

Selenium Fundamentals

Lesson: Selenium Fundamentals

- Selenium Concepts and Components
- Manual Testing using Selenium
- Automated Testing using Selenium
- Java, Testing Frameworks, and Selenium WebDriver
- Exercise: Running the Web Application

Lesson: Using the Katalon Recorder

- Start Katalon Recorder
- Understand the components of Katalon Recorder
- Use Web Developer Inspector to inspect an element on a web page
- Exercise: Analyzing the Web Application

Lesson: Creating and Running a Manual Test

- Testing planning and Test Plans
- Use Katalon Recorder to create and run a manual test
- Understand the Katalon Recorder components
- Page Transitions and Globbing
- Exercise: Creating and Running a Manual Test
- Exercise: Testing Alerts

Lesson: JUnit 5 for Selenium

- What JUnit brings to the table
- JUnit Method Lifecycle
- Test setup and teardown
- Parameterized tests
- Assertions
- Demo: JUnit
- Exercise: Reapply JUnit
- Walkthrough: Using JUnit with Selenium

Lesson: Selenium WebDriver

- Working with WebDriver in Java

- Finding Spots on Web Pages
- Working with different browsers
- Built-In Locators
- Exercise: Creating and Running a WebDriver Test
- Exercise: Testing with Other Browsers
- Exercise: Working with WebDriver Locators
- Exercise: Adding WebDriver Tests

Lesson: WebDriver Deep Dive

- WebDriver Commands for working with forms
- Working with complex form components
- Taking screenshots
- Working with alerts
- Exercise: Testing Forms using WebDriver
- Exercise: Screenshots

Lesson: Advanced WebDriver

- Use WebDriver to work with windows, tabs and iframes
- Utilize Actions class for mouse and keyboard actions
- Testing file uploads and downloads
- Testing AJAX elements
- Waiting for events to happen
- Feeding data sets into a testing sequence
- Exercise: Testing Wait Styles
- Exercise: Streaming Data into Selenium Tests

Lesson: Selenium Best Practices

- Preparation
- Managing Names
- Multiple Browser Testing
- High Quality Tests and Test Plans
- Using Whitespace
- Efficient Operations
- Establish Selenium Standards

Lesson: Testing Strategies and Patterns

- Types of web application tests
- Strategies for locating elements
- Wrapping Selenium calls
- User interface maps
- Exercise: Using Delayed Exceptions
- Exercise: Automated Running of Multiple Test Cases
- Exercise: Testing the Bank Web Application

Lesson: Selenium Locators

- Finding Spots on Web Pages
- Built-In Locators
- Find by HTML Features
- Find using CSS
- Find using XPath and the DOM
- Exercise: Working with Selenium Locators

Lesson: Selenese

- Selenese Overview
- Selenese Commands
- Action Commands
- Accessor Commands
- Assertion Commands
- Exercise: Working with Selenese

Lesson: Forms

- Selenese Commands for Working with Forms
- Form Actions
- Text Form Actions
- Keys
- Button Form Actions
- Other Actions
- Exercise: Testing Forms