

Selenium Training

Course Syllabus in

Greens Technologies

Course Name : Selenium
Category : Automation Testing Tool



What is Selenium? Back to Basics:

Selenium is a set of tools and libraries that automates web applications across different browsers and platforms. It is primarily a free and open-source collection of testing tools. Selenium is a suite of software, each catering to different testing needs of an organization. It has four components.

Selenium Integrated Development Environment (IDE)

Selenium Remote Control (RC)

WebDriver

Selenium Grid

Selenium was created by Jason Huggins in 2004. Just to overcome the inefficient manual testing, he created a javascript program that would automatically control the browser's actions.

Selenium Training in Chennai

Greens technology's selenium training will upgrade your skills in automation testing field and makes you master in selenium architecture. We provide training in all the components of selenium and mainly focuses on your hand-on experience with multiple project works. This course was demonstrated by Greens technology experts who have intensive knowledge in selenium field. Our prior candidates consider us as a best selenium training institute in Chennai. If you looking forward to start a career in selenium then Greens technology is a splendid solution.

Selenium is a framework, which is easily conveyed for testing web applications. A software framework offers us to build and expand applications. It can run in multiple platforms like Windows, Linux, macOS. It offers a playback tool for authoring functional tests. Selenium is used to write tests in various programming languages like C#, Java, Ruby, Perl, Scala. It is an open-source software which is available free of charge to the public.

Scope of Selenium Training in chennai:

Testers have large scope still developers are developing their projects. Job opportunities are high in selenium automation testing field. Every year, many companies hire automation engineers those who have knowledge in selenium. The tech giants like Microsoft and Facebook preferred selenium for their automation testing. The developed software product is must tested before marketing in order to find bugs cheque if it satisfied the requirement of the client. Many of the companies use selenium for testing their product due to open-source automated testing tool. It also has various functions like hybrid testing, keyword driven testing, library architecture. So, candidates can get job easily from leading companies.

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1.4 Locators & Object Identification

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Locators & Object Identification

- Tools to identify elements/objects
- Firebug
- IE Developer tools
- Google Chrome Developer tools
- Locating elements by ID
- Finding elements by name
- Finding elements by link text
- Finding elements by XPath
- Finding Elements by using CSS
- Summary
- Some Special IDE commands
- Write your own Selenium IDE script without record and playback

Java For WebDriver

Introducing the JAVA technology:

- Relating Java with other languages
- Showing how to download, install, and configure the Java environment on a Windows system
- Key features of the technology and advantages of using Java
- Java Features
- Write Simple Java Program
- Compile and Run the class files
- Java Programming format
- Java Keywords
- Declarations and Access Control
- Operators and Assignments
- Flow Control
- Typecasting
- Arrays

Packages:

- Introduction to all predefined packages
- User Defined Packages
- Access Specifiers

Object Oriented Programming Concepts:

- Introduction
- Class
- Object
- Local, Instance and static variables
- Constructors
- This keyword
- Inheritance and Types
- Working with super classes and subclasses
- Using types of polymorphism such as overloading, overriding, and dynamic binding
- Abstraction
- Encapsulation
- Abstract classes
- Interfaces

String Processing:

- String manipulation with String Builder and String Buffer
- Essential String Methods

Exceptions and Assertions:

- Introduction
- Exceptions categories
- Standard Java Exception classes
- Using Try-catch and finally clause

I/O Streams:

- I/O using Java
- Files (Create/Read/Write operations on files)

Wrapper Classes:

- Introduction
- Byte, Short, Integer, Long
- Float, Double
- Character
- Boolean classes

Collections:

- Introduction to Collections framework
- util Package
- List, Set and Map
- Difference of All Collections Interfaces and classes
- Reading data from Property files using java program
- Reading and Writing data from/to Excel files using Apache POI API and JXL API

Junit FrameWork:

- Running Java Programs using junit
- Writing Selenium tests from scratch using Junit FrameWork
- JUNIT Annotations
- JUNIT Methods
- Frequently used Selenium commands
- Test Suites using JUNIT
- Parameterized test cases using junit framework

TestNG FrameWork

- Overview of TestNG
- Environment of TestNG
- Writing WebDriver Test Cases using TestNG
- Basic Annotations of TestNG
- Executing Tests
- Executing Test Suites
- Ignore Test

- Dependency Test
- Parameterized Tests
- TestNG XML
- Report Generation

Selenium WEB-DRIVER

- Why WebDriver?
- Downloading web driver Jars configuring in eclipse
- Architecture of selenium webdriver
- Drivers for Firefox, IE, Chrome, Iphone, Android etc
- What is the difference between Selenium RC and WD?

