



Become A
Backend Web Developer(Python&Django3)
Internship Program





60+ Hours of Online Training



1:1 Live Mentoring



Career, Interview
and Internship guidance



Learn 8+ Technologies



Learn from Industry Experts



Create your own
hands-on Project



Intern with us



TCR
INNOVATION

Who are we?

TCR Innovation is a career platform for Students and Learners where they are provided with practical opportunities, Industrial Training Programs and Internships.

Salient Features of This course

- 1 You will host your own Website at the end of the Training
- 2 60+ Hours of Live Intensive Training
- 3 10+ Hours of Hands-on Assignments and Projects
- 4 Career, interview, internship and Placement guidance
- 5 Lifetime Access to Latest Content
- 6 Learn from the Experts
- 6 24X7 Support through Discussion forum





Additional skills You will learn



LinkedIn



GitHub



Improved communication skills



Interview cracking



Resume building



Leadership skills

SKILLS YOU WILL LEARN

BackEnd Web Development

Part 1

● Introduction

- Why Django?
- Dynamic Web Content
- Network Sockets and Connections
- Browser Developer Mode

● HTML Forms

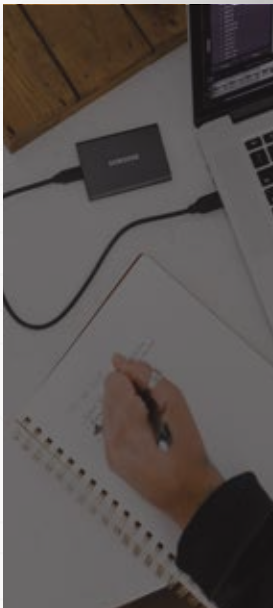
- Buttons
- Label
- Input Type
- Action
- Target

● Hosting Django on Linux Server

- Installing Django on PythonAnywhere
- Html Brief
- CSS Brief
- How Databases Work
- SQL

● The model layer

- Model View Controller (MVC)
- Object-relational mapping
- Django Migrations
- Model in the Shell
- Sqlite3 Database



SKILLS YOU WILL LEARN

BackEnd Web Development

Part 2

● The view layer

URL Routing

view.py

Inside Django Views and HTML Escaping in Django

Django Template Language (DTL)

Inheritance in Django Templates

Reversing Django Views and URLs

Generic Views

● Forms in HTTP and HTML

Forms, GET, POST, and HTTP

Building HTML Forms

Forms and Cross Site Request Forgery (CSRF)

CSRF Support in Django

The POST Refresh Pattern

Implementing POST Redirect in Django

● Django Features and Libraries

Cookies and Sessions

Django Sessions

● Users and Authentication

Creating and Managing Users in Django

Login and Logout URLs in Django

Using Django Login in Views

● Django Forms

Using Django Forms Capabilities

Data Validation with Django Forms

Walkthrough: Samples - Autos



SKILLS YOU WILL LEARN

BackEnd Web Development

Part 3

● Owned Rows

Overview

Generic Views Review

owner.py

● One to Many Data Models

Overview

Removing Replication in One-to-Many Models

Storing Primary and Foreign Keys in a Database

Representing One-To-Many Models in Django

Using the Django Shell to Explore One-to-Many Models

Loading One-to-Many Data using a Django Batch Script

● Many-to-Many Models

Many-to-Many Overview

A Simple Many-To-Many

Many-To-Many Data Models

Building a Django Batch Script to Load Data from CSV

● JavaScript & JQuery

JavaScript Overview and History

JavaScript in the Browser

Functions and Arrays

Control Structures

OOP in JS



SKILLS YOU WILL LEARN

BackEnd Web Development

Part 4

● JSON / AJAX

- Many-to-Many Overview
- A Simple Many-To-Many
- Many-To-Many Data Models
- Building a Django Batch Script to Load Data from CSV

● Projects

- Crispy Forms (crispy)
- My Articles (myarts)
- Bootstrap Menu (menu)
- Blog



SKILLS YOU WILL LEARN

PYTHON

Part 1

● Introduction

- Introduction to python
- History of python
- Installing and using python

● Basic programs in python

- Get started with "Hello world" program.
- Addition and multiplication in python

● Variables

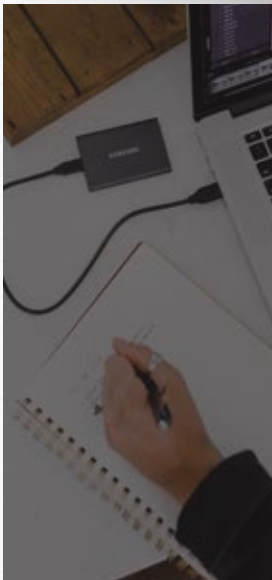
- How to work with variables
- Datatypes of variables
- Type conversion of variables
- Writing expressions using variables

● Operators

- Arithmetic operators
- Comparison operators
- Logical operators
- Bitwise operators
- Assignment operators
- Identity operators
- Membership operators

