



# Python&django COURSE + INTERNSHIP



#### **100% JOB GUARANTEED**

### **PYTHON COURSE CURRICULUM**



#### **COURSE DURATION**

**5 WEEKS** 

#### **SESSION HOURS**

**60 HOURS** 

# REALTIME PRACTICE CASE STUDIES + MOCK TESTS

### **KEY HIGHLIGHTS**

- Only EdTech with 100% Internship based and job guarantee training
- Institute backed by strong IIT alumina Team
- More than 10,000 + success stories created
- 7 Partnered and serving 100+ clients right from the inception of the firm
- Parent company Quality Thought No #1 providing placements since 2010
- Experienced IT Architects, subject matter experts as advisory in the board
- Guaranteed Internship Opportunity (3 to 6Months) for every participant
- Backed by strong Internal human resource team enabling quick placements
- Special guidance to students to win jobs with highest packages

#### TRAINING HIGHLIGHTS

- Industry ready course roaster designed by architects and subject matterexperts
- Proven content, creating gateway to world of Job opportunities
- Practical & detailed approach, everyone can understand and perform to excel
- Subject matter experts as trainers
- Not just learning, Learn by doing methodology
- Access to Instant recorded live Class videos shared
- Personalized attention and guidance to accelerate the learning
- Member access to private group to get instant doubt clarifications
- Guest lectures from leading MNC Companies







#### 4th Most Used

Programming Language in 2021, 44.1% of developers worked with it

#### 85% of the Time

Python was used as a primary programming Language for the devlopment

# **Most Popular Uses of Python**

40%
Machine
Learning

55%
Data
Science

40%
Web
Development

An average python developer
in India draws ₹779,449/- PA

There are now 8.2 million developers in the world who code using Python and that Population is now larger than those who build in Java, who number 7.6 million Source -SlashData





#### **Python - Programming from Absolute Beginning - Introduction to Computer Programs**

Introduction to Programming Languages - Translating code into something that the computer understands - Syntax and the building blocks of a programming language

#### **Types of Applications**

Standalone applications , Client-Server Applications, Web applications Mobile Applications , Distributed applications, Cloud-based applications

#### Software Projects and How We Organize Our Code

Working with software projects, Working with packages to share code Avoiding conflicts with namespaces

#### Sequence – The Basic Building Block of a Computer Program

#### **Working with Data – Variables**

Declaring and initializing variables , Primitive data types Composite type

#### **Program Control Structures**

Controlling the execution path ,
Selection with the if and switch statement
Iteration with the for loop , Iteration with the while loop
Iterating over sequences using for each

#### **Understanding Functions**

Deciding what goes into a function, Writing a function Returning values from a function, Function arguments, Functions in action, Local and global variables

#### When Things Go Wrong - Bugs and Exceptions

Understanding software bugs , types of software bugs Finding bugs using a debugger

#### **Programming Paradigms**

Understanding structured programming , object-oriented programming , functional programming - logic programming

#### **Programming Tools and Methodologies**

Understanding version control systems
Unit testing, Integration testing, Other types of tests

#### Software releases

#### Understanding software deployment Understanding software deployment

Deployment Automation Code maintenance











#### Software deployment process methodologies

Waterfall development , Spiral model Agile development

#### **Code Quality**

Defining code quality, Writing code with readability in mind Writing code with efficiency in mind

Practical Version Controlling with Git,
Software defect management using JIRA
Understanding Agile project Management using Scrum

#### **Introduction to Python**

#### A Taste of Python

Mysteries , Little Programs
A Bigger Program , Python in the Real world
Why Python? , Why Not Python?
Installing Python , Running Python , Moment of Zen

#### **Data: Types, Values, Variables, and Names**

Python Data are objects, Types, Mutability, Literal Values Variables, Assignment, Variables are Names, Not Places Assigning to Multiple Names, Reassigning a Name Copying, Choose Good Variable Names

#### **Numbers**

Boolean

Integers, Literal Integers, Integer Operations ,Integers and Variables Precedence, Bases , Type Conversions, How Big is int? Floats, Math Functions

#### **Choose with if**

Comment with #, Continue Lines with \
Compare with if, elif and else, What is True
Do Multiple Comparisons with in

#### **Text Strings**

Creating with Quotes
Creating with str(), Escape with \
Combine by Using + , Duplicate with +
Get a Character with [] , Get a Substring with a Slice
Get Length with len() , Split with strip()
Search and Select , Case , Alignment
Formatting, Oldstyle: % ,
New styles: {} and format() ,
Newest Style: f-string ,











Recursion- Async Functions

Exceptions

#### **Object-Oriented Design**

What are Objects?

