

Selenium Training Syllabus



Selenium is not an all inclusive Test tool; it requires some third party plug-ins and frameworks to broaden the scope of testing.

Selenium Course Modules

1. Selenium WebDriver - Test Tool
2. Java - Programming Language
3. TestNG - Testing Framework
4. Hybrid Framework - Automation Framework
5. Project

Module I. Java Programming for Selenium

1. Introduction to Java
2. An Overview of Java Programming
3. Java Environment Setup
4. Java Keywords and Identifiers
5. Java Basic Syntax
6. Java Program Structure
7. Java Modifiers
8. Java Comments
9. Java Data Types
10. Java Variables
11. Operators in Java
12. Java Decision-Making

13. Java Loops
14. Java Branching
15. Java Strings
16. Java Arrays
17. Java ArrayList
18. Java User Input
19. Java File Handling
20. Java Predefined Methods
21. Java User-defined Methods
22. Java Constructor
23. Java Exception Handling
24. Java Object-Oriented Programming
25. Java OOPS – Inheritance
26. Java OOPS – Polymorphism
27. Java OOPS – Abstraction
28. Java OOPS – Encapsulation

Module II. Selenium WebDriver

1. Introduction to Selenium WebDriver
2. Selenium Test Environment Setup
3. Introduction to Web/HTML Elements
4. Inspecting Web/HTML Elements
5. Locating Web/HTML Elements (Element Locators)
6. Actions on Web/HTML Elements (Selenium WebDriver API Commands)
7. Handling Web/HTML Elements
8. Writing Selenium Test Cases
9. Synchronization (Waits)

10. Page Object Model (POM)

11. Cross Browser Testing

12. Data-Driven Testing

13. Batch Testing

Module III. TestNG Testing Framework for Selenium

1. Introduction to TestNG Testing Framework

2. Install TestNG and write first TestNG Program

3. TestNG Annotations

4. Create multiple Test Cases & Run

5. Execute/Run multiple programs using XML

6. Grouping Test Cases

7. Parallel Testing

8. Data-Driven Testing using @DataProvider annotation

Module IV. Selenium Automation Framework

1. Selection of Automation Framework

2. Selenium with Maven Integration

3. Selenium Test Environment Setup (Maven Project)

4. creating Framework Folder Structure

5. Creating Object Repositories using 'Page Object Model'

6. Creating 'Reusable Functions'

7. Creating Utilities

8. Creating Test cases

9. Collecting Test Data

10. Enhancing Test Cases

11. Executing Test Cases and Storing Test Results.

Module V. Project

1. Project Information
2. Project Overview
3. Stakeholders of the Project
4. Interface of the Project/AUT
5. Features to be tested in Admin Interface
6. Features to be tested in User Interface
7. Derive Sanity Test Scenarios for Admin Interface
8. Derive Sanity Test Scenarios for User Interface
9. Derive Comprehensive (All Possible) Test Cases for Admin Interface
10. Derive Comprehensive (All Possible) Test Cases for User Interface
11. Automating Manual Test Cases using Selenium WebDriver, Java, and TestNG.

Prerequisites to Learn Selenium

1. Computer Programming

[Python Training Videos by G C Reddy](#)

Note: Class notes are available in video pages (in comment section).

2. Database Fundamentals

[SQL Step by Step Tutorial - Full Course for Beginners](#)

Note: You can practice SQL commands explained in this video using any online SQL editor.

3. Manual Testing Tutorial

[Download Manual Testing Material](#)

[Manual Testing Video](#)