● Conditional statements

- What are conditional statements in python
- Programs using conditional statements
- If else and elif



SKILLS YOU WILL LEARN

PYTHON

Part 2

● Loops and Iteration

- For loops
- While loops
- Various programs using loops

● Functions

- User defined functions and predefined functions
- Types of arguments
- Input and output
- Recursion

● Strings

- Introduction to strings
- String methods
- Working with strings

● Lists

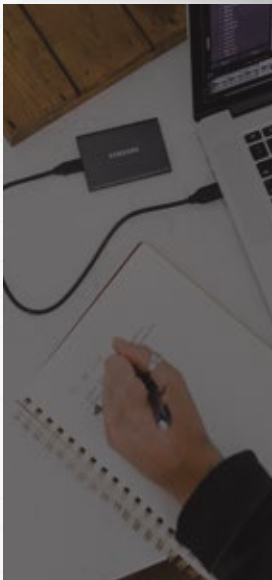
- What is a list and how does it differ from array
- List methods
- Programs using lists

● Tuple

- Introduction to tuple
- Working with tuples
- Methods of tuples

● Dictionary

- Keys and values
- Working with dictionaries



SKILLS YOU WILL LEARN

PYTHON

Part 3

● Modules and packages

Introduction to modules and packages

Working with user defined modules and packages

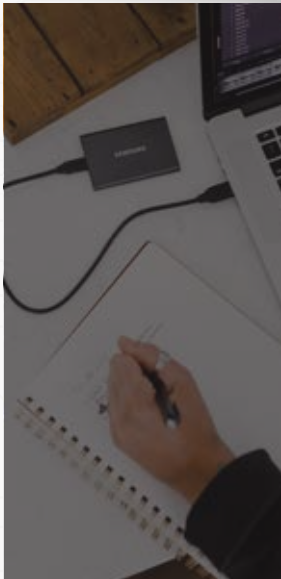
● OOPs Concept

Object Oriented Programming - Introduction

Attributes and Class Keyword

Class Object Attributes and Methods

Inheritance and Polymorphism



SKILLS YOU WILL LEARN

Structured Query Language (SQL)

Part 1

● Introduction

- What is SQL
- Real time applications
- How SQL works

● Database

- What is a Database
- Comparison of two Databases
- Database Management System(DBMS)
- Relational Databases
- Database Queries

● Tables and Keys

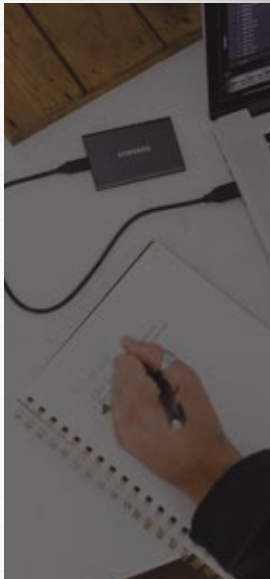
- Introduction
- Primary key
- Foreign Key

● Basics of SQL

- Data Query Language
- Data Definition Language
- Data Control Language
- Data Manipulation Language

● Creating tables and Inserting values

- Datatypes
- Create, Alter and Drop
- How to Insert values after creating tables
- Select command.



SKILLS YOU WILL LEARN

Structured Query Language (SQL)

Part 2

● Constraints

- What is a constraint
- Not Null constraint
- Unique constraint
- Primary key constraint
- Foreign Key constraint
- Check , Create Index and Default constraints

● Update and Delete

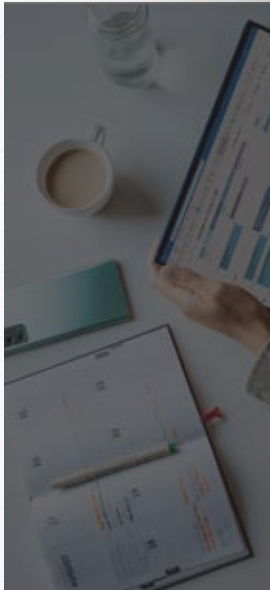
- Update and Delete commands uses
- Working with Update and Delete

● Aggregate Functions

- What is an aggregate function
- Types of aggregate functions
- Working with aggregate functions

● ER Diagram

- What is an ER Diagram
- Entity, Entity type and Entity set
- Types of Attributes
- Relationships and its types
- Cardinality
- Participation Constraints
- Designing ER Diagrams





Internship Project report

You will create a project report on your final internship project

-
- What have we learnt
 - How can be these applied in realtime
 - Projects
 - Host Your own Website

CERTIFICATION & REGISTRATION



CERTIFICATE

Training Completion Certificate

Internship Certificate

Letter of Recommendation

Appreciation Certificate

Internship Program Registration

Duration of the internship program: 2 Months

How to Register & Fees:

Step 1: Attend the free orientation to get the detailed information about our internship program.

Step 2: Final Registration Form will be provided and fees will be disclosed in the orientation itself.