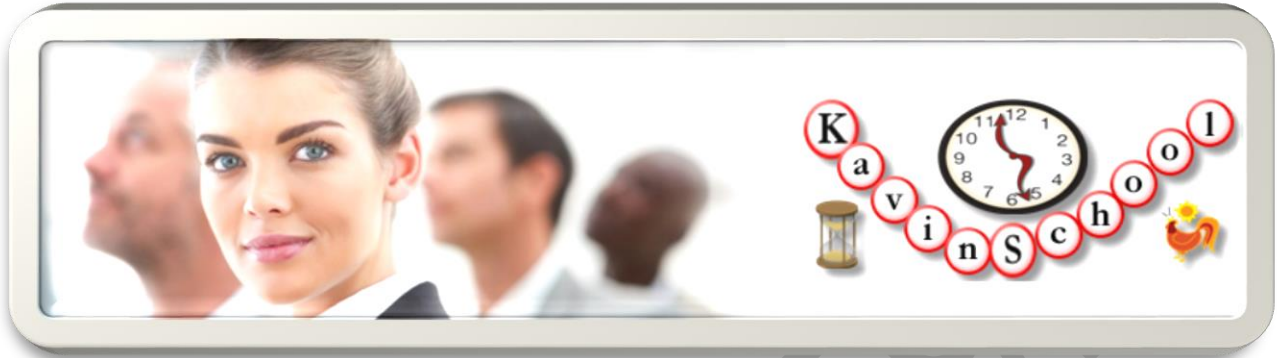




Selenium WebDriver Using Java Language

Course Catalog

Selenium WebDriver Using Java Language



Selenium/WebDriver Using Java Language

This is 8 sessions 36 hours commitment course. Kavin School provides onsite and online instructor led courses for this course. Course contents are subject to change. Please look the [schedules](#) page for current start date of the courses and fees information. Click [here](#) to contact us for any questions. Due to limited seats availability register and pay for the course at least a week before to guarantee a seat for you. Maximum number of students per batch is 12. (Note: During the 1st or Demo session more than 12 people may attend, but we'll restrict the students per batch to only 12 after the demo session).

Bring your own laptop. All the installation instructions and step by step guide is provided to you ahead of time. Install the required software's and/or tools ahead of time for the next week. This will allow covering the course materials during the session instead of wasting time on installation.

System Requirements:

- **O/S:** Windows 7, 8, 10, Mac
- **Hardware:** Intel-based machine (i5 2.0 GHz or faster) with at least **100GB** free disk space; 65536 colors, set to at least 1024 X 768 resolution;
- **RAM:** 8 GB RAM
- **HDD:** 100 GB free space
- **Internet Connectivity:** Machines must have access to the Internet.
- You should have [admin access](#) to the laptop to install all the software mentioned in this course.

Prerequisites:

This course assumes that you have basic understanding of QA Manual process. Any programming language experience is desired but not must to start the course. This course covers the Java language basics needed for Selenium WebDriver, but does not Java itself

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Session 1: - Introduction to Selenium IDE

The session 1 starts with installing Selenium IDE in Mozilla Firefox. Creating simple test cases that search “Energy Efficient” key word in different domain’s search engines. You will create a Selenium Test Suite using the “Energy Efficient” test cases in Selenium IDE. The above exercises “Energy Efficient” test case allows you to understand how Selenium is dependent on the HTML structure of the application under test (AUT).

You can install the useful Firefox add-ons like Firebug, Dom Inspector, Regular Expression Tester, HTML Validator, etc. These tools will allow you understand the locator strategies, and how to aptly provide locators for different commands in Selenium. Optionally you can also install 7-Zip for opening Zipped files, and Notepad++ which allows you to look out the source codes of different programming languages.

Quick Tour of Selenium IDE - The first section introduces and provides detailed description about each of the features available within Selenium IDE. Age classification exercises will demonstrate to the students how to use different Selenium IDE options. The second section provides advanced features about how to add your own custom formatters for Selenium. The Google Map exercise demonstrates how to specifically look for an element within a page.

