Module: Python API and REST Web Services

In this training, you will learn how to create REST web services using Python, Django and FastAPI: REST web services, creating a REST API, using Django and the REST framework, APIViews and ViewSets, Endpoints and deployment.

Prerequisites : Python programming, Django framework.

E-TRAINING

PYTHON REST API WEBSERVICES

VIRTUAL CLASSROOM

Django . FastAPI . ViewSets

Ways to take this course: Online Instructor Led
Online self-paced
Video On Demand

Video conference tool : ZOOM

Duration : 14 H (2 days)

OUTLINE

Web Services and APIs

Service Oriented Architectures
REST compared to SOAP
Webservice compared to API
JSON and XML formats
HTTP methods: GET, POST, PUT, DELETE, etc.
RESTful: definition and principles

Django framework

Processing HTTP request
Structure of a Django project
The MVT design pattern
Generate a project (CLI), settings.py
Routing, views and templates
The urls.py
file Create templates
Static resources
Authentication and session
The Django ORM

Advanced Features

Filtering and pagination
Relationship between elements
Authentication
Access and permissions
User Endpoints
Create and test an APIView
Set up API tokens
Version your API
Browsable API
API Deployment

Django and the REST framework

Installation
Framework setup
Templates, routing, forms
Access to databases
APIViews and ViewSets
Serializers
Best practices