#### Simple Objects

Define a Class with class,

Attributes

Methods, Initialization

#### Inheritance

Inherit from a Parent Class, Override a Method

Add a Method, Get Help from your Parent with super()

Multiple Inheritance, Mixins

#### In Self Defense

#### **Attribute Access**

**Direct Access** 

**Getters and Setters** 

**Properties for Attribute Access** 

**Properties for Computed Values** 

Name Mangling for privacy

Class and Object Attributes

#### **Method Types**

**Instance Methods** 

**Class Methods** 

Static Methods

**Duck Typing** 

Magic Methods

Aggregation and Composition

When to Use Objects or Something else

Named Tuples

**Dataclasses** 

Attrs

#### **Objects Oriented Python**

#### Object Oriented Design

Object-Oriented Design

Introducing object-oriented

Objects and classes

Specifying attributes and behaviors

Hiding details and creating the public interface

Composition

Inheritance - Case Study

#### Objects in Python

Objects in python

Creating python classes

Modules and packages





INSTAGRAM









#### **More String Things**

#### Loop with while and for

Repeat with while

Cancel with break, Skip Ahead with continue

Check break Use with else,

Iterate with for and in

Cancel with break, Skip Ahead with continue, Check break Use with else

Generate Number Sequences with range(), Other Iterators

#### **Tuples and Lists**

#### **Tuples**

Create with Commas and ()

Create with tuple()

Combine Tuples by Using +

Duplicate Items with \*

**Compare Tuples** 

Iterate with for and in

Modify a Tuple

#### Lists

Create with [], Create or Convert with list()

Create from String with split()

Get an Item by [ offset ] , Get Items with a Slice

Add an item to the End with append(),

Add an Item by offset with insert()

Duplicate All items with \*, Combine Lists by Using extend() or +

Change an item by [ offset ], Change Items with a Slice

Delete an Item by Offset with del,

Delete an Item by Value with remove()

Get an Item by Offset and Delete It with pop()

Delete All items with clear(),

Find an Item's Offset by Value with index()

Test for a Value with in.,

Count Occurrences of a Value with count()

Convert a List to a String with join()

Reorder Items with sort() or sorted()

Get Length with len()

Assign with =, Copy with copy(), list() or a Slice

Copy everything with deepcopy()

Compare Lists(), Iterate with for and in

Iterate Multiple Sequences with zip()

Create a List with a Comprehension- Tuples vs Lists

#### **Dictionaries and Sets**

#### **Dictionaries**

Create with {}

Create with dict()











Convert with dict()

Add or Change an Item by [key]

Get All Keys with keys()

Get All Values with values()

Get All Key-Value Pairs with items()

Get Length with len ()

Combine Dictionaries with {\*\*a, \*\*b}

Combine Dictionaries with update()

Delete an Item by Key with del

Get an Item by Key and Delete it with pop()

Delete All Items with clear()

Assign with =

Copy with copy()

Copy Everything with deepcopy()

**Compare Dictionaries** 

Iterate with for and in

**Dictionary Comprehensions** 

#### Sets

Create with set()

Convert with set()

Get Length with len()

Add an Item with add()

Delete an Item with remove()

Iterate with for and in

**Combinations and Operators** 

**Set Comprehensions** 

Create an Immutable Set with frozenset()

