

PLAYWRIGHT TRAINING COURSE CONTENT

SECTION 1: INTRODUCTION

- What is an API with an Example's
- Usage of API
- Why API is growing in demand (API Base APP + Faster + Easier to Isolate + Less Failure)
- API vs Web Service vs Microservice
- SOAP(1998) vs REST(2000) vs GraphQL -- Architecture design
- To see the API call use the Developer tool + Network tab or Postman Interceptor

SECTION 2: TOOLS AVAILABLE FOR EACH ARCHITECTURE

- Swagger (Design and Documentation)
- Postman (Design,Develop,Manual Test,Automation,CI/CD) - Java Script
- SOAP UI - SOAP + REST - Groovy
- Karate - BDD
- TOSCA - Codeless automation
- REST Assured Framework using Java

SECTION 3 : REST TERMINOLOGIES

- Consumer vs Provider
- HTTP Methods (CRUD) POST - Create + GET - Read+ PUT + PATCH + DELETE)
- Authentication - No Auth Ex : Weather,Map + Basic Ex : Gmail + oAuth 2 (Open Source Auth) Ex : Payment Gateway(Expiry) + Token Ex
- HTTP Header (Content Type - Req Data,Accept - Res Data,Cookies - session,Host - req server and port details)



Real-time Practical's

- 1. Java Logical Programs from Interview Point of View .*
- 2. Interview Questions Discussion*

SECTION 4 : I/O STREAMS

- I/O using Java
- Files (Create/Read/Write operations on files)



Real-time Practical's

1. Reading Values from the File and Perform Java Logical Programs.

SECTION 5 : INTRODUCTION TO PLAYWRIGHT

- What is Playwright?
- Playwright Vs Selenium
- Advantages of Playwright
- Architecture of Playwright

SECTION 6 : GETTING START WITH PLAYWRIGHT

- Maven Setup
- Adding Playwright Dependencies

SECTION 7 : INTERACTING WITH BROWSER

- Launching Chrome, Edge, Firefox and Webkit.
- Performing Browser Actions like Maximize and Handling Cookies.
- Interacting with CDP.

SECTION 8 : LOCATORS IN PLAYWRIGHT

- CSS
- XPath



Real-time Practical's

1. Interview Questions Discussion.

SECTION 9 : EXPLORING WEB ELEMENTS

- Edit box
- Link
- Button
- Checkbox
- Radio Button
- Drop Down Box
- Select value
- Display all values
- Select values step by step
- Capture screenshots
- Synchronization Commands in Playwright
- HandlingWebTables



Real-time Practicals

1. *Performing End to End Scenarios in Ecommerce Application.*
2. *Performing End to End Scenarios in User Registration Application.*
3. *Handling Web Tables in the Live Score Card.*
4. *Performing Functionality Test in the Banking Application.*

SECTION 10 : Handling Frames, Alerts and Pop Up Window

- Handling iFrames
- Handling multiple tabs
- Handling popups
- File uploads and File downloads
- Handling alerts
- Handling confirmation messages

SECTION 11 : Handling complex User Gestures


- Handling Mouseover Menu
- Handling Slider
- Handling Drag and Drop
- Handling Shadow DOM
- Handling Keyboard Event

SECTION 12 : Capturing Screenshot, Videos and Trace viewer

- Capturing Screenshot
- Capturing Videos
- Capturing Trace Viewer

SECTION 13 : DATA DRIVEN FRAMEWORK

- Interacting with Database
- Interacting with Property File
- Interacting with XML
- Interacting with Excel




Real-time Practicals

1. Retrieving Values from the Property file and perform End to End Scenarios in Live Projects
2. Reading and Writing Values from the Excel File and perform End to End Scenarios in Live Projects.

SECTION 14 : TESTNG FRAMEWORK

- How to Install TestNG plug-in in Eclipse?
- TestNG Annotations
- TestNG sample script
- Selenium testing script from scratch
- Creating Test suites using TestNG
- Reports generation using TestNG
- Parameterized test cases using TestNG framework
- Preparing TestNG Parallel Suite
- Running test multiple times, depends on Methods, Grouping
- TestNG Listener Sample Program



Real-time Practicals

1. Implementing the Live Project Using TestNG

SECTION 15 : CUCUMBER FRAMEWORK

- Test Driven Development (TDD)
- Cucumber & Behavior Driven Development
- Gherkin – Business Driven Development
- Cucumber BDD for Testing
- Install Cucumber Eclipse Plugin
- Download Cucumber for Eclipse
- Download Webdriver Java client
- Configure Eclipse with Cucumber
- Cucumber Selenium Java Test
- Feature File
- JUnit Test Runner Class
- Gherkin Keywords
- Step Definition
- Cucumber Options
- Parameterization in Cucumber
- Data Driven Testing Using Examples Keyword
- Data Tables in Cucumber
- Maps in Data Tables
- Tags
- Hooks
- Tagged Hooks
- Execution Order of Hooks
- Background Keyword



Real-time Practicals

1. *Implementing the Live Project Using TestNG*

SECTION 16: PAGE OBJECT MODEL DESIGN PATTERN

- Why Page Object Model & When it will be effective
- POM Design Rules
- POM Implementation of Rules
- Implementation of testcases using POM framework

SECTION 17: REPORTING

- Methods in Extent Report
- Extent Report Implementation



Real-time Practicals

1. *Generating the Live Report which Include Failure Screenshots*

SECTION 18: BUILD TOOLS

- Maven Features
- Maven Build Process and Dependencies
- Maven Automation Project Build
- Best Practices

SECTION 19: CI TOOLS

- Install Jenkins
- Setup Maven Project in Jenkins
- Schedule the build
- Best Practices