Sample programs in webdriver

- Handel Text box
- Handel HyperLink
- Handel Button and Check box
- Handel Radio Button and DropDown Controls
- Select value from DropDown
- Display all values
- Select values step by step
- Capture screenshots
- Synchronization Commands In Web Driver
- Why Implicit wait and Implementation of Implicit wait
- Why Explicit wait and Implementation of Explicit wait
- Web Driver Fluent wait and Thread Sleep functionality
- File uploads and File downloads (Handling Window based controls using Robot and Sikuli API)
- Handling alerts box and Verfying the Alert Texts
- Handling confirmation messages
- Keyboard actions
- Mouse actions
- Handling Iframes working with Nested Iframes

- Handling multiple tabs
- Handling popups
- Preparing web driver test cases using customized x-path
- Identifying controls using x-path predefined functions

Cucumber

- Cucumber - Home
- Cucumber - Overview
- Cucumber - Environment
- Cucumber - Gherkins
- Cucumber - Features
- Cucumber - Scenarios
- Cucumber - Annotations
- Cucumber - Scenario Outline
- Cucumber - Tags
- Cucumber - Data tables
- Cucumber - Comments
- Cucumber - Hooks
- Cucumber - Command Line Options
- Cucumber - JUnit Runner
- Cucumber - Reports
- Cucumber - Debugging
- Cucumber - Framework Implementation

Web Tables

- What is Web Table
- Extracting data from web tables
- Examples on static and dynamic Web Tables
- Creating Reusable functions for Web Tables
- Web Driver with TEST NG Frame Work
- Batch Running Test cases using TestNG

- Validations and its usage in Automation test scripts
- Customized Report Generation
- Implementing Logs using Apache Log4j API
- Database testing using Web Driver

Working with multiple browsers

- Executing Automation Test Cases in multiple browsers Sequentially
- Working with Chrome and IE browsers
- What is Firefox Profile And Implementation of Firefox Profile
- What is WebDriver Desired Capabilities class
- Executing Automation Test Cases in multiple browsers Parallel

Maven Project Management Tool

- Introduction about maven
- High Level Overview
- Ant vs Maven
- Installation of Maven
- Demo using Sample Maven Project

Maven Structure

- Introduction of Maven Folder Structure
- The pom.xml
- Dependencies
- Goals
- Local Repo Structure
- Defaults
- Sample Demo of Build Session of Maven Project

Maven Dependencies

- Dependency version
- Versions
- Types
- Transitive Dependencies

➤ **Scopes**

Maven Repositories

- What is a Repository
- Dependency Repository
- Adding a Repository
- Plugin Repository

Maven Eclipse Integration

- Demo Installation
- Importing Projects
- Converting Existing Projects
- Pom Viewer
- Effective Pom

Version controlling tool GITHUB

- Downloading and configuring Github
- Difference between CVC Versus DVC
- Basic Git Commands
- Working with Repositories
- Setting up Repositories
- Local and Remote Repositories
- Create repository and cloning projects
- Committing and Syncing the code
- Reverting and Rolling Back the Code
- Branch and Merging Concepts and Implementation
- Stashing Changes
- Resolving the Conflicts

Database testing using web driver

- Installing MySQL Database
- sql package
- Overview on Connection Interface, Statement Interface, Prepared Statement and Result set Interfaces.