#### **Functions**

Define a Function with def

Call a Function with Parentheses

#### **Arguments and Parameters**

None is useful

Positional arguments

**Keyword Arguments** 

**Specify Default Parameter Values** 

Explode/Gather Positional Arguments with \*

Explode/Gather Keyword Arguments with \*\*

**Keyword-only Arguments** 

Mutable and Immutable Arguments

**Docstrings** 

**Functions are First-Class Citizens** 

**Inner Functions** 

Closures

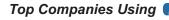
#### Anonymous Functions: lambda

Generators

Decorators

Namespaces and Scope

Uses of \_ and \_\_ in Names













Organizing module content

Who can access my data? - Third-party Libraries - Case Study

#### When Objects are Alike

When Objects are Alike

**Basic Inheritance** 

Multiple Inheritance

Polymorphism

Abstract base classes

Case Study

#### **Exceptions**

Raising exceptions Case Study

#### When to Use Object-Oriented Programming

When to use Object-Oriented Programming Treat objects as objects Adding behaviors to class data with properties Manager objects Case Study

#### **Python Data Structures**

Python Data Structures
Empty Objects
Tuples and named Tuples
Data classes, Dictionaries
Lists, Sets, Extending built-in functions
Case Study

#### **Python Object-Oriented Shortcuts**

Python Object-Oriented Shortcuts
Python built in functions
An alternative to method overloading
Functions are objects too
Case Study

#### **Strings and Serialization**

Strings and Serialization Strings Regular expressions Filesystem paths Serializing objects Case Study

#### **The Iterator Pattern**

The Iterator Pattern
Design patterns in brief













**Iterators - Comprehensions** 

Generators - Coroutines - Case Study

#### **Python Design Patterns**

The decorator Pattern

The observer Pattern

The Strategy Pattern

The State Pattern

The Singleton Pattern

The template Pattern

The adapter Pattern

The facade Pattern

The flyweight Pattern

The command Pattern

The abstract factory Pattern

The composite Pattern

### Top Companies Using



#### **Testing Object-Oriented Programs**

**Testing Object-Oriented Programs** 

Why test? - Unit testing

Testing with pytest

Imitating expensive objects

How much testing is enough- Case Study

#### **Concurrency**

Concurrency

Threads

Multiprocessing

**Futures** 

Aysnc IO - Case Study

#### Modules, Packages, and Goodies

#### Modules and import Statement

Import a Module

Import a Module with Another Name

Import Only What You want from a Module

#### **Packages**

The Module Search Path

**Relative and Absolute Imports** 

Namespace Packages, Modules Vs Objects

#### Goodies in the Python Standard Library

Handle Missing Keys with setdefault() and defaultdict()

Count Items with Counter()

Order by Key with OrderedDict() - Deque

Iterate over Code Structures with itertools

Print Nicely with pprint() -Get Random

More Batteries: Get Other Python Code -











#### **Virtual Environments**

### **Software Testing and Test-Driven Development**

#### **Getting Started with Software Testing - Introducing software testing and quality control**

Test plans

Introducing automatic tests and test suites

Multiple test cases, Organizing tests

Introducing test-driven development and unit tests

Test-driven development, Test units

Understanding integration and functional tests

Integration tests, Functional tests

Understanding the testing pyramid and trophy

The testing pyramid, The testing trophy

Testing distributions and coverage





#### **Test Doubles**

Introducing test doubles

Using dummy objects

Replacing components with stubs

Checking behaviors with spies

Using mocks

Replacing dependencies with fakes

Understanding acceptance tests and doubles

Managing dependencies with dependency injection

Using dependency injection frameworks

#### Test-Driven Development (TDD)

Starting projects with TDD

Building applications, the TDD way

Preventing regressions

#### Scaling the Test Suite

Scaling tests

Moving e2e to functional

Working with multiple suites

Compile suite, Commit tests, Smoke tests

Carrying out performance tests

Enabling continuous integration, Performance testing

#### PyTest for Python Testing

Running tests with PyTest

Writing PyTest fixtures, Using fixtures for dependency injection

Managing temporary data with tmp\_path

Testing I/O with capsys, Running subsets of the test suites









#### **Dynamic and Parametric Tests and Fixtures**

Configuring the test suite Generating fixtures Generating tests with parametric tests

