SDET(FULL STACK AUTOMATION COURSE)

WHAT YOU GET

- 6 weeks of Basic + 2 weeks of Advanced Automation Course training
- 10 hours weekly training
- 5 days online access to teacher
- Online Training with a Live Instructor
- Recorded class videos
- Required Automation Testing software's will be provided

WHAT YOU'LL LEARN

BASIC AUTOMATION COURSE: SELENIUM WITH JAVA (6 WEEKS)

Module 1: Overview on Automation

Module 2: Java Programming for Selenium

Module 3: Java Object Oriented Programming

Module 4: Selenium WebDriver

Module 5: TestNG

Module 6: Extent Reports, Page Object Model & Page Factory

Module 7: Maven Integration with Selenium

Module 8: Automation Frameworks

Module 9: Continuous Integration (CI) - Maven, Jenkins, GIT & Github

ADVANCED AUTOMATION COURSE (2 WEEKS)

Module-10: Cucumber BDD Framework

Module-11: API Testing using Rest Assured

BONUS: SELF-PACED RECORDED VIDEOS:

- Appium for Mobile App Testing
- JMeter for Performance & API Testing

AUTOMATION TESTING (BASIC COURSE)

Module 1: Overview on Software Testing & Automation

- What is Software testing?
- Ways of Software Testing
- Challenges in Manual testing
- Use of automation Testing
- Tools for Automation Testing
- What is Selenium?
- Features of Selenium
- Limitations in Selenium

Module 2: Java Programming for Selenium

- Download and install Java
- Setup Java Environment
- How to use Eclipse/IntelliJ IDEA
- Basic Java Program
- Compile and run a Java program
- Understanding console output
- Java Variables and Data Types
- Java Operators
- Conditional statements
- Looping statements
- Single Dimensional array
- Double Dimensional array
- Object class
- String Class
- String methods

Module 3: Java Object Oriented Programming

- Classes and Objects
- Java methods
- Passing parameters to the methods
- Call by value and call by reference
- Java Constructor
- Method Overloading
- Constructor Overloading
- this, final keywords
- Static variables and methods
- Java Inheritance
- Method Overriding
- Java Interfaces
- Access Modifiers
- Java Packages
- Exception Handling
- Array List
- Hash Map
- JDBC

Module 4: Selenium WebDriver

- Download WebDriver API
- Create WebDriver Project in Eclipse
- Create WebDriver test case
- Execute test case on multiple browsers
- Locators
    - What are locators?
    - Types of Locators
    - Capturing XPath in different ways
    - How to use ChroPath in Chrome

    - Types XPath
    - Writing XPath
    - Built-in functions in XPath
    - Handling Dynamic elements using XPath
- WebDriver commands
    - Browser commands
    - Get commands
    - Switching commands
    - Navigation commands
    - Conditional commands
    - Implicit, Explicit and Fluent Waits
- Handling Web Elements
    - Textbox/Input box
    - Links
    - Radio Button/Checkbox
    - Dropdown box/Combo box
    - Multi Select dropdown
    - List box
    - Calendar/Date Picker
    - Web Links
    - HTML frames/Iframes
    - Web/HTML Tables
- Mouse actions using Actions class
    - Mouseover
    - Mouse double click
    - Mouse right clicks
    - Drag and Drop
    - Handling Slider/scroll bar
    - Resizing

        - Handling Tooltips
    - Keyboard actions
    - Working with Robot Class
    - Working with Sikuli
    - How to use JavaScript Executor
    - Browser profiles
    - Desired Capabilities
    - Handling cookies
    - Headless browser testing
    - Capturing Screenshots
    - Data Driven Testing in Selenium
        - What is data driven testing?
        - Apache POI API
        - Data Driven Tests using multiple sources
            - Excel/csv files
            - Java HashMap
            - Databases
            - Text files
    - Log4j for logging

Module 5: TestNG

- What is TestNG? Features of TestNG
- Install TestNG in Eclipse
- How to write TestNG Test case
- Annotations in TestNG
- Understanding testng.xml
- TestNG html Report
- Prioritizing tests
- dependsOnMethods
- Skipping tests

- Grouping methods
- Parameterization
- Passing parameters using xml
- Parallel testing
- Data Provider
- Invocation methods
- TestNG Listeners

Module 6: Extent Reports, Page Object Model & Page Factory

- Generating Extent Reports
- Page Object Model - Creating Page objects
- Page Factory – @FindBy annotation

