



Duration :- 4 -6 month



VIVEK IT SOLUTION

Mob no. 9891136923

- **Introduction Session**

- ✓ What is Python
- ✓ Python History, Introduction & Python Scope
- ✓ Type of Application Created by Python
- ✓ Comparison of Python with C, CPP & Java
- ✓ Why Python is Most Popular Script

- **Python Installation and Software Tools**

- ✓ Python Installation
- ✓ What is Python IDLE
- ✓ Interpreters vs Compilers
- ✓ What is Python Shell
- ✓ How run Python Script under Command Prompt
- ✓ Working with Jupyter.org try
- ✓ What is PEP and PIP
- ✓ What is Indentation Concept in Python
- ✓ How to Write Comment in Python
- ✓ Create First Hello World of Program of Python

- **Operator in Python**

- ✓ What is Operators
- ✓ Types of Operator
- ✓ Python Arithmetic Operators
- ✓ Python Comparison Operators
- ✓ Python Assignment Operators
- ✓ Python Bitwise Operators
- ✓ Python Logical Operators

- ✓ Python Membership Operators (in, not in)
- ✓ Python Identity Operators (is, is not)
- ✓ Ternary Operator
- ✓ Python Operators Precedence

- **Variable, Constant, Literals & Data Types**

- ✓ What is Variables, Constant and Literals
- ✓ Assigning Values to Variables, Constant
- ✓ Multiple Assignment, Tuple Assignment
- ✓ Python Numbers
- ✓ Python Strings
- ✓ Accessing Values in Strings
- ✓ String Special Operators
- ✓ String Formatting Operator
- ✓ Triple Quotes
- ✓ Built-in String Operations
- ✓ Python Lists
- ✓ Accessing Values in Lists
- ✓ Updating Lists
- ✓ Delete List Elements
- ✓ Basic List Operations
- ✓ Indexing, Slicing, and Matrixes
- ✓ Built-in List Functions & Methods
- ✓ Python Tuples
- ✓ Accessing Values in Tuples
- ✓ Updating Tuples
- ✓ Delete Tuple Elements
- ✓ Basic Tuples Operations
- ✓ Indexing, Slicing, and Matrixes
- ✓ No Enclosing Delimiters
- ✓ Built-in Tuple Functions
- ✓ Python Dictionary
- ✓ Accessing Values in Dictionary
- ✓ Updating Dictionary
- ✓ Delete Dictionary Elements
- ✓ Properties of Dictionary Keys
- ✓ Multidimensional Dictionary & LIST & SET & TUPLE
- ✓ LIST Comprehension
- ✓ Built-in Dictionary Functions & Methods

- **Loops and Conditional Statements**

- ✓ if statements
- ✓ ..else statements
- ✓ nested if statements, Ladder if else, Multiple If
- ✓ while loop, while else

- ✓ for loop, for else
- ✓ nested loops
- ✓ Loop Control Statements
- ✓ break statement
- ✓ continue statement
- ✓ pass statement

- **Functions & Module**

- ✓ Defining a Function
- ✓ Syntax
- ✓ Calling a Function
- ✓ Pass by reference vs value
- ✓ Function Arguments
- ✓ Required arguments
- ✓ Keyword arguments
- ✓ Default arguments
- ✓ Variable-length arguments
- ✓ The return Statement
- ✓ Scope of Variables
- ✓ Global vs. Local variables
- ✓ What is module, how to call function under module

- **OOPs Concept in Depth**

- ✓ Class and Object, Polymorphism, Encapsulation, Abstraction
- ✓ Documented String
- ✓ Access Specifier, Access Modifier(Instance, Static)
- ✓ Constructor or Init Method
- ✓ Inheritance
- ✓ Polymorphism
- ✓ Object Array

- **Python Built-in Modules and Packages**

- ✓ Framework vs Packages
- ✓ Why are modules used?
- ✓ Creating modules
- ✓ The import Statement
- ✓ The from...import Statement
- ✓ The from...import * Statement
- ✓ Locating Modules
- ✓ The PYTHONPATH Variable
- ✓ Namespaces and Scoping
- ✓ The dir() Function
- ✓ The globals() and locals() Functions

