Fundamentals of REST API

Duration:

6 x 4 hours (8:30 AM to 12:30 PM)

Detailed Course Outline

- Overview of REST API
 - o The REST Vision
 - Understanding HTTP
 - o RFC 2616
 - o HTTP verbs
 - Content negotiation
 - o CRUD Operations and Business Operations
- Testing API calls using tools
 - o Postman
 - Insomnia
 - o REST Client VS Code extension
 - o cURL command
- Making API calls
 - o GET
 - POST
 - o PUT
 - o DELETE
 - o PATCH
 - Authentication and Authorization
 - o BASIC
 - o JWT
- Basic Python scripting
 - Introduction to Python scripting
 - o Python modules
 - Functions (creating and invoking)
 - Control flow
 - Conditionals
 - loops
 - Data types
 - Primitives
 - collections
 - Regular expressions
- Creating REST APIs using Flask
 - o Installing Flask
 - Your first Flask application

- o HTTP Verbs
- o REST Principles
- o Creating our application endpoints
- o Returning a list of stores
- o Implementing other CRUD endpoints
- Using Postman for API testing
- Python script for consuming REST API
 - Getting Started With requests
 - o The GET Request
 - o The Response
 - Status Codes
 - o Content
 - o Headers
 - Query String Parameters
 - Request Headers
 - o Other HTTP Methods
 - The Message Body
 - Inspecting Your Request
 - Authentication