



## Selenium Course Content

### **(In Scripting Orientation)**

**Duration: Eight Weeks (Only on Weekends (Sat & Sun) – 2Hr Class)**

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## Introduction & Selenium Test Process

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- **Overview on Test Automation & Types of Test Tool**

- Drawbacks of Manual Testing
- Advantages of Test Automation
- Drawbacks of Test Automation
- Types of Test Tool (Business Classification)
- Types of Test Tool (Technical Classification)

- **Basic Features of Selenium**

- Introducing Selenium
- Supporting Environments
- Version History
- Selenium Components
- Flexibility and Extensibility

- **Selenium Basics**

- Getting Started – Choosing your selenium tool
- Introducing Selenium Commands
- Test Suites
- Commonly Used Selenium Commands

### Development of Scripts

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- **Developing Test Cases with Selenium IDE**
  - Introduction
  - Installing the IDE
  - Opening the IDE
  - IDE Features
  - Building Test Cases
  - Running Test Cases
  - Debugging
  - Writing a Test Suite
- **Building Test Suites**
  - Creating a test suite
  - Creating tests in test suite
  - Adding a new test in a test suite
  - Deleting a test from test suite
  - Running a test suite from IDE/ Analyzing results

### Basic Java Concepts

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- Core java basic concepts
- Core java control flow statements
- Loops
- Communication(Methods)
- Polymorphism(Classes)

#### **Selenium RC**

- What is Selenium RC
- How to download and Configure RC
- Creating your First RC Test
- Difference between IDE, RC and WebDriver
- Starting and Stopping Selenium Server
- Download Firebug and Firepath

# WebDriver & its features.

### Introduction to Selenium WebDriver

- What is WebDriver
- Downloading WebDriver Jar Files
- Open Google homepage through WebDriver
- Exploring more features of WebDriver

### WebDriver Features and Examples

- Handling HTML Elements such as Text Box,Hyperlinks,Submit buttons, Radio Buttons,Checkboxes,Dropdown etc
- Finding Elements and Text on a webpage.
- Printing all links and other values from a webpage and HTML Elements
- Using By class to find elements using different methods.

### WebDriver and advanced Features

- How to capture a screenshot
- How to handle pop up windows
- Simulating keypress events such as buttons for example Page up, Page down, Backspace etc
- Handling Java Script Messages

### Browser Navigate Methods

- Handling menu items on a webpage
- Explore action class mouseover method
- Working with Javascript executor
- Handling Frames

## TestNG UNIT FRAMEWORK & REPORTS Generation

- Installing the TestNG on eclipse
- Configuring TestNG libraries with Eclipse
- Understanding the Scripts in TestNG format
- Exporting the Tests from SeleniumIDE
- Adding the necessary methods to work with TestNG
- Running the tests with TestNG
- Understanding the reports generated by TestNG
- Creating a XML file for running the tests though TestNG
- Working on a case study

### Working with user extensions

- Understanding the significance of adding the user extensions
- Working with user extensions
- Adding function libraries to user extensions
- Configuring the user extensions
- Accessing the function libraries from Selenium IDE
- Running the tests with extended functions from Selenium IDE

### Working with Selenium IDE extensions

- Understanding the significance of Selenium IDE extensions
- Working with Selenium IDE extensions
- Configuring the Selenium IDE extensions
- Recording the new script with new Selenium IDE extensions
- Running the test with new Selenium IDE extensions
- Converting the tests to Java or other languages
- Running the tests from Selenium RC
- Generating the reports
- Working on a sample case study

### Selenium Grid

- Setting up the Selenium Grid
- Ensuring the validity of ant build
- Starting the hub
- Starting the Selenium Remote controls on different platforms
- Running the tests parallel
- Running the tests sequential
- Analyzing the results

### Selenium-RC, JUnit with Eclipse

- Configuring JUnit with eclipse
- Setting up eclipse
- Setting up Selenium cline drivers
- Starting Selenium RC Server
- Building the test scripts using eclipse
- Configuring eclipse to run the tests
- Running test scripts from eclipse
- Understanding the test run from eclise
- Generating the test log and understanding