

Selenium Course Curriculum:

Class 01

Introduction to Selenium

- Need of Test Automation
- Why Open Source Test Automation
- Introduction to Various tools of Test Automation
- Introduction of Selenium
- Selenium Components
- First Record and Replay of Scenario in Selenium IDE
- Introduction of Web Technologies – HTML, XML, XPath, CSS and DOM
- Locators in Selenium
- Q & A and Assignment

Class 02

- Revised last class, Q & A
- Introduction of Selenese Command Types
- Selenium Action Commands
- Verification and Assertion Commands
- Store and StoreEval – Accessor Commands
- Creation of Test Suite
- Debugging IDE Script
- More on Selenium IDE
- Q & A, and Assignment

Class 03

Java Concepts

- Introduction to Java
- Setting Development Environment - Eclipse
- Walk through of Java concepts
- Hello World!
- Introduction to Java Data Types
- Taking Input from End User
- Numerical Data Type and Numerical Operators
- Boolean Data Type and Operators
- Conditional Statements [IF], and Loop [While]
- Conditional Statement[SWITCH]
- Q&A, Assignment

Class 04

Java and OOPs

- Revised last class, Q & A
- Loop [FOR]
- String Data type and functions
- Command Line Parameters
- Arrays

Class 05

- Hash Tables/ Map Object
- Regular Expression
- File Handling
- Java OOPs Concept
- Concept of Classes and Objects in Java
- Q & A and Assignment

Class 06

- Revised last Class
- Java Programs
- Concept of Packages in Java
- Exception Handling
- Debugging in Java
- Q & A and Assignment

WebDriver

Class 07

- Overview of WebDriver
- Introduction to browser specific drivers
- Setup WebDriver package on system for eclipse
- Set up firebug for Firefox
- Exporting pre-recorded test scenario in IDE to WebDriver, and executing it.
- Q & A and Assignment

Class 08

- Webdriver class files, and their methods
- Automating different HTML Elements text fields, buttons, links, check box, drop-down etc
- Verifications and Assertions
- Parameterization
- Synchronization
- Desired Capabilities and IE
- Q & A and Assignment

Class 09

- Handling Web Table
- Handling Drop Down elements

GRID - 2

- SwitchTo Command -Handling Frames, Popup Windows, Alerts
- Brief about Ajax and how to handle Ajax with WebDriver JDBC –Introduction
- Components of JDBC
- Set JDBC with MYSQL Connector for Java Project
- JDBC with MySQL
- Q & A and Assignment

Class 09

- Introduction of Selenium Grid
- Usage of Selenium Grid, executing same test on different browsers

POM

- Introduction to Page Object Model
- Usage of Page Object Model for DemoSite
- Introduction to JUnit
- Introduction to various Java APIs – Log4J, Apache POI, XML Beans.

Class 10

- Quick Snapshot- Create Logs
- Quick Snapshot- Read and Write to Excel Files
- Q & A, Assignment

Class 11

Maven

- What is Maven and Why Maven?
- Installing/Configuring Maven
- Archetypes in Maven
- Creating maven project through command line
- POM.xml
- Importing Archetypes
- Maven Repositories
- Importing the maven project into eclipse
- Building a selenium project and running it through Maven
- Q & A, Assignment

Class 12

Framework

- Q&A
- What is Framework and Types of Framework
- Demo of Hybrid framework for Selenium
- Demo of Keyword Driven Framework for Selenium
- Q&A
- Assignment

Class 13

Project 01

Class 14

Project 02

Class 15

Project 03