#### Using Behavior-driven development

Writing acceptance tests
Writing first test, Defining a feature file
Declaring the scenario, Running the scenario test
Further setup with the And step
Performing actions with the When step
Assessing conditions with the Then step
Embracing specifications by example

#### **PyTest Essential Plugins**

PyTest Essential Plugins
Using pytest-cov for coverage reporting
Coverage as a service
Using pytest-benchmark for benchmarking
Comparing benchmark runs
Using flaky to rerun unstable tests
Using pytest-testmon to rerun tests on code changes
Running tests in parallel with pytest-xdist

#### Managing Test Environments with Tox

Introducing Tox
Testing multiple python versions with Tox
Using environments for more that Python Versions

#### Playing with data (text and binary)

Text Strings: Unicode

Python 3 Unicode Strings UTF-8, Encode Decode, HTML Entities Normalization

#### **Text Strings: Regular Expressions**

Find Exact Beginning Match with match()
Find FirstMatch with search(), Find All Matches with findall()
Split at Matches with split(), Replace at Matches with sub()
Patterns: Special Characters, Patterns: Using specifiers
Patterns: Specifying match() Output

#### **Binary Data**

Bytes and bytearray Convert Binary Data with struct Other Binary Data Tools









#### **Calendars and Clocks**

Leap Year, The datetime module , Using the time module Read and Write Dates and times All the Conversions, Alternative Modules

#### **Files and Directories**

#### File Input and Output

Create or Open with open(), Write a Text File with print()
Write a Text File with write(),
Read a Text File with read(), readline(), or readlines()
Write a Binary File with read(), Read a Binary File with read()
Close Files Automatically by using with, Change Position with seek()

### Memory Mapping

#### **File Operations**

Check existence with exists()

Check Type with isfile()

Copy with copy()

Changing Name with rename()

Link with link() or symlink()

Change permissions with chmod(), Change Ownership with chown()

Delete a File with remove()

#### **Directory Operations**

Create with mkdir(),

Delete with rmdir()

List contents with listdir(),

Changing current directory with chdir()

List Matching Files with glob()

Pathnames, BytesIO and StringIO

#### **Processes and Concurrency**

#### Program and Processes

Create a Process with subprocess

Create a Process with multiprocessing

Kill a Process with terminate

Get System Info with os

Get Process Info with psutil

#### **Command Automation**

Invoke

**Other Command Helpers** 

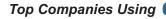
#### Concurrence

Queues

**Processes** 

Threads - Concurrent.futures

Green Threads and gevent













### Twisted Asyncio, Redis - Beyond Queues

#### **Effective and Performant Python**

#### **Pythonic Thinking**

Follow PEP 8 Style Guide

Differences between bytes and str

Interpolated F-strings over C-style Format strings and str.format

Writing helper functions instead of complex expressions

Multiple Assignment Unpacking Over Indexing

Prefer enumerate over range

Using zip to process Iterators in Parallel

Avoid Else blocks after for & while loops

Prevent Repetition with Assignment Expressions



#### **Lists and Dictionaries**

**Know How to Slice Sequences** 

Avoid Striding and Slicing in a Single Expression, Prefer Catch-All unpacking over slicing