Installations:

- Installing Firefox (Latest version)
- Installing Selenium IDE (Latest version)
- Installing 7 Zip
- Installing NotePad++

Presentations and Exercises:

The Selenium Project

- History Of Selenium
- Story About Selenium
- What is Selenium?
- What is a framework? (wrapper, architecture, methodology)
- Selenium Testing Frameworks

Selenium Test Cases and Test Suites

- Selenese File Types
- Selenese Format
- Selenese Test Writing in HTMLFormat
- Three test cases using Energy Efficient Search Test Cases for the below sites:
 - Yahoo (Exercise 1)
 - GE (Exercise 2)

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- Bing (Exercise 3)
- Creating and understanding Test Suites (Exercise 4)
- Understanding open, click, type, storeText, storeValue, assertTitle Commands
- Explanation about Locators and Internal Structure of HTML

Quick Tour of Selenium IDE - Simple Features

- Using Selenium as an IDE
- Selenium IDE Features
- Different Panels in Selenium IDE
 - Menu List,
 - Test Case List View,
 - Table/Source List View
 - Log/Reference View
- Exporting Test Cases into Different Languages
 - Java/JUnit Web Driver Format
 - Python 2/Unit Web Driver Format
 - Ruby/Test Unit Web Driver Format
 - Understanding clipboard Formats
 - Exporting part of the test case into specific language format
 - Options Menu (Understanding UTF-8 and other encodings available and localization of your test cases to different languages like Hindi, Tamil, Kanji, Spanish, etc)
 - Selenium IDE Plugins
- Age Classification Test Case (Exercise 5)
 - Creating Test Case in Selenium IDE
 - Debugging the test case
 - Using different locators like XPath, CSS Path, ID, Name and DOM for the same location
 - Using setSpeed, pause, waitForXXX, xxxAndWait commands, equivalent commands in WebDriver
 - Understanding assertAlert (javascript dialog boxes)
 - Set start point, breakpoint, executing single command, stepping through from a breakpoint, resuming from a breakpoint, etc.,

Quick Tour of Selenium IDE - Advanced Features

- Adding a New Format using Format Tab
 - CSV – Comma Separated Value Format
 - STIQ – Story Test IQ Format – Fitness Framework Format
 - Converting existing test cases into CSV Format, loading into Excel
 - Converting existing test cases into STIQ Format, using in Blogs

Software Testing Life Cycle

- Discussion about different development life cycles and how the testing for each model interrelated:
 - Waterfall model
 - Sashimi waterfall model

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- V Model
 - Spiral Model
 - Six Sigma
 - Microsoft Solutions Framework
 - Agile Methodology (Scrum)
- Circle of Software Testing Services
 - Global Collaboration Performance Services
 - Migration Testing/Packaging Services
 - Functionality Testing Services
 - What is customer expectation? (SQA role to meet the expectation??)

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Session 2: - Selenium Concepts and Commands

The session starts with Selenium concepts like actions, assessors and asserts and allows you to create many test cases to understand the basic concepts.

The Selenium commands are provided with examples:

- Variable Substitution
- Stored Vars and Maps
- JavaScript Evaluation
- Handling Alerts, Prompts and Confirms
- Browser commands GoBack and refresh

Installations:

Installing useful tools for Selenium (Firefox Add-ons)

- Firebug
- FireFinder for Firebug
- FirePath for Firebug
- XPath Checker
- Regular Expression Tester
- HTML Validator
- YSlow
- LinkChecker

Installing Selenium Plug-ins & Usage

- Log Search Bar
- Stored Variables Viewer
- File Logging
- Selenium Expert
- Power Debugger
- Flow Control
- Highlight Elements
- Screenshot on Fail
- Favorites
- Test Results
- Export TC Status

Installing Google Chrome Extensions

- XPath
- XPath Helper
- XPath Viewer
- XPath Finder

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- Firebug lite for GC

Installing IE tools for finding Locators

- Adding Firebug lite Bookmarklet for IE
- Installing Fire-IE-Selenium Macro

Presentations & Exercises:

Selenium Commands

- Understanding different types of commands
 - Actions
 - Accessors
 - Asserts
- Variable Substitution - Accessors
 - Creating variables in Selenium IDE
 - Understanding storeText, storeTitle, store, storeCookie, storeEval commands
- JavaScript Evaluation in Selenium IDE
 - Using JavaScript
 - Understanding Maps Data Structure
 - Using storedVars Map in JavaScripts
- Creating Noah's Classified Application Test Cases
 - Initial Test Case (Exercise 1)
 - Segregating Test Case from Test Inputs
 - Using Variable Substitution (Exercise 2)
 - Using storedVars (Exercise 3)
 - Using storedVars Plugin
 - Using echo command
 - Creating Noah's App Test Suite (Exercise 4)
- Understanding JavaScript Dialog Boxes
 - Alert
 - Difference between onload alert and click alert
 - Understating alertPresent, and storeAlert
 - Click Alert (Exercise 5)
 - On Load Alert (Exercise 6)
 - Prompt
 - Confirm
- Understanding Select and GoBack commands
 - Select command with different filters
 - Select command with different locator types
 - goback and gobackAndWait commands

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- refresh and refreshAndWait commands
- SelectAWebSite (Exercise 7)
- Understanding Popups
 - selectWindow and waitForWindow
 - selecting a new popup dialog box
 - selecting a parent window
 - Popups Test Case (Exercise 8)
- Creating Commands Test Suite (Exercise 9)

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Session 3: - Introduction to WebDriver & JUnit Framework

The session focuses on introducing JUnit Framework, Eclipse IDE and WebDriver basic concepts.

Introduces JUnit Concepts like

- org.junit
- org.hamcrest
- JUnit Annotations
- Order of Execution of Before Class, Before, AfterClass and After, etc
- Asserts
- Testing Setter and Getter methods
- @Test Annotation

DataPoints and Theories

- @RunWith
- org.junit.runner
- @DataPoints
- @Theory
- Theory.class

Parameterized Parameters

- Parameterized Annotation
- org.junit.runners
- @Parameterized.parameters
- Parameterized.class
- Collection and Constructors

Installations:

- Installing JDK
- Installing Eclipse IDE
- Installing Selenium Server

Presentation

Eclipse IDE Features:

- What is Eclipse IDE - Platform?
- Eclipse IDE Platform Overview
- Eclipse WorkSpace
- Workspace Settings
- What is Eclipse Workbench?
- What is Eclipse Perspective?

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- How Eclipse IDE Perspective used?
- Different Types of Eclipse IDE Toolbars
 - Workbench Toolbar
 - Individual View Toolbar
 - Perspective View Toolbar
 - View Stack Toolbar
 - ToolBar Buttons

Exploring JUnit & JUnit 4.x Concepts

- Introduction to JUnit
- JUnit Features
- xUnit Architecture
- JUnit Packages
- JUnit Annotations
- JUnit Order of Execution
- JUnit Asserts

Concepts in Eclipse Java Project OrderOfExecWorkSpace (Exercise 1)

- Create a OrderOfExecWorkSpace workspace in Eclipse IDE
- Go to workbench
- Create OrderOfExec Project
- Create com.kavinschool.order package
- Create a Welcome Java Class
- Write your Hello World example, run and see it
- Create OrderTest JUnit Class
- Explore the @BeforeClass, @AfterClass, @Before, @After, @Test
- Run the test case and understand the order of execution
- Create multiple test cases and understand how the order of execution works
- Create multiple @BeforeClass, @AfterClass, @Before, @After annotation
- Understand order of execution in different scenarios

WebDriver Concepts

- WebDriver W3C Specification
- What is WebDriver?
- What is Selenium 2.0?
- Browsers supported by WebDriver
- Mobile supported by WebDriver
- Is WebDriver backward compatible?
- Locators in WebDriver
- findElement vs findElements
- By by mechanism to locate webelements
- isTextPresent - assertTextPresent support

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- Can I take screenshot?
- How do I handle waits?
- testng_square_simple.xml - creating and running using testng control file
- understanding the results

WebDriver waits

- How do I handle waits?
- ImplicitlyWait
- ExplicitWaits
- WebDriverWait
 - ExpectedConditions
 - FluentWait
 - Thread.sleep()

