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14 YEARS

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# API

**REST ASSURED**



**POSTMAN**

## Installation and Basic Setup

- ▶ Introduction to API Automation
- ▶ Setting Up the Project Structure

## Dependencies We Need

- ▶ Overview of Required Dependencies
- ▶ Installation and Configuration

## How to Automate HTTPS Requests

- ▶ Understanding HTTPS
- ▶ Handling HTTP/HTTPS Requests

## Creating Payload for POST/PUT Requests in Multiple Ways

- ▶ HashMap
- ▶ JSONObject
- ▶ POJO (Plain Old Java Object)
- ▶ External Json

## Assertions

- ▶ Importance of Assertions in API Testing
- ▶ Common Assertion Techniques

## How to Deal with Cookies

- ▶ Understanding Cookies
- ▶ Managing Cookies in API Requests

## How to Deal with Headers

- ▶ Header Types and Functions
- ▶ Customizing Headers in Requests

## Path and Query Parameters

- ▶ Understanding Path Parameters
- ▶ Working with Query Parameters

## Validation Response

- ▶ Validating Status Codes
- ▶ Response Time Validation

## Parsing JSON Response

- ▶ Introduction to JSON Parsing
- ▶ Extracting Data from JSON Responses

## Validating JSON Schema

- ▶ Overview of JSON Schema Validation
- ▶ Implementation in API Testing

## Types of Authorization

- ▶ Basic Authorization
- ▶ Digest Authorization
- ▶ Preemptive Authorization
- ▶ Bearer Token Authorization
- ▶ OAuth 1.0 and 2.0
- ▶ etc

## FAKER Library

- ▶ Introduction to FAKER Library
- ▶ Generating Random Data for Testing

## API Chaining

- ▶ Basics of API Chaining
- ▶ Implementing API Chaining in Automation

## Framework

- ▶ TestNG Framework
- ▶ Cucumber Framework
- ▶ Hybrid Framework

## Reporting

- ▶ Overview of API Test Reporting
- ▶ Popular Reporting Tools and Libraries

## Q&A and Project Work

- ▶ Live Examples and Scenarios
- ▶ Practical Project Work for Hands-on Experience

## API testing using Jmeter

- ▶ Introduction to Webservices Performance testing
- ▶ Configuring webservices in Jmeter
- ▶ API Authentications
- ▶ Using JMeter to fire CRUD operations
- ▶ Response assertions in Jmeter
- ▶ Different features of Jmeter
- ▶ Processing bulk requests using Jmeter
- ▶ Running JMeter Webservice scripts using batch file
- ▶ Running JMeter Webservice scripts using Jenkin



## API MANUAL

### API Testing Essentials

What is Front end and Back end and difference between FE & BE?

- ⇒ Web Services Testing Introduction
- ⇒ What is a Web Service?
  - ⇒ Why do we need web services?
  - ⇒ How are web services working?
  - ⇒ Types of web services
    - A) SOAP    B) REST
  - ⇒ Difference between SOAP and REST More
  - ⇒ Examples on Web Services
- ⇒ What is an API?
- ⇒ What is a REST API?
- ⇒ Why REST is Architecture
- ⇒ URL vs URI vs API
- ⇒ HTTP Introduction
- ⇒ HTTP Methods : POST , PUT , GET, DELETE, PATCH
- ⇒ POSTMAN tool Introduction
- ⇒ Practice different APIs in POSTMAN Tool
- ⇒ Create/collect APIs for Practice purpose
- ⇒ Collections in POSTMAN
- ⇒ Save Collections in POSTMAN
- ⇒ Collection Folder Structure
- ⇒ Collection Variables vs Global Variables
- ⇒ Share Collections    ⇒ Run Collections
- ⇒ Import /Export Collections
- ⇒ Explore Headers
- ⇒ Headers Types
  - A) Fixed Headers
  - B) Dynamic Headers
- ⇒ Parameters
- ⇒ Different Types of Parameters
  - a) Path Parameter    b) Query Parameter
  - c) Header parameter    d) Body Parameter
- ⇒ Different Authorizations in POSTMAN
- ⇒ HTTP Status Codes
  - 1 - Informational    2 - Success
  - 3 - Bi-direction    4 - Client Side Error
  - 5 - Server side Error
- ⇒ Explore SNIPPETS- (Pre-request Script & TESTS Tab ) in POSTMAN
- ⇒ Introduction to JSON Path
- ⇒ Understanding to JSON path in various Tools
- ⇒ Practice different SNIPPETS
- ⇒ Data Driven Testing in POSTMAN
- ⇒ Data Driven using JSON    ⇒ Data Driven using CSV
- ⇒ Environment Setup in POSTMAN tool
- ⇒ APIs chaining / Property Transfer in POSTMAN
- ⇒ Run Console Reports    ⇒ Run HTML Reports
- ⇒ Interview Questions & Answers discussion
- ⇒ API Testing Project Explanation
- ⇒ API Testing Resume Preparation



**Our Students  
Are Placed In**



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