
 - For Loop
 - Event Controlled Loop
 - Count Controlled Loop
- **SESSION 3**
 - Predefined function
 - Exercise

DAY – 03: DATA STRUCTURES & FUNCTIONS IN PYTHON

- **SESSION 1**
 - Introduction of Data Structure in Python
 - List Data Structure
 - Dictionary Data Structure
 - Tuple
 - Set
 - String
- **SESSION 2**
 - Function Syntax
 - Function Definition, Declaration and Return Statement
 - Function Call
 - Modules
- **SESSION 3**
 - Lambda Expression
 - Map, Reduce & Filter
 - Zip
 - Enumerate
 - Exercise

DAY – 04: ERRORS, EXCEPTION HANDLING & FILE HANDLING

- **SESSION 1**
 - Errors
 - Errors & Exception Handling
- **SESSION 2**
 - File Handling
 - Read & Write mode

- How to read different types of files(e.g. csv)
- **SESSION 3**
 - Modules and Packages
 - Exercise

DAY – 05: OBJECT ORIENTED CONCEPTS AND SOCKET PROGRAMMING

- **SESSION 1**
 - Basic of Object Oriented Approach
 - Class & Object
 - How to implement Classes in python
 - Constructor
- **SESSION 2**
 - Decorators
 - Generators
- **SESSION 3**
 - Socket Programming (Client Server Architecture)
 - Exercise

DAY – 06: REGULAR EXPRESSION & OTHER ADVANCE TOPICS

- **SESSION 1**
 - Basic of Regular Expression
 - Advance concept in List
 - Advance concept in Dictionary
 - Advance concept in String

STAGE 2 – WEB DEVELOPMENT WITH DJANGO

DAY 7: INTRODUCTION OF WEB DEVELOPEMT & DJANGO OVERVIEW

- **SESSION 1 :**
 - Introduction to Web Development
 - Technologies Used
 - Frameworks
- **SESSION 2 :**
 - Django Overview
 - Git Overview

DAY 8: SETUP AND PROJECT STRUCTURE

- **SESSION 1 :**
 - IDE installation (PyCharm)
 - Virtual Environment
 - Django Installation
 - Creating Project
- **SESSION 2 :**
 - Project Structure
 - Creating Application
 - Application Structure

Day 9: FRONT END INTRODUCTION WITH DJANGO

- **SESSION 1 :**
 - Front End Introduction
 - Django Templates
 - Django Static Files
 - URL Mapping

DAY 10: MODELS

- **SESSION 1 :**
 - Level one Project
 - Models
 - Models Templates Views paradigm

DAY 11: BASICS OF SQL AND EXERCISE

- **SESSION 1 :**
 - SQL (basics)
- **SESSION 2 :**
 - Level Two Project
 - Model Exercise

DAY 12: DJANGO FORMS

- **SESSION 1 :**
 - Django Forms
 - Form Validation
 - Model Form
 - Model Forms Exercise

Day 13: WEB SERVICES AND PROJECT OVERVIEW

- **SESSION 1 :**
 - Web Services
- **SESSION 2 :**
 - Flask Framework
 - RESTful Web service With Flask
- **SESSION 2 :**
 - Mini Project