**Selenium Level 1**

Workshop Details:

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| **Duration :** | 3 Days |
| **Objectives and Take away :** | Understanding and hands-on on the topic for software testing professionals who would like to learn the basics of Selenium through practical examples. Automating any web based application using Selenium. Writing automated code and create test scripts using Selenium libraries. Hands-on with Selenium Automation Frameworks. Working knowledge on All major Selenium components  **Take away**: In-depth understanding of Selenium and its related tools and their usage. |
| **Participants’ Entry Profile :** | Participants should have a basic understanding of Java or any other object-oriented programming language. In addition, you should be well-versed with the fundamentals of testing concepts. |
| **Training Methodology :** | The workshop will follow Synergetics methodology of  **Concept Visualization**  **Active Experimentation**  **Application Development.**  The workshop will be 100% Hands-On with each participant having access to system during the session |

Setup Requirements

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| **Hardware and Software Requirements :** | Participant’s as well as Trainer’s Machine are required to have :  **Hardware**  Intel Core i3 2.2 GHz  80 GB HDD  LCD Color Monitor  2 GB RAM  LAN Connectivity  **Software**  Windows XP or 7  Firefox/ HTMLUnit/ ChromeDriver/ Internet Explorer Driver Server  Java SDK 1.7.x  Tomcat 7.0/GlassFish 3.2.x/JBoss 7+  Eclipse J2EE 4.0 onwards (**Must match with bit architecture of machine**)  J2EE Documentation  **Selenium Java Client Driver 2.48.2**  MS Office 2007 onwords   * The installable must match in bits architecture of the machine. * A shared disk-space among participants and trainer for trainer to share training stuff with participants. * Internet connection to fetch maven dependencies . |
| **Training Lab Requirements:** | Whiteboard 6 feet by 4 feet (minimum)  Whiteboard markers – Red, Blue, Green, Black  Video Projector (1024 X 768 resolutions) |

**Pre-requisite for training**

* A skill-set equivalent to Software Testing
* Basic Java is added advantage

Course Content

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| **Day 1** | * **Module 1: Selenium Overview (\*)**   + Introduction   + History   + Selenium Advantages   + Selenium Disadvantages   + Selenium Tool Suite components   + Selenium Integrated Development Environment (IDE)   + Selenium Remote Control (RC)   + Selenium WebDriver   + Selenium Grid   + Selenium 3   + Environment and Technology Stack   + How to Choose the Right Selenium Tool for Your Need   + A Comparison between Selenium and QTP   + Summary      * **Module 2: Getting Started with Selenium IDE (Installation and its Features) (\*)**   + Introduction to Selenium IDE   + Selenium IDE Download and Installation   + Features of Selenium IDE   + Menu Bar   + Base URL Bar   + Toolbar   + Editor   + Test case pane   + Log Pane * **Module 3: My First Selenium IDE Script(\*)**   + Creating First Selenium IDE Script   + Process #1: Recording a test script   + Process #2: Playing back / executing a test script   + Process #3: Saving a test script   + Using Common features of Selenium IDE   + Selenium IDE Commands   1. Actions   2. Accessors   3. Assertions  Module 4: Identify Web Elements Using Selenium Xpath & Other Locators(\*)  * + What is Locator?   + Types of Locators   + Using ID as a Locator   + Verify the locator value   + Using ClassName as a Locator   + Using name as a Locator   + Using Link Text as a Locator   + Using Xpath as a Locator  Module 5: Use CSS Selector for Identifying Web Elements for Selenium Scripts(\*)  * + Using CSS Selector as a Locator   + CSS Selector: Id,Class,Attribute   + CSS Selector: Sub-string   + CSS Selector: Inner text |
| **Day 2** | Module 6: Selenium WebDriver (\*)  * + Introduction to Selenium WebDriver   + Architecture   + Features of Selenium WebDriver   + Drivers, Methods and Classes  Module 7: Selenium Framework Creation and Accessing Test Data from Excel (\*)  * + Framework Creation and Accessing test data from the excels   + Framework creation strategy   + Sample project  Module 8: Creating Generics and Testsuites(\*)  * + Generics   + Type of Generics   + Application Specific   + Framework Specific   + Creation of Generic Class   + Testsuite |
| **Day 3** | Module 9: Debugging Selenium Scripts with Logs (\*)  * + Advantages of Logging in Selenium Scripts   + Log4j – A Java based Logging API   + Constituents of Log4j  1. **Loggers** 2. **Appenders** 3. **Layouts**    * Installation/Setup  Module 10: Efficient Selenium Scripting and Troubleshoot Scenarios(\*)  * + JavaScript Executors   + Accessing multiple links   + Accessing multiple elements in a List   + Handling keyboard and mouse events |