Concepts in Eclipse Java Project - ZenPhotoLoginTest (Exercise 2)

- Understand the ZenPhoto Test Case
- Create a test case in Selenium IDE
- Export the test case in to Selenium WebDriver Format
- Create com.kavinschool.zenphoto package in the existing workspace
- Create ZenPhotoLoginTest
- Add the needed external libraries
- Understand and correct any compilation errors
- Run your Test Case and fix any run time errors

JUnit DataPoints and Theories

- @RunWith annotation in JUnit
- Runner class internal structure
- DataPoints and Theories Introduction
- Learn about @DataPoints annotation
- Learn about @Theory annotation

Concepts in Eclipse Java Project - ZenPhotoLoginSimplifiedTest (Exercise 3)

- Copy and create a new test case ZenPhotoLoginSimplifiedTest
- Remove the unused imports
- Remove the unused code from the template
- Understand and correct any compilation errors
- Run your Test Case and fix any run time errors

Concepts in Eclipse Java Project - ZenPhotoLoginMethodTest (Exercise 4)

- Copy and create a new test case ZenPhotoLoginMethodTest
- Create doZenLogin method using the existing test

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- Call the doZenLogin method in your @Test
- Understand and correct any compilation errors
- Run your Test Case and fix any run time errors

Concepts in Eclipse Java Project - ZenPhotoLoginDataPointsTest (Exercise 5)

- Copy and create a new test case ZenPhotoLoginDataPointsTest
- Create User class, understand the constructor, setter and getter methods
- Add @DataPoint, @RunWith annotation
- Create @Theory and pass your test data
- Understand and correct any compilation errors
- Run your Test Case and fix any run time errors

JUnit Parameterized Parameters

- Introduction about @Parameterized annotation
- How to use @Parameters annotation
- Internal structure of Parameterized.Parameters
- @RunWith annotation using Parameterized class
- Passing your data to @Parameters
- Creating constructor and using it to pass the values
- How to use the data in @Test annotation

Concepts in Eclipse Java Project - ZenPhotoLoginParametersTest (Exercise 6)

- Copy and create a new test case ZenPhotoLoginParametersTest
- Add @Parameters, Collection userInfo methods
- Create ZenPhotoLoginParametersTest constructor and pass your test data
- Change your test case parameters for doZenLogin
- Understand and correct any compilation errors
- Run your Test Case and fix any run time errors

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Session 4:- Selenium/WebDriver Locators and Pattern Matchers

This session provides detailed Data Driven Testing Concepts using WebDriver Examples. This session teaches both core Java concepts as well as how to use them along with WebDriver Project.

Selenium Locators and Pattern Matchers

- Types of pattern matchers
 - Glob, exact and regex
- Understanding Element Filters
 - Index
 - Value
 - Label (Or Text)
- Identifying Locators
- Locator Strategies and Order of recommended usage
- Using Regular Expressions in Selenium IDE
 - Regular Expression Tester Tool (Firefox Addon)
 - Basic regular expression meta characters usage
 - Creating regular expression for SSN
 - Regex library usage
 - WinNameCheck Test Case (Exercise 9)
 - Using regex, regexp, regexpi commands
 - UserInputForm Test Case (Exercise 10)
 - Using regex to check e-mail, firstname, last name in a test case

Finding locators in different browsers

- Finding locators in Firefox (FF)
 - Using Firebug with FirePath and Firefinder
 - Usage of Firebug with a live example
 - Finding locators without using Selenium IDE
 - Using FirePath and FireFinder
 - Finding XPath, CSS Path, Link, ID, Name using Firebug
 - Test Case on Search Button (Exercise 11)
- Finding locators in GC
 - Using XPath Viewer Chrome Extensions
- Finding locators in IE
 - Using Fire-IE-Selenium

Testing Strategies and Best Practices

- What to automate?
- How to test your application?
- How should you test your applications?
- Implementing Best Practices while creating test cases
- Exploring Toolbox
 - HTML Validator

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- Link Checker
- YSlow

Using Selenium in Your Organization

- Issues while creating test cases
- Challenges while creating a test framework
- Introducing Continuous Integration
 - CI – Best Practices
 - CI – Advantages
 - CI – Disadvantages
 - Hudson or Jenkins?