Sort by Complex Criteria Using the key parameter

Be Cautious when relying on dict insertion Ordering

Prefer get Over in and KeyError to Handle Missing Dictionary Keys

Prefer default dict Over setdefault to Handle Missing Items in Internal State

Know How to Construct Key-Dependent Default Values with \_\_missing\_\_

#### **Functions**

Never Unpack more than three variables when functions return multiple values

Prefer Raising exceptions to Returning None

Know How Closures interact with Variable Scope

Reduce Visual Noise with Positional Arguments

Provide Optional Behavior with Keywork Arguments

Use Node and Docstrings to Specify Dynamic Default Arguments

Enforce Clarity with Keyword-Only and Positional-Only Arguments

Define Function Decorators with functools.wraps

#### **Comprehensions and Generators**

Use Comprehensions Instead of map and filter

Avoid More Than Two Control Subexpressions in Comprehensions

Avoid Repeated Work in Comprehensions by Using Assignment Expressions

Consider Generators Instead of Returning Lists

Be Defensive When Iterating Over Arguments

Consider Generator Expressions for Large List Comprehensions

Compose Multiple Generators with yield from

Avoid Injecting Data into Generators with send

Avoid Causing State Transitions in Generators with throw

Consider itertools for Working with Iterators and Generators

#### **Classes and Interfaces**

Compose Classes Instead of Nesting Many Levels of Built-in Types Accept Functions Instead of Classes for Simple Interfaces





Use @classmethod Polymorphism to Construct Objects Generically Initialize Parent Classes with super

Consider Composing Functionality with Mix-in Classes

Prefer Public Attributes Over Private Ones

Inherit from collections.abc for Custom Container Types

#### **Meta classes and Attributes**

Use Plain Attributes Instead of Setter and Getter Methods

Consider @property Instead of Refactoring Attributes

Use Descriptors for Reusable @property Methods

Use \_\_getattr\_\_, \_\_getattribute\_\_, and \_\_setattr\_\_ for Lazy Attributes

Validate Subclasses with \_\_init\_subclass\_\_

Register Class Existence with \_\_init\_subclass\_\_

Annotate Class Attributes with \_\_set\_name\_\_

Prefer Class Decorators Over Metaclasses for Composable Class Extensions



#### **Concurrency and Parallelism**

Use subprocess to Manage Child Processes

Use Threads for Blocking I/O, Avoid for Parallelism

Use Lock to Prevent Data Races in Threads

Use Queue to Coordinate Work Between Threads

Know How to Recognize When Concurrency Is Necessary

Avoid Creating New Thread Instances for On-demand Fan-out

Understand How Using Queue for Concurrency Requires Refactoring

Consider ThreadPoolExecutor -

When Threads Are Necessary for Concurrency

Achieve Highly Concurrent I/O with Coroutines

Know How to Port Threaded I/O to asyncio

Mix Threads and Coroutines to Ease the Transition to asyncio

Avoid Blocking the asyncio Event Loop to Maximize Responsiveness

Consider concurrent.futures for True Parallelism





#### **Robustness and Performance**

Take Advantage of Each Block in try/except/else/finally

Consider contextlib and with Statements for Reusable try

Use datetime Instead of time for Local Clocks

Make pickle Reliable with copyreg

Use decimal When Precision Is Paramount

**Profile Before Optimizing** 

Prefer deque for Producer& Consumer Queues for Producer-Consumer Queues

Consider Searching Sorted Sequences with bisect

Know How to Use heapq for Priority Queues

Consider memoryview and bytearray for Zero-Copy Interactions with bytes

#### **Testing and Debugging**

Use repr Strings for Debugging Output

Verify Related Behaviors in TestCase Subclasses

Isolate Tests from Each Other with setUp, tearDown, setUpModule, and tearDownModule Use Mocks to Test Code with Complex Dependencies





Encapsulate Dependencies to Facilitate Mocking and Testing Consider Interactive Debugging with pdb Use tracemalloc to Understand Memory Usage and Leaks

#### Collaboration

Know Where to Find Community-Built Modules
Use Virtual Environments for Isolated and Reproducible Dependencies
Write Docstrings for Every Function, Class, and Module
Use Packages to Organize Modules and Provide Stable APIs
Consider Module-Scoped Code to Configure Deployment Environments
Define a Root Exception to Insulate Callers from APIs
Know How to Break Circular Dependencies
Consider warnings to Refactor and Migrate Usage
Consider Static Analysis via typing to Obviate Bugs

#### **Understanding Performant Python**

The Fundamental Computer System

Computing Units
Memory Units
Communications Layers

#### Putting the Fundamental Elements Together

dealized Computing Versus the Python Virtual Machine So Why Use Python?

