



EXCEL SOLUTIONS

Add Extra Skills to Your Professional Career

PYTHON FULL STACK

Welcome to the Python and Django Full Stack Web Developer In this course we cover everything you need to know to build a website using Python,Django,and many more web technologies.

Python : it would be used to process the user request in background

Django : it is the web framework which coordinates all these components to make a web application.

MySQL : it is the open-source database to store the data permanently for long time .

HTML,CSS : it would be use to prepare beautiful web pages with numerous styles.

Java Script : it is a client -side scripting language ,which would be use to perform client-side validations .

GIT : it is the repository to maintain the versions of your source code

COURSE CONTENT

Pre-work

1. Intoduction to programming

Introduction



2.Learn about the course

Course Set-Up and Installation

3.Setup your computer for the course

Python Basics:

4.Tokens

5.Formatted strings

6.Operators

- Arithmetic
- Logical
- Comparison
- Identity
- Membership
- Short-circuit Evaluation
- Bitwise

7.Data types

8.Conditional flow Statements

9.Match case statements

10.Loops

- While
- While-else
- For
- For-else
- Nested loops
- Iterables

11.Inbuilt Data Structures

- List
- Tuple
- Set
- Dictionary



- List comprehension
- Dictionary Comprehension
- Unpacking Operator

12.Strings

13.Functions

- Defining functions
- Arguments
- Types of functions
- Key word arguments
- Nested functions
- Default arguments
- List of args(*args)
- Dictionary of args (**kwargs)
- Lambda
- Generators
- Decorators
- Iterators
- Recursive
- Map
- Filter
- Zip
- Enumerate

14.Scope

15.file I/O

OOP'S :

16.OOP'S Vs Procedure Oriented programming

17.OOPS concepts

- Class



- Object
- Inheritance
- Polymorphism
- Abstraction
- Encapsulation

18.Constructor

19.Class Vs instance attributes

20.Class Vs Instance methods

21.Static methods

22.Magic methods

23.Destructor

24.Data hiding

25.Operator Overloading

26.Method overriding

27.Abstract base class

28.MRO

29.Exception handling

- Exceptions
- Handling exceptions
- Custom exceptions
- With statement
- Raising exceptions

30.Modules

- Creating modules
- Compiled python files
- Packages
- Sub packages
- Dir function



PYTHON STANDARD LIBRARY :

31.Regular expressions

32.OS

33.SYS

34.MySql.connector

35.Threading

36.PDB

37.Random

38.Logging

39.Unittest

EXTERNAL LIBRARIES (optional):

40.Numpy

41.pandas

42.Matplotlib

DJANGO FRAMEWORK:

43.Introduction

44.Setup development environment

45.Getting started with Django

46.MVT Architecture

47.Http methods

48.Creating an application

49.Views layer

50.URL mapping



51.Template layer

52.Models

- Creating migrations
- Running migrations

53.Model inheritance

54.MySQL

- Connecting to MySQL
- Using MySQL in Django
- Basic MySQL commands

55.ORM

- Django ORM
- Query sets
- Retrieving objects
- Filtering objects
- Q objects
- F objects
- Aggregating objects
- Annotating objects
- Grouping data
- Creating objects
- Updating objects
- Deleting objects
- Transactions
- Executing Raw SQL Queries

56.Debugging toolbar

57.Django Template Language (DTL)

- Template inheritance

58.Form processing

- Django forms
- Model forms



59. Image processing

60. Cookies handling

61. Django Admin

- Setting Up Admin Site
- Registering modules
- Customizing list page
- Adding filtering to the list page

62. Authentication & authorization

63. Static files

64. pagination

65. Signals

66. Dynamic URL'S

67. Function based views Vs Class based views

MYSQL DATABASE

68. Importance of database

69. DDL

Create

Alter

Drop

Truncate

70. DML

Insert

Update

Delete

71. TCL



Commit

Roll back

72.DCL

Grant

Revoke

73.DQL

Select

74.Constraints

Primary key

Unique

Check

Notnull

Foreign key

75.Clauses

76.Operators

77.single row functions

78.Group functions

79.Joins

80.Functions

81.Stored procedures

82.triggers

FRONTEND TECHNOLOGIES(basics)

83.Html

84.CSS



85.Java script

86.Bootstrap templates

GIT REPOSITORY

DATA STRUCTURES & ALGORITHMS FOR SOME EXTENT

LIVE PROJECT

PROJECT DEPLOYMENT

MOCK INTERVIEWS

WEEKLY TESTS

What you'll learn

- 1.Create a fully functional web site using the Full-Stack with Django
- 2.Learn how to use HTML to create website content
- 3.Use CSS to create beautifully styled sites
- 4.Use JavaScript to interact with sites on the Front-End
- 5.Learn how to take advantage of Bootstrap to quickly style sites
- 6.Understand HTTP requests
- 7.Learn the power of Python to code out your web application
- 8.Implement a full Models-Views-Templates structure for your site
- 9.Mainly interview skills

Who this course is for

- 1.Complete Beginners
- 2.Professionals looking to bridge gaps in their knowledgess