What is New in Selenium 2.0

- Differences between Selenium RC and WebDriver
- New Features in WebDriver

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Session 5:- Implementing Data Driven Testing in Selenium Projects

This session provides detailed Data Driven Testing Concepts using WebDriver Examples. This session teaches both core Java concepts as well as how to use them along with WebDriver Project.

Overview of Data Driven Testing Concepts

- What is Data Driven Methodology?
- What is data sources?
- What is a data pool?
- Advantages of using Data Driven Testing
- What is a test fixture?
- Flow of Data Driven Testing
- Different types of Data used for testing
- Related data set usages
- Architecture of Data Driven Testing
- Creating mature data driven testing process
- ZenPhoto WorkSpace Preparation (exercise)

Create ZenPhotoWorkSpace in Eclipse IDE

- Click and goto workbench
- Create a Java project with ZenPhoto

ZenPhoto TestCase (exercise)

- Create ZenPhoto Login Test Cases in Selenium IDE
- Export the testcase into JUnit Format
- Correct any compiler warnings and errors
- Create a package com.kavinschool.zenphoto.tests in src/test/java
- Run the test case for FirefoxDriver
- Correct any issues and re-run the test case for FirefoxDriver
- Copy the ZenPhotoLogin and create ZenPhotoMethodLogin
- Create a method doLogin and parameterize using user id, and password

Understanding CustomFormat core Java API's for data driven testing (exercise)

- Create CustomFormat.java
- Run and see the results
- Understand DecimalFormat format method
- Understand the pattern #,0,\$,',' etc

Understanding ReadProperty core Java API's for data driven testing (exercise)

- Create ReadProperty.java
- What is Java property file?
- How to use read Java property files using Properties
- copy the server.properties.txt into the resources

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- Run and see the output, and correct any compile or other issues in the code

Understanding ReadText core Java API's for data driven testing (exercise)

- Create ReadText.java
- Understand BufferedReader in Java
- Check how the FileReader used in Java to read the text files
- EOF file check using not null comparison
- Read the text file contents show in the console
- Run and see the output, and correct any compile or other issues in the code

Understanding ReadCSV core Java API's for data driven testing (exercise)

- Create ReadCSV.java
- Understand java third party API's to resolve specific tasks
- How to use opencsv to read the CSV file contents
- copy the users.csv into the src/test/resources
- Run and see the output, and correct any compile or other issues in the code

Understanding ReadExcel core Java API's for data driven testing (exercise)

- Create ReadExcel.java
- Understand java third party API's available for handling Excel files in Java
- Understand what is apache-poi project
- What is the abbreviation of HSSF? What is the meaning of HSSF
- Understand Excel WorkBook, WorkSheet, Cols, Rows and Cell Details
- The Cell content can be a RichText, Integer, Formula, etc
- Using Iterator reading the workbook into a sheetData list
- Understanding try { } to open and close the resources
- Create the method printExcelData to dump the contents of excel into console
- Run and see the output, and correct any compile or other issues in the code

Understanding ReadDB core Java API's for data driven testing (exercise)

- Create ReadDB.java
- Understand java third party API's available for handling Reading Data Bases in Java
- Understand com.mysql.jdbc.Driver
- Using getConnection to connect to the database
- Use createStatement and executeQuery to get the ResultSet
- Looping the ResultSet and dump the contents of the database into console
- Run and see the output, and correct any compile or other issues in the code

Presentations

- Overview of Data Driven Testing
- ZenPhoto Data Driven TestSuites Exercises Sheet Eclipse IDE Project
- ZenPhoto Data Driven TestSuites JavaDoc with UML diagram

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Session 6: Code Coverage, Subversion, Maven and Jenkins

Simple Calculator Project:

- Provides how to use code Coverage tool Cobertura with Maven and Jenkins
- Allows you to understand how to use Maven goals within your builds
- Allows you to understand how the code changes will break your builds
- Allows you to understand how to create unit test cases, and get code coverage
- Allows you to understand how to create continuous integration jobs

Installations:

