

What's new in Selenium 4

Selenium History

Architecture of Selenium 1

Architecture of Selenium 2

Architecture of Selenium 3

Architecture of Selenium 4

Selenium IDE

Getting Started with Selenium 4

Adding Jars Manually

Downloading and Configuring Maven

Adding Selenium 4 via Maven Dependencies

WebDriverManager

Detailed Core Java for Beginners

Introduction to core java

Classes and Objects

DataTypes

Object Creation

String Class, Concatenation , String Methods

Operators

Conditional Statements

Types of Variables

Static and Non Static

IfElse, Switch case

Loops – for, Do While, While, Enhanced for-each

Arrays – 2D/3D

Packages

OOPS – Inheritance

OOPS – Polymorphism

OOPS – Method Overloading

OOPS – Method Overriding

OOPS – Interface and Abstract Classes

Constructor, This, Super

Exception Handling

File Handling – txt, csv

POI APIs – Excel Reading and Writing

Collections API

Selenium 4 New Feature: Relative Locators

Above

Below

leftOf

rightOf

Near

Chaining Relative Locators

Minimising and Full Screen Window

Handling Basic Authentication

New Tabs and Windows

Changes in Action API

Selenium 4 Basics and Advance topics

Architecture of selenium Webdriver

Drivers for Firefox, Chrome, Edge, IE etc

Close and Quit difference

Importing WebDriver documentation in eclipse

WebDriver Desired Capabilities class

Inspecting elements on chrome, IE , Firefox

HTML language tags and attributes

Various locator strategies

WebDriver Interface

WebElement Interface

Identifying WebElements using id, class, name

Finding XPATH to identify WebElements

Absolute and Relative Xpaths

Creating customized xpaths without any tool

CSS Selector

Generating own CSS Selectors

Performance of CSS Selectors as compared to xpath

Finding xpaths/css selectors on different browsers – FF, Chrome, IE

Objects with same xpath/id/cssSelector

Handling dynamic objects/ids on the page

Working with different browsers without changing code

Synchronization

Taking Screenshots

Handling different Web Elements

Select class

Handling Frames

Selenium 4 New Feature: Chrome Dev Protocols(CDP)

Handling SSL Certificates

Blocking network requests

Change Time zones

Mocking Geo Locations

Simulate Device Views

Chrome Console logs

TestNG Framework

What is TestNG

Installing TestNG on Eclipse

TestNG Annotations

Running a test in TestNG

Batch running of tests in TestNG

Skipping Tests

Parameterizing Tests – DataProvider

Parameterizing Tests – testNG.xml

Assertions/Reporting Errors

Groups

ReportNG

TestNG Reports

Customizing reports

Other Integrations

- Extent Report
- JDBC
- Apache POI
- Log 4J
- Java Mail API
- Properties file
- Selenium 4 grid
- Dockers
- Jenkins
- Maven
- AWS cloud

Data Driven Framework

Page Object Model + Page Factories Framework