#### How to Be a Highly Performant Programmer

**Good Working Practices** 

#### **Profiling to Find Bottlenecks**

Profiling Efficiently
Introducing the Julia Set
Calculating the Full Julia Set
Simple Approaches to Timing—print and a Decorator
Simple Timing Using the Unix time Command
Using the cProfile Module
Visualizing cProfile Output with SnakeViz
Using line\_profiler for Line-by-Line Measurements
Using memory\_profiler to Diagnose Memory Usage
Introspecting an Existing Process with PySpy

#### Bytecode: Under the Hood

Using the dis Module to Examine CPython Bytecode Different Approaches, Different Complexity

#### **Unit Testing During Optimization to Maintain Correctness**

No-op @profile Decorator Strategies to Profile Your Code Successfully







#### Asynchronous I/O

Introduction to Asynchronous Programming How Does async/await Work?

#### Serial Crawler

Gevent

Tornado

Aiohttp

#### Shared CPU-I/O Workload

Serial

**Batched Results** 

Full Async

#### The multiprocessing Module

An Overview of the multiprocessing Module

# **Estimating Pi Using the Monte Carlo Method Estimating Pi Using Processes and Threads**

**Using Python Objects** 

Replacing multiprocessing with Joblib

Random Numbers in Parallel Systems

Using numpy

#### **Finding Prime Numbers**

Queues of Work

#### **Verifying Primes Using Interprocess Communication**

**Serial Solution** 

**Naive Pool Solution** 

A Less Naive Pool Solution

Using Manager. Value as a Flag

Using Redis as a Flag

Using RawValue as a Flag

Using mmap as a Flag

Using mmap as a Flag Redux

# **Sharing numpy Data with multiprocessing Synchronizing File and Variable Access**

File Locking

Locking a Value

Clusters and Job Queues Using Less RAM Lessons from the Field











# **Python Django**

#### **Persistent Storage**

Flat Text Files

Padded Text Files Tabular Text Files

CSV - XML, HTML

JSON, YAML, Tablib

Pandas, Configuration Files

**Binary Files** 

Padded Binary Files and Memory Mapping

Spreadsheets, HDF5, TileDB

**Relational Databases** 

SQL, DB-API

SQLite, MySQL

PostgreSQL, SQLAlchemy

**NoSQL Datastores** 

The dbm Family

Memcached

Redis. Document Databases

Time Series Databases

**Graph Databases** 

Other NoSQL

**Full-Text Databases** 

#### **Networks**

TCP/IP

**Networking Patterns** 

The Request-Reply Pattern

Zero MQ

Other Messaging tools

#### The Publish-Subscribe Pattern

Redis

ZeroMQ

Other Pub-Sub Tools

Internet Services- DNS- Python Email Modules

Web Services and APIS

#### Data Serialization

Serialize with pickle

Other Serialization Formats

Remote Procedure Calls

XML RPC- JSON RPC- Zerorpc- gRPC- Twirp

Top sites & products built with Python & Django













#### **Web applications and Services**

HTML Web Development

CSS, JavaScript. SQL Databases (mysql)

NoSQL Databases (mongo db)

SQL Databases and Python (SQLAlchemy)

NoSQL Databases and Python (PyMongo)