- Install Maven
- Install M2E
- Install Jenkins
- Install Jenkins Plugins
 - Cobertura Plugin
- Configure Jenkins
 - JDK
 - Maven
 - Email Notification
- For Subversion repository:
 - Install TortoiseSVN
 - Install subclipse in Eclipse IDE

Presentations & Exercises:

Simple Calculator Project - Create in Eclipse IDE (Exercise 1)

- Create Eclipse Maven Project
- Add Maven Dependencies (pom.xml)
- Add com.kavinschool.calc package in main
- Create Calc Java Class
- Add com.kavinschool.calc package in test
- Create CalcTest TestNg Class
- Run the test cases directly from test class
- Run the test cases using unit testing framework
- Run the test cases using pom.xml
- Understanding POM structure

Simple Calculator Project - eCobertura Usage (Exercise 2)

- What is code coverage?
- Different code coverage criteria's.
- Code Coverage Tools
- What is cobertura?
- What is instrumentation?

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- Understand how the unit testing and code coverage works

Simple Calculator Project - Adding to Subversion (Exercise 3)

- Create Subversion Repository (CalcRepo)
- Connect the repository in Eclipse IDE Calc Project
- Commit your code in repository
- View the committed code in TortoiseSvn Repository

Simple Calculator Project - Cobertura - Maven Report Generation (Exercise 4)

- Adding maven plugins for cobertura
- Adding maven reporting plugin and formats for cobertura
- Understanding Maven goals using Cobertura
- Running cobertura using different maven goals
 - Cobertura:clean
 - Cobertura:help
 - Cobertura:cobertura

Simple Calculator Project - Jenkins - Continuous Integration (Exercise 5)

- Creating New Item/Job in Jenkins
- Scheduling the job to run weekly, daily, monthly, based on polling your code change
- Configuring your pom in Jenkins
- Configuring your repository in Jenkins
- Running your test cases in Jenkins
- Running your cobertura code coverage in Jenkins
- Changing your code in Eclipse IDE, committing and running the latest code in Jenkins

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Session 7: Page Object Pattern, Creating WebDriver Framework, Selenium Grid, Jenkins and Artifactory

Design Patterns:

- Introduction about design patterns
- Categories of patterns
 - Creational patterns
 - Structural patterns
 - Behavioral patterns

WebDriver Page Object Pattern:

- What is Page Objects Pattern (PoP)?
- Why do you need to use PoP?
- Abstracting PoP using Excel
- Page Factory
- @FindBy annotation
 - Why you need to use?
 - What are the different syntaxes?
 - Name of the locators used in @FindBy
 - How attribute along with @FindBy
 - What is the advantage of using @FindBy along with Page Factory
- Creating osTicket Project using Page Objects Pattern

Architecture of a typical WebDriver Project:

- Subversion - Version Management System
- Jenkins - Continuous Integration Server
- JUnit – Testing framework
- ANT/Maven – Build Tool
- Running Web Driver test cases in Selenium Grid
- Artifactory - Repository Management Tool
- Deployment Servers (Dev, QA, Prod, etc)

Selenium Grid 2.0:

- Overview and Architecture
- Selenium Grid Configuration
- Running Selenium Test Cases using Selenium Grid in IE, FF and GC

osTicket Application - Case Study

- osTicket Application Architecture and Automation Goals
- osTicket Creating Eclipse IDE Maven JUnit Project
- osTicket Creating Classes for Page Object Pattern
- osTicket Creating Util classes to handle common methods
- osTicket Creating Test Cases for E2E Automation

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- osTicket Creating repository and Adding into Subversion
- osTicket Adding distribution management for Artifactory
- osTicket Job Jenkins

Installations:

- Installing WebDriver Server Tools
 - ChromeDriver
 - IEDriverServer
 - SafariDriver
- Installing Artifactory OpenSource
- Installing Jenkins Plugins - Artifactory

Configurations:

- Configure Artifactory
 - Creating user
 - Downloading settings.xml

Presentations:

