

# CODING CREATORS

## API Testing Syllabus:

### PART 1: Rest API – An overview

- What is Web Services?
- Deep Dive on SOAP and REST Web Services
- How does REST API architecture works?
- What is BaseURL?
- What is Resources in REST API?
- How to use GET and POST request?
- How to use PUT and DELETE request?
- What are headers and cookies in rest request?

### PART 2: Get started with REST API Testing

- Deep Dive on google place Search API for scripting
- What do you know about POSTMAN -Manual testing client?
- How is it useful for REST API?
- How to adding new place in Google Maps with google API?
- Do you know to validate responses with POSTMAN client?

### PART 3: Automation Set Up

- What do you know Test API?
- How to set up Test Project with Rest Assured API?
- How to use tag for passing requests?

### PART 4: Validate the Rest API Responses

- How to validate the body of first JSON response?
- Do you know to validate response headers and status codes?
- Real Time Examples

### PART 5: Deep Dive on REST API Automation

- Do you know to automate POST request with payload?
- How to grab the response body into String for Advance validations?
- How to pass the response values into subsequent requests?
- Do you know to optimize the script?
- Deep Dive on Data driven testing best practices

#### **PART 6: Automation Utilities**

- How to Validate advanced xml responses?
- What are the Shortcut methods to convert raw data to xml/JSON?
- How to parse JSON response to extract values?
- How to log feature to debug automation script?

#### **PART 7: Automate Jira**

- How does Jira API Works?
- Deep Dive on Cookie Authentication API for Jira requests
- How to use GET and POST API Script in JIRA to create bugs?
- How to automate JIRA API?
- Real Time Examples
- How to add comment API using POST and PUT?
- How to use JIRA API Script?

#### **PART 8: Deep Dive on OAuth Authentication Set Up**

- What is OAuth?
- How does OAuth works?
- Difference between OAuth and OpenID
- Deep Dive on User Authentication using OAuth

#### **PART 9: Maven- Build Management tool**

- Deep Dive on Maven in Framework Dev
- How to install and configure Maven?
- Important things to know about Maven
- How to creating Maven Project?
- Do you know to import Maven in Eclipse?
- What do you know about POM.xml file?
- What do you know about surefire plugin?
- How is it used to execute Test?
- Do you know to integrate Testng with Maven?
- How to switch the Test with Maven Profiling?

#### **PART 10: Jenkins- Continuous Integration Tool**

- Deep Dive on Jenkins in Test frameworks



- How to Install and configure Jenkins?
- How to Configure Jenkin Settings and Workspace?

#### **PART 12: Testng Reporting Plugin into Jenkin jobs**

- Real Time Configuration

#### **PART 13: Logging Framework – log4j**

- What is log4j?
- How is it used in Rest API framework?
- Do you know to import log4j in Eclipse project?
- Deep Dive on log4j xml file
- How to use xml file to control logging in Testcase?

#### **PART 14: Integrate Excel**

- What is Apache POI API?
- What do you know about download instructions?
- Do you know the Approach to Access Excel Data?
- How to access rows and its cells from sheet?
- Do you know to retrieve data from excel?
- Deep Dive on Library API
- What do you know about Library API Postman and Rest Assured?
- How to convert HashMap to JSON?
- How to integrate excel with Rest Assured Test?