

Selenium Introduction

DAY 1: Introduction to Automation & Selenium

- ⚙ What is Automation Testing?
- ⚙ Why we need Automation? & How to learn any automation tool?
- ⚙ Different types of automation approaches
- ⚙ Introduction to Selenium. What is Selenium? & Why WebDriver?

DAY 2: Selenium Overview

- ⚙ Brief history of Selenium
- ⚙ Features of Selenium
- ⚙ Advantages and limitations of Selenium

DAY 3: Selenium Components and Introduction to Selenium IDE

- ⚙ Selenium IDE
- ⚙ Selenium RC
- ⚙ Selenium WebDriver
- ⚙ Selenium Grid

DAY 4: Deep dive into Selenium IDE

Learning Core Java Concepts

DAY 5: How much Java you need to learn? Exclusive Java session – 1

- ⚙ Java Introduction
- ⚙ Download and Installing Java
- ⚙ Write a simple Java program
- ⚙ Compile and Execute your Java program – Importance of JVM

DAY 6: Exclusive Core Java session – 2

- ⚙ Variables and Data Types
- ⚙ Classes, Objects and methods
- ⚙ Constructors & Packages

DAY 7: Exclusive Core Java session – 3

- ⚙ Different Access Specifiers
- ⚙ Different keywords – static, this
- ⚙ Control Structures or Conditional Statements in Java

DAY 8: Exclusive Core Java session – 4

- ⚙ Iterative/Looping statements in Java
- ⚙ String Methods

DAY 9: Exclusive Core Java session – 5

- ⚙ OOPs Introduction - Encapsulation
- ⚙ Polymorphism
- ⚙ Inheritance

DAY 10: Exclusive Core Java session – 6

- ⚙ Interfaces in Java
- ⚙ Collections in Java

DAY 11: Exclusive Core Java session – 7

- ⚙ Exception Handling in Java

DAY 12: Exclusive Core Java session – 8

- ⚙ Java IO Concepts: Handling Files
- ⚙ Database connectivity concepts [JDBC]

Selenium Core Concepts

DAY 13: Installation of selenium in eclipse and basic scripting using Selenium WebDriver

- ⚙ 7 basic steps to automate a test case using WebDriver script

DAY 14: Deep dive into Selenium WebDriver

- ⚙ Different available drivers
- ⚙ Different available locators – object repository & X path overview

DAY 15: Automating different web elements - I

- ⚙ Different Web Elements - text fields, buttons, links, check box, drop-down etc.

DAY 16: Automating different web elements - II

- ⚙ Different Web Elements - text fields, buttons, links, check box, drop-down etc.

DAY 17: Synchronization in Selenium

- ⚙ Explicit Waits
- ⚙ Implicit Waits
- ⚙ Other Synchronization techniques

DAY 18: Handling Frames, Popup Windows [SwitchTo Command]

DAY 19: Handling Mouse movements and keyboard Events

DAY 20: Other Important Selenium features

- ⚙ Capturing screen shots for failed test cases
- ⚙ Executing Java Script using JavaScriptExecutor
- ⚙ Use of Robot Class in Selenium WebDriver

DAY 21: Commonly used commands and browser navigation method

Advanced Selenium Concepts

DAY 22: Data driven testing – read/write data from/to Excel using Apache POI API

DAY 23: Introduction to TestNG and Its importance in Selenium Automation

DAY 24: Deep dive into TestNG

DAY 25: Selenium Grid overview and how to configure it?

DAY 26: Test Automation Framework and different types of automation frameworks

DAY 27: Design & develop an automation framework using Page Object Model

DAY 28: Behavior Driven Development (BDD) and Gherkin language

DAY 29: Test automation framework using Cucumber and TestNG

DAY 30: Java Build Tools – ANT or Maven configuration

DAY 31: Code versioning – Tortoise SVN or GIT

DAY 32: Continuous Integration using Jenkins (CICD tool)

DAY 33: Selenium Tips & Tricks. Common Challenges we face while scripting

DAY 34: Interview Questions on Selenium Test Automation and Core Java