WebDriver Page Object Pattern

- Intro to Design Pattern (GOF – Gang of 4)
- Explanation about 3 different of patterns
 - Creational Patterns
 - Structural Patterns
 - Behavioral Patterns
- Page Object Pattern (POP)
 - What is POP?
 - Why do you need to use POP?
 - Abstracting Page Objects in Excel
 - How POP helps for DSL?
 - What is Page Factory?
 - FindBy (Different syntax variations)
 1. how along with using,
 2. Direct locator types
 - Advantages of using @FindBy along with PageFactory
- Creating WebDriver Framework using Page Objects Pattern

Architecture of a typical WebDriver Project

- Typical Architecture Diagram
- Selecting Tools & Technologies

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Selenium Grid 2.0

- What is Grid?
- What is Grid Computing?
- What is Selenium Grid?
- Selenium Grid Architecture
- Can I use Selenium Grid for Load Testing?
- Selenium Grid 2.0 What is it?

Selenium Grid & WebDriver Nodes Setup (Exercise 1)

- Selenium Hub with 2 nodes for IE, GC and FF browsers
- Starting Selenium Grid in Hub Mode
- Starting Web Driver Node for IE
- Starting Web Driver Node for FF
- Starting Web Driver Node for GC
- Running Selenium Test Cases using Selenium Grid in IE, FF and GC

osTicket Application Automation - Goals and Steps

- osTicket Creating Maven Project
- Committing you code in Subversion
- Creating and Scheduling your Jenkins Job
- Integrating with Artifactory

osTicket Application Framework Setup (Exercise 2)

- Desired Capabilities to handle multiple browsers
- Desired Capabilities to run your test cases in Grid
- Creating osTicket WorkSpace
- Creating osTicket Packages
 - com.kavinschool.osticket.pages
 - com.kavinschool.osticket.tests
 - com.kavinschool.osticket.utils
- Setting up Maven POM file dependencies
- Setting up referenced libraries
- Creating osTicket Application Pages Using POP
 - SupportCenterHomePage
 - OpenNewTicketPage
 - CreatedTicketPage
- Creating Test Cases Using POP
 - SupportCenterHomePageTest
 - OpenNewTicketTest
- Creating Utility Package for Framework
 - ScreenShotRemoteWD
 - Utils
- Setting up the server.properties file

Selenium WebDriver Using Java Language

- browserType, browserPath, WebDriverTools Path Setup

osTicket Repository Setup (Exercise 3)

- Create a new repository in Subversion using TortoiseSVN (Windows)
- Create a new Subversion repository and connecting with svnX (Mac)
- Setup and connect to the repository in Eclipse IDE
- Setup the baseline and commit the code to repository

osTicket Jenkins Setup (Exercise 4)

- Create a osTicket Item/Job
- Configure Jenkins job for Subversion
- Setup the build triggers
- Setup the email notification
- Setup the Root POM
- Run the Build

osTicket Artifactory Setup (Exercise 5)

- Download the settings.xml from Artifactory
- Deploy in maven repository
- Setup the POM file with Artifactory
 - distributionManagement
 - repository
 - snapshotRepository
- Commit the code in Eclipse IDE
- Setup the Artifactory server in Jenkins
- Run the build
- See the artifacts in Artifactory Site.

Understanding framework capabilities

- Page Objects
- Utils Package methods
- Common methods
- Screenshot File Name generation
- Taking Screenshots

Selenium WebDriver Using Java Language

Session 8: - TestNG Concepts

This session provides detailed TestNG Concepts.

TestNG Concepts

- History of TestNG
- TestNG internal classes and annotations
- TestNG Config Annotations
- Understanding the order of execution
- OrderTest - create, modify, run and see the result
- Understanding @BeforeSuite, @BeforeTest, @BeforeClass, @BeforeMethod
- Understanding @AfterMethod, @AfterClass, @AfterTest, @AfterSuite
- using enaled attribute
- using alwaysRun
- using groups
- Annotation attributes (dependsOnGroups, dependsOnMethods,enabled, groups, inheritedGroups)
- understanding testng.xml
- testng.xml structure

TestNG Asserts

Assertion methods

- pattern for parameters - actualValue, expectedValue [, message]
- Junit uses expectedValue, actualValue
- assertEquals, assertNotEquals - values equal?
- assertTrue, assertFalse - condition true?
- assertSame, assertNotSame - objects are same?
- assertEqualsNoOrder - arrays contain the same elements in no particular order?
- assertNull, assertNotNull - check NULL?

