

Selenium

Introduction

- ✓ What is automation testing
- ✓ When best to go for automation
- ✓ Advantages of Automation
- ✓ Criteria for Automation

Introduction to Selenium

- ✓ What is Selenium
- ✓ Use of selenium
- ✓ When selenium can be useful in testing
- ✓ Features of Selenium
- ✓ Differences between Selenium and QTP

Selenium Components

- ✓ Selenium IDE
- ✓ Selenium RC
- ✓ Selenium Grid

Configuration of IDE & Dev Scripts

- ✓ Recording the script
- ✓ Running the script script
- ✓ Object Identification
- ✓ Difference between Testcase and test suit
- ✓ Languages supported while Recording
- ✓ Synchronization in Selenium IDE
- ✓ Testing Vs Selenium IDE
- ✓ When to use Selenium IDE
- ✓ How to run the recorded script Against other browsers
- ✓ Why companies are not using Recording tools

Creating the Environment for

Selenium RC

- ✓ Creating generic scripts in Selenium
- ✓ Creating scripts by using Functions

- ✓ Running the scripts in Eclipse
- ✓ Inheritance
- ✓ Browser commands with examples
- ✓ Interactive commands with examples
- ✓ Information commands with examples
- ✓ Validation commands with examples
- ✓ How to take data from excel sheets
- ✓ Why should we use excel sheets
- ✓ How to take large no of data from excel sheets
- ✓ How to export data to an excel sheets
- ✓ Export large no of data to an excel sheet
- ✓ How to export results after completion of execution the script
- ✓ How to use Eclipse
- ✓ Debugging the script
- ✓ Maintaining synchronization Points
- ✓ How to handle Popups and alert messages
- ✓ Recognizing Similar Elements
- ✓ Working with Table Elements
- ✓ Connecting to Database

Developing reusable script

- ✓ Validations
- ✓ What is validation
- ✓ What is the use of validation in Automation testing
- ✓ When to use validation in realtime
- ✓ How to use validations

Core Java Fundamentals

Language Fundamentals

- ✓ Java Programming Language Keywords
- ✓ Class and Object

- ✓ Data Types
- ✓ Array Declaration, Construction and Initialization

Flow Control, Exceptions, and

Assertions

- ✓ Writing Code Using If and Switch

Statements

- ✓ Writing Code using Loops
- ✓ Handling Exceptions
- ✓ Working with the Assertion Mechanism

Object Orientation, Overloading and

Overriding, Constructors

- ✓ Benefits of Encapsulation
- ✓ Overridden and Overloaded Methods

Using the java.lang.String Class

- ✓ Using the java.lang.Math Class
- ✓ Using Wrapper Classes
- ✓ Using the equals() Method with Strings, Wrappers and Objects

Defining, Instantiating, and Starting

Threads

- ✓ Preventing Thread Execution
- ✓ Synchronizing Code
- ✓ Thread Interaction

JUnit Introduction

- ✓ Proving it works
- ✓ Starting from scratch
- ✓ Understanding unit testing Frameworks
- ✓ Setting up JUnit
- ✓ Testing with JUnit

Object repository

- ✓ What is object repository
- ✓ How to use object repository in Framework
- ✓ What is the use of maintaing

- ✓ Object repository
- ✓ Types of creating object repository

Additional concepts

- ✓ How to use XPath
- ✓ How to use DOM
- ✓ How to use Key Commands

Selenium 2 / Web Driver

- ✓ Selenium 2.0 Features
- ✓ The Selenium Server – When to Use it
- ✓ Setting up a Selenium – Web Driver Project
- ✓ Migrating from Selenium 1.0
- ✓ Getting Started with Selenium Web Driver
- ✓ Introducing Web Driver's Drivers
- ✓ Commands & Operation
- ✓ Web Driver backed Selenium RC
- ✓ Programs on Web Driver
- ✓ Programs on Web Driver Backed Selenium RC

TestNG Framework

- ✓ What is TestNG
- ✓ Create TestNG.xml file
- ✓ Integrate the Selenium Scripts and Run from TestNG
- ✓ Reporting Results & Analyze
- ✓ Run Scripts from Multiple Browsers

Automation Life Cycle

- ✓ What is a Framework
- ✓ Types of Frameworks
- ✓ Modular framework
- ✓ Data Driven framework
- ✓ Keyword driven framework
- ✓ Hybrid framework
- ✓ Use of Framework
- ✓ How develop the framework
- ✓ Integration of the framework
- ✓ How execute the scripts from framework