- Example program to Access Database.
- Some examples on SELECT,UPDATE and DELETE queries
- Some Web driver examples using Data fetched from Database

Automation Test Frame Work

How to develop Test automation frame work in live environment

- What is a frame work
- Types of frame work
- Data driven frame work
- Modular driven frame work
- Keyword driven frame work
- User Defined Keyword driven framework with implementation
- Execute test scripts from the framework

Continuous Integration Testing using Jenkins

- About Jenkins
- History of Jenkins
- Splitting of Projects
- What is Continues Integration
- Installing Jenkins
- Creating a simple job
- Integrating Jenkins to the Project

The Fundamentals of RESTful Services in Java

- What is Jersey?
- RESTful Architecture
- Using HTTP GET Demo
- Test Created New REST Service USING HTTP GET
- JSON Output for HTTP GET
- Using HTTP POST Demo
- Test Service USING HTTP POST
- JSON Output for HTTP POST

- Using HTTP PUT Demo
- Test Service USING HTTP PUT
- PUT vs POST
- JSON Output for HTTP PUT
- Using HTTP DELETE Demo
- Test Service USING HTTP DELETE
- JSON Output for HTTP DELETE

Interview Questions on

- Selenium IDE
- Selenium webdriver and Automation Testing
- Core Java
- Manual Testing Concepts
- Overview on Selenium Grid

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Selenium Certification in Chennai:

Selenium is an open source automation test so there is no recognised body to provideselenium certification. Yet, in Greens technologies we provide a valid certificate which authorise your talent in the various facet of selenium. Our certifications are accepted by all the prominent companies.

Popularity:

Selenium is the most favoured automation among leading companies. It was the first choice for automation testers to automating the web-based application testing in GUI. In present day, it is the best choice for automated testing. Day to day it become popular due to many users.

Kinds of selenium training in Chennai:

Selenium training is one of the most demanding skill in the world. Greens technology paves excellent training in selenium and we support for your future career.

Selenium classroom training in Chennai:

One to one training:

Greens technologies provide one to one classroom training. We also provide online one to one classroom training for both freshers and professionals. The speciality of this training is to bring out candidate's potential by giving full attention to every individual.

Group training:

Greens technologies provide selenium training with professionals in a convenient environment space. This course gives you hands-on experience.

Fast track training:

Fast track course didn't differ from regular semester course (length). Candidates can learn more hours. This kind of training sits those who wanted complete course quickly by learning extra hours. Sessions are also more intensive. Training is provided by the certified tutors with smart classes. Greens technologies provide result orientated training programs which makes the candidates well in hands-on practical experience.

Selenium online training:

Selenium online classroom training:

This kind of training session conducted on via live online streaming. It helps you to raise your doubts and take part in discussion during class time. The online classroom training is provided by profession who works in leading companies. With highly experienced tutors we provide online classroom training.

Selenium online one to one training:

One trainer for one candidate is our motto for this kind of training. It also simple to understand. You don't want to waste your time by waiting to clarify your doubts. We provide online training regarding your free hours. You can stay in your comfort zone and learn selenium from the selenium professional.

Selenium corporate training in Chennai:

This training perfectly suited for companies who want to train their employees. We provide corporate training by professionals. Due to experienced trainers you can clarify your doubts easily with them. We help our candidates to accomplish success by providing practical based corporate training with up to date skills and knowledge.

Features of learning selenium Training in green technology:

Greens technology is one of the popular selenium training centres in Chennai. We provide authentic study material, class room trainings with smart board classes and IT professionals as trainer. Our air-conditioned classrooms keep you in convenient zone. Our courses are designed according to the candidates understanding capacity. After finishing your selenium training in Greens technologies, you get a vast knowledge and skills from selenium webdriver to selenium IDE. Our well-designed courses are one of the main reasons why upcoming candidates approach us for selenium training. Courses provided in Greens technologies are based on industry norms which keeps you updated in selenium.

Job opportunities in Selenium Training in Chennai:

Web testing is one of the hottest jobs in the market today. So, you don't want to think about unemployment. Selenium webdriver is the most popular among leading companies such as Fakhion technologies, Harvas management solutions, kotecso maverick systems limited, BR raysoft global private limited, Ness technologies, Capgemini technology etc. Quality Engineer, Senior Test Engineer, Selenium Automation Analyst, QA Engineer, Automation Test Lead are the eligible job positions after finishing selenium training course.

Who are all capable for selenium training?

Candidates those who are having following knowledges are capable for selenium training:

Java knowledge for selenium.

HTML knowledge.

Basic knowledge of webdriver