Responsive Web Design

ReactJS

#### **Introduction to Django**

Introduction

Scaffolding a Django Project and App

Creating a Project and App, and Starting the Dev Server

Model View Template

Models

Views

**Templates** 

Introduction to HTTP

Processing a Request

Django Project

The myproject Directory

Django Development Server

Django Apps

PyCharm Setup

Project Setup in PyCharm

View Details

**URL Mapping Detail** 

Writing a View and Mapping a URL to It

GET, POST, and QueryDict Objects

Exploring GET Values and QueryDict

Exploring Django Settings- Using Settings in Your Code

Finding HTML Templates in App Directories

Creating a Templates Directory and a Base Template

Rendering a Template with the render Function

Rendering a Template in a View

Rendering Variables in Templates

Using Variables in Templates

Debugging and Dealing with Errors

Exceptions - Generating and Viewing Exceptions -

Debugging

Creating a Site Welcome Screen

Top sites & products built with Python & Django











#### Customizing the Admin Interfaces

#### **Serving Static Files**

Introduction

Static File Finders

App Directories Finder

Static File Namespacing

FileSystemFinder

**Custom Storage Engines** 

#### **Forms**

Introduction

The <form> element

Types of Input

Form Security with Cross-Site Forgery Protection

Accessing Data in the View

Choosing b/w GET and POST

Django Form's Library

Validating Forms & Retrieving Python Values

#### **Advanced Form Validation and Model Forms**

Introduction

Custom Field Validation & Cleaning

#### **Media Serving and File Uploads**

Setting up Media Uploads & Serving

Context Processors & using MEDIA\_URL in Templates

File Uploads using HTML Forms

Storing Files on Model Instances

#### **Sessions and Authentication**

Middleware Modules

Implementing Authentication Views & Templates

Password Storage in Django

The Profile Page

request.user in Django

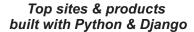
Authentication Decorators - Redirection

**Enhancing Templates with Authentication Data** 

**Session Engine** 

Pickle or JSON Storage

Storing Data in Sessions













#### **Models and Migrations**

Introduction Databases

Relational Databases Non-Relational Databases Database Operations Using SQL Data Types in Relational databases

#### **SQL CRUD Operations**

SQL Create Operations
SQL Read Operations

SQL Update Operations

**SQL** Delete Operations

Django ORM

Database Configuration and Creating Django Applications

Django Apps

Django Migration

Creating Django Models and Migrations

Field Types

Field Options

#### Relationships

One-to-One

Many-to-One

Many-to-Many

Django's Database

**CRUD Operations** 

#### **URL Mapping, View and Templates**

**Function Based Views** 

Class Based Views

**URL** Configuration

**Templates** 

#### Django Template Language

Template Variables

Template Inheritances

Template Styling with Bootstrap

#### Introduction to Django Admin

Introduction

Creating a Superuser Account

**CRUD Operations Using Django Admin App** 

Registering the Model

# Top sites & products built with Django & Python

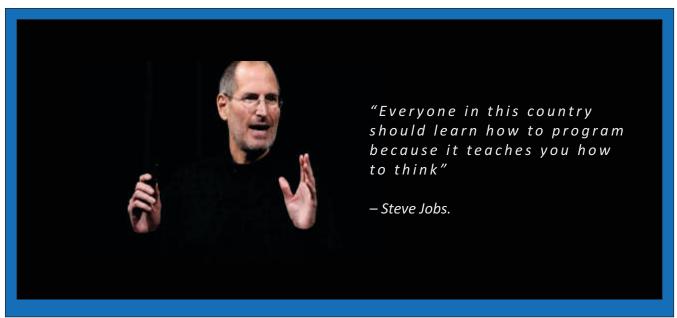












#### **Advanced Django Admin & Customizations**

Customizing Admin Site -Adding Views to the Admin Site

#### **Advanced Templating & Class Based Views**

Template Filters
Custom Template Filters
Template Tags
Django Views
Class Based Views

#### **Generating CSV PDF and Other Binary Files**

Working with Python's CSV Module Working with Excel Files in Python Working with PDF files in Python Playing with Graphs in Python Integrating Visualizations with Django

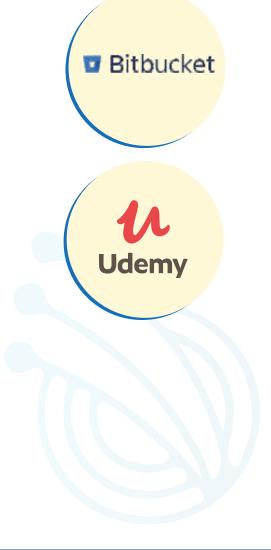
#### **Testing**

Automation Testing
Testing in Django
Testing Django Models
Testing Django Views
Django Request Factory
Test Case Classes in Django

#### **Using Frontend JavaScript Libraries with Django**

JavaScript Frameworks - React and its Components

Top sites & products built with Python & Django







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### **OTHER JOB GUARANTEE COURSES**





































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