Module 7: Maven Integration with Selenium

- What is Maven and Why Maven?
- Installing/Configuring Maven
- Creating Maven Project
- Importing Maven Project into Eclipse
- What is POM.xml?
- Adding Dependencies to POM.xml

Module 8: Automation Frameworks

- What is Framework?
- Various Types of Frameworks
- Implementation of Hybrid Driven Framework from the scratch
    - Creating Maven Project
    - Update pom.xml with dependencies
    - Creating page objects and Object repository
    - Creating utility files
    - Setting up configuration files
    - Creating automation test scripts
    - Creating data driven test scripts

- Generating extent reports
- Generating logs using log4j
- Execute test scripts
- Emailing test reports
- Execute test scripts through Maven
- Execute test scripts using bat file

Module 9: Continuous Integration (CI) - Maven, Jenkins & GIT

- What is Continues Integration?
- Continuous Integration Tools
- Download and install Jenkins
- Maven integration with Jenkins
- Run selenium test scripts through Jenkins
- Downloading and Installing GIT
- Installing GIT and GITHUB plug-ins for Jenkins
- Git commands
- Uploading project to Github

AUTOMATION TESTING (ADVANCED COURSE)

Module-10: Cucumber BDD Framework

- Cucumber Introduction
- TDD (Test Driven Development) Vs BDD (Behavior Driven Development)
- Set Up Cucumber with Eclipse
- Install Cucumber Eclipse Plugin
- Download Cucumber JVM for Eclipse
- Cucumber Selenium Java Test
- Cucumber Environment
- Setting Up Cucumber with Selenium

- Cucumber Gherkins languages
- Cucumber – Features file
- Cucumber – Scenarios
- Cucumber – Annotations
- Cucumber - Scenario Outline
- Cucumber – Tag
- Cucumber - Data Tables
- Parameterization in Cucumber
- Cucumber - Comments
- Cucumber - Hooks
- Cucumber - Command Line Options
- Cucumber - JUnit Runner
- Cucumber – Reports generation both Html report and Json report

Module-11: API/Webservices Testing

- Basics of API & Web services Testing
- What is Client and Server?
- Client Server architecture
- Presentation, Business & Database Layer
- What is Request & Response
- What is API Testing
- API Testing VS Unit Testing
- What is Web Service
- Difference between API & Web service
- Components of Web services (WSDL & UDDI)
- SOAP VS Rest services
- API/Web service testing challenges
- Web Service API testing tools
- Web services API Testing process
- HTTP Methods (GET/POST/PUT/DELETE)

- Status Codes
- Examples of Web service API's

Postman

- Download and Install Postman
- Creating Requests and Analyzing Response
- Request Parameters in Postman
- Postman Collections
- End to End test case (GET, POST, PUT, DELETE)
- Test and Collection Runner in Postman
- Workflows in Postman
- Variables in POSTMAN
- Environment/Global variables
- How to share collections in workspaces
- Data Driven testing using Json & CSV files
- Run Postman tests in command Line
- Generating Reports in Postman
- How to handle SOAP Web service Requests in Postman

Rest Assured API

- Introduction to HTTP methods
- REST Assured Setting up environment (Eclipse, Maven & TestNG)
- Send GET request using REST-Assured
- Send POST request using REST-Assured
- Send PUT request using REST-Assured
- Send DELETE request using REST-Assured
- REST-Assured Extracting values from the response.
- Validating Response codes and status line
- JSON Schema Validation
- Validating Headers
- Rest Assured End-to-End Test Cases

- Data Driven test cases
- How to run API tests using Maven CLI
- Generating reports
- Run Rest Assured tests in Jenkins

Module 12: Appium

- Introduction to Mobile Testing and Appium
- Importance of Mobile Phones
- Types of Mobile Apps
- Available Mobile Testing Tools
- Why Appium?
- Advantages & Limitations of Appium
- What is an Appium
- Appium Architecture
- Environment setup
- APK File, Simulators, Emulators and real devices
- What are Desired Capabilities?
- How to get locators in the App
- Invoking Android APP using .apk file – First Automation test script
- How to use UIAutomatorViewer Tool – Locate Elements in the App
- How to use XPath, ID, ClassName and multiple objects of App with Index
- How to use AndroidUIAutomator to identify objects
- Working with Native, Web & Hybrid Apps on Android