Kaushalya Technical Training and Consultancy Services
No. 1094, Indushankara,MCECHS Layout,
23 Cross, Dr. Shivarama Karanth Nagara, Bengaluru - 560077
www.kaushalya.tech

Test Automation
using
Java, Selenium and Apache JMeter

Raghu Prasad K S

B.E, MS (Software Systems)

CEO

Kaushalya Technical Training and Consultancy Services
**#1094,Indushankara,23 Cross, MCECHS Layout, Dr. Shivarama
karanth Nagar, Bangalore 560 077**

+91 – 9845547471   www.kaushalya.tech   raghuprasad@kaushalya.tech

Course Details:

Name	Test Automation
Course Duration	70 hours
Fees	INR 15,000 (Fifteen thousand only)

IT industry is moving towards automating the testing of web application. This would help in faster go to market strategy and fit into agile development. Test automation using Java with selenium has become the hot skill in the industry. It is essential for the graduates and professionals to learn and master these skills.

Objectives of Training

- Provide minds-on and hands-on training
- Understand test automation
- Understand basics of Java
- Understand HTML/CSS and Java Script
- Learn selenium web driver and grid
- Learn performance testing concepts
- Implement test performance using JMeter
- Build simple test automation scripts

Outcome of Training
- Trainees should understand the overall scope for automation of testing process
- Build test scripts to automate given use case
- Write program to automate performance testing using Jmeter
- Training on test automation should enable trainees to solve objective and programming type questions. This would help them to prepare for placements/switch career.

Syllabus

Module	Topics
Module 1 – Core Java	✓ Introduction to Java ✓ Java Platforms ✓ Language fundamentals – JDK,JRE,JVM ✓ Data Types,Operators,loops,conditional statements ✓ OOPs concepts Introduction ✓ Array and String ✓ Oops in Java ✓ Packages and Wrapper Classes ✓ File Management ✓ Exception Handling ✓ The Collection Framework – List,Set,Queue and Map ✓ Sample programs and assignments
Modules 2 – HTML/CSS/JavaScript	✓ Introduction to HTML ✓ Basic HTML Tags ✓ HTML Forms ✓ Building sample HTML programs ✓ Introduction to CSS ✓ CSS syntax ✓ In-line,Internal and external stylesheets ✓ CSS selectors – element,id,class ✓ ✓ Introduction to Java script ✓ Building block of java script programs ✓ Java script events ✓ Sample programs and assignments
Module 3 – Automation basics	✓ Fundamentals of test automation ✓ ROI in Automation ✓ Automation framework ✓ Various tools and comparison with Selenium

Module 4 – Selenium Webdriver	✓ What is selenium and how it is used in the industry ✓ Features of selenium ✓ WebDriver Architecture ✓ Installation of Selenium and supporting tools/frameworks
Module 5 –Locating Techniques	✓ Simple webdriver program demonstration ✓ Locators and eight locating techniques ✓ Creating robust locators using CSS and XPath
Module 6 – Web Driver Basics	✓ Execute tests in Firefox,Chrome and Internet Explorer ✓ Webdriver commands ✓ WebElement commands ✓ Handling various WebElements ✓ WebDriver Timeout Methods ✓ Handling multiple elements using findElements() methods ✓ Handling Alerts,Pop-ups and Frames ✓ Implicit and Explicit waits ✓ Advanced user interactions ✓ Taking screenshots
Module 7 - TestNG	✓ Introduction to TestNG ✓ Various annotations of TestNG ✓ TestNG configuration file ✓ Configuration annotations ✓ Attributes of @Test ✓ Parallel Test Execution Capability ✓ Assertion API's ✓ Passing parameters to Tests ✓ Configuring Test Suites ✓ Reports using TestNG
Module 8 – WebDriver – Framework	✓ Introduction to various frameworks ✓ Page Object Design Pattern ✓ Data Driven Tests using TestNG and POI ✓ Use of Listeners ✓ Introduction to Jenkins ✓ Configuration of Jenkins to invoke Selenium Tests
Module 9 – Selenium Grid	✓ What is Selenium Grid ? ✓ When to Use Selenium Grid ✓ Setting up Grid – Hub and Nodes ?

	✓ Configuring TestNG.xml to run tests on Grid
Module 10 - JMeter	✓ Introduction to performance testing ✓ Introduction to Apache JMeter ✓ Elements of JMeter Test Plan ✓ Building a JMeter Test Plan ✓ JMeter Result Analysis ✓ API Testing ✓ Generation of Test Report
Module 11 – Project	✓ Sample project ✓ Assessment