

QA Automation Course Content

Course Description:

QA Automation testing is a method of software testing that uses tools and scripts to implement the entire software development lifecycle in a short time to deliver an efficient software application to the end-user. QA Automation Selenium is a widely used open-source tool for testing web-based applications. Overall using automation testing tools will be the best way to get an optimal level of test effectiveness, efficiency, and testing coverage. Our selenium software training consists of Selenium Integrated Development Environment (IDE), Selenium Remote Control (RC), WebDriver and Selenium Grid, and basic concepts of Java, OOPs concepts, TestNG, XPath and Waits, CSS selectors, Ajax testing, frameworks, AutoIT, GIT hub, Maven, and Jenkins continuous integration.

Hachion QA Automation Testing - Selenium online training will be provided by the best trainers from end to end. The course is well designed with basics and advanced topics to train beginners and professionals to have a strong career in their testing domain. After completion of the QA selenium testing course, participants may work on real-time projects, and assignments to gain practical knowledge. Expand your testing capacity with faster feedback, and improve quality testing through the Selenium test automation tool suite. We provide resume preparation tips, mock interview sessions, and job assistance to get placed in top companies.

Course Content:

Introduction

- What is Automation testing?
- When to start Automation?
- When not to go for Automation?
- What are the advantages of Automation testing?
- What is Selenium?
- What are the advantages of Selenium?
- Difference between Selenium and QTP?

Selenium IDE

- What is Selenium IDE?
- Installing IDE
- Record and playback
- Converting Selenium script into other languages
- Batch testing in IDE

Java

- Introduction to Java
- Installing JDK
- Configuring Eclipse IDE
- Creating Java project
- Sample Java program

- Classes and objects
- Downloading Selenium server jar
- Configuring Selenium into the Java project
- Conditional Statements in Java
- Loops in Java
- Arrays in Java
- Array List in Java
- Methods in Java
- Utility functions in Java
- Local and global variables in Java
- Static and instance variables in Java
- Hash set in Java
- Method overloading in Java
- Constructors in Java
- Inheritance in Java
- Interfaces in Java
- Packages in Java

WebDriver Introduction

- Browser Launching Automation
- Working on
 - Firefox
 - Chrome
 - IE

Add on and Methods

- Firebug and Fire path
- Login functionality test
- Locators in WebDriver
- Methods in WebDriver

Profiles

- Firefox Profiles
- Making WebDriver launch a customized instance of Firefox
- Basic HTML notations

Automating Links

- Links testing
- Clicking on a link and validating
- Capturing all links in a page
- Capturing links from a section of the page
- Validating the captured Links
- Links testing types
- Visible links and hidden links
- Validating all the links based on href property
- Checking for broken links

Automating Dropdowns

- Dropdown Testing
- Selection an option from the Dropdown
- Select class to Automate Dropdown
- Capturing all elements in a Dropdown
- Checking the correctness of options in the Dropdown
- Validating multiple Dropdowns

Xpaths

- Types of Xpaths
- Relative and Absolute
- Creation of Relative Xpaths
- Creation of Absolute Xpaths
- Customizing Xpaths
- Handling Dynamic Xpaths
- Xpath Axes

Using CSS Selectors

- CSS Selectors
- Creation of CSS Selectors
- Comparison between Xpath and CSS Selectors
- Relative and Absolute CSS
- Handling Dynamic CSS Selectors

TestNG

- Introduction to TestNG
- Configuring TestNG into Eclipse
- Annotations in TestNG
- Prioritizing Test cases
- Ignoring Test cases
- Advantages of TestNG
- Using TestNG.xml

Tab and Popup Automation

- Automating Tabs
- Automating Multiple Windows
- Handling Popup
- Handling Alerts

Synchronization

- Introduction to Synchronization
- Thread.sleep()
- Implicit wait
- Explicit wait

Ajax Testing

- What are the Ajax components?

- Handling Ajax Autosuggestions

Miscellaneous

- Radio Buttons Testing
- CheckBoxes Testing
- Automating input fields

Actions Class

- Advanced user interactions
- Mouse Hovering
- Right Clicking
- Double Clicking
- Chain Actions
- Drag and drop and element
- Automating Slider bar

Automating WebTable

- Introduction to WebTable Testing
- Handling Static WebTable
- Handling Dynamic WebTable
- Automating Datepicker (calendar)

Excel Read/ Write

- Apache POI
- Configuring POI into the project
- Interacting with Excel
- Read operations on Excel
- Write operations on Excel
- Dropdown testing and storing the results in Excel
- WebTable testing and storing the results in excel
- Creating Data-Driven Framework
- Creating test data Excel files
- Using the test data to test the web application

Frameworks

- Creating a Data Engine to control the automation test suite
- Keyword Driven Testing
- Creation of Properties File
- Object Repository
- Creating Actions Keywords Excel file
- Reflections in Java to handle keywords

Automating Window Components

- AutoIT
- Handling Window Components
- Installing AutoIT
- Notepad Automation

- Integrating AutoIT and Selenium
- File download using AutoIT
- File upload using AutoIT

Version Controlling

- GIT
- Version Controlling
- Installing GIT
- GIT bash and GIT HUB
- Creating a GIT local repository
- Creating GIT Hub account
- Uploading into GIT Hub (push)
- Downloading from GIT Hub (pull)

Maven

- Introduction to Maven
- Maven local and Global repositories
- Creating a maven artifact from the command prompt
- Configuring maven project into Eclipse
- Creating a Maven local repository
- Adding Jars into Maven local repository
- Stages in Maven
- Configuring Maven from Eclipse plug-in
- Maven as a build tool

Grid II

- Selenium Grid
- What is Grid
- Configuring Hub and Nodes
- Serial and parallel testing
- Cross browser Testing
- Cross platform Testing
- Customizing the nodes
- Using JSON to configure Hub and Nodes
- End to End Testing in Grid

Continuous Integration

- Different tools for implementing CI
- Jenkins
- Continuous Integration
- Downloading Jenkins
- Dashboard of Jenkins
- Scheduling the automation build
- Sending automated mails when the build executes
- Integrating Jenkins with Git
- Parallel testing of selenium programs on multiple browsers and OS using Jenkins