

**UPLATZ.COM**

# *API TESTING*

## **API Testing – course curriculum**

### **1. Introduction to JAVA basics**

- - Objects and Classes
  - Control Structure
  - Conditional Statements
  - OOPs Concepts in Java
  - String handling

### **2. Web Service Basics**

- - What is web service?
  - Web service Example
  - Different types of Services: SOAP & REST

### **3. Setup Environment**

- - Setup SOAPUI Free Version
  - Setup SOAPUI Pro Version
  - Free SOAP Web services
  - Difference between SOAP and Rest Services

- Advantage of Rest Services over SOAP Services
- UDDI

#### **4. Jump into SOAP UI / ReadyAPI**

- - What is SOAPUI
  - SOAPUI work hierarchy
  - First SOAP Test Case/SOAP Request test step
  - What is ReadyAPI
  - Understanding of ReddyAPI test Steps

#### **5. Properties At Different SOAPUI Level**

- - Global properties
  - Project level property
  - TestSuite level property
  - TestCase Level Property

#### **6. Test steps in SOAPUI**

- - Delay Test Step
  - Groovy Script test step
  - Property test step
  - Manual Test Step
  - Run Test Case Step
  - Assertion Test step

#### **7. Parameterization / Data driver Test Cases**

- - Data Source-Data source Loop using Grid
  - Data Source looping using text file
  - Data Source looping using excel file
  - Data Sink Step
  - Data source Loop using Data sink

#### **8. SOAPUI Utilities**

- - Extent Reporting
  - Data-Driven Framework
  - PDF Reporting

#### **9. Reporting in SOAPUI/Pro**

#### **10. Command Prompt Execution**

- - Run Functional suite from the command prompt
  - Run Load test suite from the command prompt

#### **11. Groovy Programming-Basic to Advance**

- - Groovy coding environment setup
  - Class and objects

- Groovy Basics
- Groovy Programming KickOFF
- Programming Exercise-Number Swapping
- Groovy Condition Handling
- Programming Exercise-Check Even Odd
- Groovy: Arrays
- Groovy: For Loop
- Groovy: While Loop
- Groovy: For Each Loop
- Programming Exercise: Prime Number
- Programming Exercise: Fibonnaci series
- Groovy String Handling

#### **12. XPATH and XQUERY Assertion**

- - XPATH Assertion
  - XQuery Assertion in soapUI

#### **13. Basics of Restful Services**

- - What is Web service
  - Request and Response
  - What is Rest
  - HTTP Methods
  - Request and Response Methods

#### **14. Using Postman for Testing**

- - Deploying the Test Application in Tomcat
  - Application under Test
  - Testing GET endpoint

#### **15. Query Parameter**

- - Handling the query parameter from code

#### **16. Introduction to Rest Assured**

- - Introduction to course material
  - Setting up the Rest Assured Framework
  - Rest assured with BDD Framework
  - Coding style
  - Understanding of Rest Assured -Behaviour Driven Framework

#### **17. HTTP Get Method using Rest Assured**

- - Writing GET Method
  - Handling Response
  - Handling and validating response status code
  - Setup using rest assured environment variable

- Creating GET Request with custom headers
- Validating Response Content
- Validating using XMLpath class
- Validating using JsonPath Class
- Handling query parameters

**18. HTTP Put and Delete method using Rest Assured**

- - Writing the PUT method
  - Writing Delete Method

**19. Working with Twitter API**

- - Introduction and creating an app for Twitter
  - POST-Status-Update on Twitter
  - Get the list of followers
  - Deleting status update from Twitter wall  
of accounts