

Django (High Level Python Web framework)

Module 1: Review of Python Programming

- Installing Python
- Understanding python Syntax
- Python Data types & Literals
- Diving python program in functions and Modules
- Programming constructs with python
- (Iterative Statements, Conditional Statements, Jumping Statements)
- OOps based programming in python

Module 2: Introduction to Django

- Overview of Django
- Django As High-Level Framework
- Setting Up Environment for Django
- Installing Django with PIP
- Creating a New Django Project
- Understanding Django Project Structure
- Understanding MVT Architecture
- Django Admin & Super User

Module 3: Django Views and Templates

- What are Views
- URL Routing in Views & URL Patterns
- Class-Based Views
- Working with Templates
- Inheriting template & Template Filters
- Working with Forms in Django
- Form Validation

Module 4: Django Models and Databases

- Understanding ORM
- Working with Models
- Database Migrations in Django Using Models
- Querysets and Managers
- Retrieving Data with Querysets
- Custom Managers
- Customizing Admin Views

Module 4: API Architecture & Rest Services

- Understanding API Architecture
- MVT v/s API Structure
- Overview of SOAP API
- REST Framework & Its Advantages
- CRUD operations using RESTful APIs
- Serializers
- API Endpoints
- Views and Viewsets

Module 5: Django Authentication & Authorization

- Authorization v/s Authentication
- User Authentication
- Built-in Authentication
- User Authorization
- Built-in Authorization

Module 6 : Deployment

- Understanding Github
- Setting up Github for Django Project
- Django Project Deployment