- ✓ The reload() Function
- ✓ Packages in Python

Designing:-

- **Front end explanation**

- ✓ What is HTML
- ✓ What is CSS, Internal, External and Inline
- ✓ What is JS, JS Events, JS DOM
- ✓ What is JQuery, JQuery Events and Selector
- ✓ What is Bootstrap, How to create Responsive Design
- ✓ Create Responsive Web Template

- **Angular Framework**

- ✓ Explain Angular, Angular Short History, Comparison of Angular JS and Angular Framework

- ✓ Angular JS 1.0 Overview
- ✓ Angular architecture, Angular application flow
- ✓ Comparison of Different Version of Angular
- ✓ Angular CLI to create project ,component and module
- ✓ Angular Architecture,MVC Design pattern
- ✓ What is Type Script, Data type in Angular Typescript
- ✓ Operator and Conditional
- ✓ Statements
- ✓ Control Structure or Loop, Array ,String Concept
- ✓ Angular Routing
- ✓ Create multiple Components and
- ✓ develop single page application
- ✓ Data binding in Angular
- ✓ Directives in Angular ,Pipe in Angular
- ✓ Dependency Injection and services in Angular
- ✓ File System in Angular,Read,Write.Open other operation
- ✓ Forms in angular, Template driven, reactive
- ✓ Http Request using GET,POST,PUT,DELETE
- ✓ Authentication, Create Login Form
- ✓ Modules, Predefine modules, Custom Module
- ✓ Animation,HTML Template Integration, query integration
- ✓ Validation using Angular Directive
- Web API implementation in Angular ,Create Login,Registration,CRUD
- ✓ State management in Angular
- ✓ Create Admin dashboard using Angular

Database MySQL

DJANGO Course Content

- **Introduction Session**

- ✓ What is Django
- ✓ DJANGO History, Django Architecture, Explain MVT
- ✓ What is Static Website & Dynamic Website
- ✓ DJANGO Version, Advance Features of Django
- ✓ Why Django is Most Popular as compare to Flask

- **Django Installation and Software Tools**

- ✓ Django Installation
- ✓ Django CLI and Commands
- ✓ What is Project vs APPS
- ✓ Explain Project Directory
- ✓ Explain settings.py and urls.py in depth
- ✓ Create First App

- **Django Views and Template**

- ✓ What is Views
- ✓ What is Template
- ✓ How to render template under views
- ✓ Create Static Website using Django
- ✓ Django Form Elements
- ✓ What is Include and Extends in Django
- ✓ Django Master Layout
- ✓ HTML, CSS and JS Overview and apply in Django Web Pages
- ✓ HTML Template to Django Template Conversion
- ✓ How to use JINJA Tag Under Template
- ✓ Pass data from Views.py to Template Page
- ✓ Create Form with POST and GET Method using Method View and Class View
- ✓ Method View & Class View Difference

- **Django Database Connectivity**

- ✓ What is Models, Command to migrate model class with Sqlite
- ✓ Explain ORM, Write Django Query under CLI
- ✓ Explain Django Insert, Update, Delete and Select Query

- ✓ What is Sqlite
- ✓ CRUD Operation using Sqlite
- ✓ Create Login and Registration form using Sqlite

- **Django Database Connectivity using Generic class**

- ✓ What is FormView
- ✓ What is LISTVIEW & CreateView
- ✓ What is UpdateView & DeleteView
- ✓ Create Complete RESULT GRID using LISTVIEW, CREATEVIEW, UPDATEVIEW & DELETEVIEW
- ✓ What is Relationship
- ✓ How to Create Primary Key & Foreign Key
- ✓ How to add columns after creating Model Class
- ✓ How to manage Join Operation in Django

- **Django SuperAdmin**

- ✓ What is Super Admin
- ✓ How to activate Super admin & Manage Login Operation
- ✓ How to add model class Under Super Admin
- ✓ User Management Operation using Super Admin Dashboard
- ✓ Customize Superadmin Template

- **Django State management**

- ✓ What is Session in Django
- ✓ What is Cookie in Django
- ✓ What is Difference between Session & Cookies
- ✓ Manage Session using Django user authentication

- **Create LIVE Project**

- ✓ Explain Project SRS
- ✓ CREATE DATABASE TABLES With ER-DIAGRAM
- ✓ CREATE GUEST LAYOUT
- ✓ CREATE USER DASHBOARD
- ✓ MANAGE ADMIN DASHBOARD
- ✓ Responsive Page Layout
- ✓ Discuss SDLC