



# Selenium with JAVA Course Content

Course Fees: Rs. ~~45,000~~ (20% off), Now Rs. 12,000 /-

Duration: 32 – 36 hrs.

## Selenium Intro

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- What is selenium
- Jobs/Opportunities
- Supported Browser
- Supported OS
- Supported languages

## Java Intro

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- Installing Java
- Installing Eclipse
- Features of Java
- Why Java for Selenium
- First Eclipse Project
- First Java program
- Concept of class file
- Platform independence
- Data types in Java
- String class
- If statements

## Conditional and concatenation operators

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- While Loop
- For Loops
- Practical Examples with loops
- Usage of loops in Selenium
- Single Dimensional Arrays
- Two Dimensional arrays
- Practical usage of arrays in Selenium
- Drawbacks of arrays
- Method, Method Overloading, overriding
- Void and return type method
- Collection API

## Object Oriented Programming

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- Local Variables
- Global Variables



- Static and Non-Static Variables
- Static and Non-Static Functions
- Creating Objects in Java
- Meaning of Static
- Why is main method static?
- Object and Object References
- Call by reference and Value
- Constructors
- Constructor Overloading
- Inheritance
- Interface
- Diff between Interface and class
- Usage of interface in Selenium
- Usage of Objects in Selenium
- Try/catch block
- Exception Handling
- Read/write from excel file \*\*\*
- Java list/Set
- Access modifiers

### **Selenium IDE (Not supported anymore)**

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- ~~Installing Selenium IDE~~
- ~~Recording Script~~
- ~~Running, Pausing and debugging Script~~
- ~~Running a script line by line~~
- ~~Inserting commands in between script~~
- ~~XPATHS and installing firebug to get XPATHS~~
- ~~Wait Commands~~
- ~~Verification and Assertions~~
- ~~JavaScript~~
- ~~User extension.js in Selenium IDE~~
- ~~Using if statements and loops in IDE.~~
- ~~Echo, StoreEval and StoredVars Demystified~~
- ~~Creating your own user extensions~~
- ~~Making a function in user extension to generate random number.~~
- ~~Capturing screenshots from Selenium IDE~~
- ~~Sample scripts~~

### **Selenium RC (Not supported anymore)**

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- ~~What is Selenium RC~~
- ~~Architecture of RC~~
- ~~Difference between Selenium IDE and Selenium RC~~
- ~~Difference between WebDriver(2.x) and Selenium RC(1.x)~~
- ~~Configuring Selenium RC in Eclipse~~
- ~~Javadocs for Selenium RC~~



- ~~Selenium Interface~~
- ~~Starting and Stopping Selenium Server~~
- ~~Running Sample Selenium code~~
- ~~Running sample script in FF~~
- ~~Running sample script in IE~~
- ~~Running sample script in Chrome~~
- ~~Browsers supported by RC~~
- ~~Dynamic Objects / WebTable~~

## Understanding XPath & Object Identification

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- Installing Firebug and FirePath Addons in Firefox
- Using Firebug and Firepath
- Extracting Xpaths and relevance of Xpaths
- Difference between xpath / css selector
- Identify object using different attributes

## Selenium WebDriver

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- Identifying Web-Elements using id, name, linkname, class, xpath, tagname
- Handling Input box/buttons, list/selection boxes, radio buttons, check boxes
- Dynamic objects
- Extracting links and other Web-Elements
- Capturing screenshots with WebDriver
- Window handles
- Handling Frames in Web Page
- WebDriverWait Class
- Extracting Data from WebTable
- Setting the page load timeout- WebDriver.Timeout Interface
- Simulating front and back button click on Browser using selenium
- Finding Coordinates of a Web Object
- Drag and Drop Function
- Handling Mouse Event
- Handling Keyboard Up-Down Arrow
- Handling Keyboard Enter Key
- Select checkbox randomly
- Working with Rows and Columns
- Firefox Profile
- Desired Capability class
- Listeners class
- Auto-IT tool etc.

## TestNG

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- What is TestNG
- Installing TestNG in Eclipse
- TestNG annotations



- Understanding usage of annotations
- Running a Test in TestNG
- Batch Running of tests in TestNG
- Skipping Tests
- Parameterizing Tests – DataProvider
- Assertions
- TestNG Reports
- Advantages over Junit
- Using TestNG in Selenium

## Apache Ant and XSLT

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- What is ant
- What is xslt report
- How to generate xslt report
- Create .bat file and compile and run it and generate report in graphical format

## Selenium Grid

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- Introduction
- Node & Hub concept
- maxSession and maxInstance
- Executing selenium tests on multiple machines with diff browsers/OS
- Run all the test cases parallel
- Run all the test cases serially

## Maven \*\*\*\*\*

- What is Maven and its usage?
- Install and configure

## Jenkins @ Github

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- Installation
- Scheduling run using Jenkins
- Install and configure git and github
- Use of Git and Github in selenium

## FrameWork

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- Explaining different kinds of framework like KWD, DataDriven, Hybrid, POM etc
- Sample KWD framework
- Develop the POM framework from scratch