Assertion Files

- assertDirectory - is directory?
- assertFile - is file?
- assertLength, assertMinLength, assertMaxLength - check total character in a file
- assertReadable, assertWritable, assertReadWrite - check a file is read/writeable?

Soft Assertions

- What is hard assert?
- What is soft assert?
- Usage of softassert
- Usage of assertAll

Selenium WebDriver Using Java Language

TestNG Parameters

- Understanding Parameters
- testng.xml - parameter tag - name, value pair
- Creating testng_rectangle_parameters.xml (exercise)
- Creating and running RectangleParameterTest (exercise)
- Using @Parameters

Installations

- Installing TestNG Eclipse Plugin
- Installing Selenium IDE/TestNg Formatter

Presentations

- TestNG Concepts
- TestNG Asserts
- TestNG Parameters
- TestNG Data Providers
- TestNG - Running using Eclipse IDE

Selenium WebDriver Using Java Language

Hours for each session:

Course	Duration
Session 1	6
Session 2	3
Session 3	6
Session 4	3
Session 5	6
Session 6	3
Session 7	6
Session 8	3
Total	36

Selenium WebDriver Using Java Language

Testimonials from KavinSchool's alumni students:

Our student testimonials:

<http://www.kavinschool.com/content/kavin-school-testimonials>

Some of our past students testimonials:

Took Advanced Selenium course at Kavin School. Kavin has immense knowledge on Selenium and he is very good at teaching. The classroom sessions are very interactive and lively. Along with covering the concepts, the students are given lot of practical examples to attempt in the classroom which makes the student have a better grip over the concepts. He pays attention to every single student in the class and makes sure that his concepts reach everyone in the classroom. The Course material is very nice and the concepts are explained in a simple manner. He is always available for the students anytime to help even after the class hours. Kavin also give tips on how to face the interviews. Kavin school is the best school in Bay area. He is very honest and very nice person. I recommend Kavin school for selenium training. ”

01/22/2016
Swapna Mokalala

I had done Selenium course from Kavin school. Material and coaching was fantastic.. Through kavin school, i was referred and placed to one of the client .. Very thankful to kavin school for all their wonderful support and guidance. I would definitely refer anyone to Kavin school for the quality education and continued support they provide. Thanks again ”

01/16/2016
Sujatha N

I took the Automation with Selenium class in November 2015. This class is an excellent one for those starting out in test automation. Kangs is extremely patient, friendly & goes out of the way to ensure that everyone gets the concepts & walk away with a sense of accomplishment. The course & lab material are well organized & follow a very nice flow that ties together all aspects at the end. With excellent guidance from Kangs & little bit of hard work from the individual, this course would lay the perfect foundation for a very productive career in QA. Thank you Kangs ! I learnt a lot from this class. ”

12/21/2015
Rampi Nagaraja Rao

Selenium WebDriver Using Java Language

I took Selenium QA training from KavinSchool. This training program is excellent and amazing. Kangs as a trainer gave us a very detailed and great training based on selenium functional testing perspective. His training program is completely oriented in industry and his teaching materials covered all of the selenium component. I learnt a lot of from his class. I am surprise that all of the training materials and testing samples are purely from himself. No copy and easy to understand. I believe he prepared this program not only he want to transfer his knowledge to us but also he wants us to be success in testing filed. This is such a great job he did. I am so lucky to join his program. Also, even after the training, whenever I have any questions I email him. He will immediately reply me and clarify my question and doubts without failed. He is such a responsible trainer. I definitely recommend people who want to involve in this testing filed to attend his training class. You will learn far more than you paid. You worth much!! Thank you Kangs!

”

09/05/2015

Quan Ma

I am a software test analyst got training from KavinSchool

Fremont, Ca

<http://www.kavinschool.com>

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Photo Gallery:

You can see our some of our alumni students using the below link:

<http://www.kavinschool.com/photos/index.php/>