Selenium Certification Training Course

Course Curriculum : Your 12 module Learning Plan

https://www.edureka.co/selenium-certification-training

About Edureka

Edureka is a leading e-learning platform providing live instructor-led interactive online training. We cater to professionals and students across the globe in categories like Big Data & Hadoop, Business Analytics, NoSQL Databases, Java & Mobile Technologies, System Engineering, Project Management and Programming. We have an easy and affordable learning solution that is accessible to millions of learners. With our students spread across countries like the US, India, UK, Canada, Singapore, Australia, Middle East, Brazil and many others, we have built a community of over 1 million learners across the globe.

About Course

Edureka's Selenium certification training helps you master this automation testing tool and become a certified Automation Tester. This Selenium training covers WebDriver, Grid, IDE, handling IFrames, Alerts, and Modal Dialog box. With this Selenium course, you will learn to use supported plugins such as TestNG Framework, Robot Class, Cucumber, and Gherkin to control your automation environment. Get hands-on experience on widely used automation frameworks such as Data-Driven Framework, Keyword-Driven Framework, Hybrid Framework, etc. This Instructor-led automation testing training online is created by top industry experts and allows you to work on real-life industry cases.

Selenium Course Curriculum

Java Basics Refresher

Topics

- Why Java?

- Need of Java (Cover Java Terminology—JDK, JVM, Byte Code, and JRE; How Java Works? How to Setup Java Path and Class Path? Explain About IDE and Where We are Going to Write Our Java Program.)

- Platform Independence in Java

- Explain Java Program Structure and Naming Convention

- Java Data Types and Variables and Output Statement

- Basic Operators in Java

- Features of Java

- Keywords and Syntax

- Classes and Objects

- Conditional Statements

- Iterative Statements

- Comments in Java

- Access Specifiers

- Java Methods

- Constructors

- What is Object Oriented Programming?

- OOPs Concepts

Hands-On
- Basic Applications on Java and OOPs Concepts

Skills You Will Learn
- Basics of Java

- Implementing Constructors

- OOPs Concepts

Arrays and Collection Framework in Java

Topics

- Arrays

- Strings

- Packages

- Blocks in Java

- Exceptional Handling in Java

- What are Collections?

- Collections

- Interfaces in Java

- Map Interface in Java

Hands-On

- Basic Applications on Arrays, Strings, Packages, and Blocks

- Basic Applications on Exceptional Handling and Collections

Skills You Will Learn

- Basics of Arrays and Strings

- Implementing Packages

- Collection Frameworks

Introduction to Automation Testing and Selenium

Topics

- Test Automation Fundamentals

- Types of Applications (Desktop, Web, Mobile, and Hybrid)

- Software Testing Methods (Manual and Test Automation)

- Test Automation Types (Unit Testing, API Testing, and GUI Testing)

- Test Automation Frameworks

- Test Automation Tools

- Test Automation Process

- Components of Selenium Suite

- Types of Testing

- Selenium vs. Other Testing Tools

- Introduction to Selenium

- Features of Selenium

- Selenium IDE

- Integration of Selenium with Other Tools

Hands-On

- Basic Selenium Application Without Maven

- Integration of Selenium with Other Tools (Maven)

Skills You Will Learn

- Basics of Selenium

- Maven Framework

- Test Automation Frameworks

- Implementing Selenium IDE

Interacting with waits in Selenium and TestNG Framework

Topics

- Types of Waits in Selenium

- Introduction to TestNG

- Installing TestNG Plug-In in Eclipse

- Annotations

- Grouping

- Sequencing

- Parameterization

- Parallel/Cross Browser Testing

- Introduction to Reports

Hands-On

- Types of Waits in Selenium

- Installing TestNG Plug-In

- Executing a TestNG Script

- TestNG Assertions

- TestNG Parameters

- Parallel Testing Using TestNG

- TestNG Reporting

Skills You Will Learn

- Waits in Selenium

- TestNG Framework Annotations

- TestNG Grouping

- TestNG Sequencing

- TestNG Parameterization

Selenium WebDriver and Locators

Topics

- Introduction to Selenium WebDriver

- Evolution of Selenium WebDriver

- Advantages of Selenium WebDriver

- Selenium WebDriver Architecture

- Introduction to Web Elements

- Locating Web Elements Using Various Locators (ID, Name, Class Name, Tag Name, Link Text, Partial Link Text, CSS Selector, and XPath)

- Introduction to XPath

- Types of XPath

- XPath Functions and Customizations

- What are CSS Selectors?

- Locating Web Elements Using CSS Selectors

- Selenium Commands in WebDriver

- Interacting with Web Elements

Hands-On

- Selenium WebDriver and Architecture

- Locating Web Elements Using Various Locators

- Absolute and Relative XPath

- XPath Functions

- XPath Axes

- Locating Web Elements Using CSS Selectors

- Selenium Commands in WebDriver

Skills You Will Learn

- Selenium Framework

- Selenium WebDriver Handling

- Web Elements Locating

- Locating Web Elements Using CSS Selectors

- Selenium Commands in WebDriver

Handling Alerts and Modal Dialog Box in Selenium

Topics

- What are Alerts?

- Types of Alerts

- Handling Alerts in Selenium WebDriver

- What is a Modal Dialog Box?

- Handling Modal Dialog Box Using Selenium WebDriver

- Handling Multiple Windows and Multiple Tabs Using Selenium WebDriver

- Scrolling on a Web Page Using Selenium WebDriver

- Verifying Tooltip Using Selenium WebDriver

·**Hands-On**

- Handling Web Page Alerts Using Selenium WebDriver

- Handling Modal Dialog Box Using Selenium WebDriver

- Scrolling on a Web Page Using JavaScriptExecutor

- Verifying a Tooltip Using Selenium WebDriver

- Handling Multiple Windows and Multiple Tabs Using Selenium WebDriver

Skills You Will Learn

- Handling Web Pages with Navigation Pop-Ups and Alerts

- Modal Dialog Box Handling

- Tooltip with Selenium WebDriver

- Handling Multiple Browser Windows and Webpage Scrolling

Selenium Grid and Robot Class

Topics

- Introduction to Selenium Grid

- Deploy a Grid

- Introduction to Robot Class

- Methods under Robot Class (KeyPress, Key Release, Mouse Press, Mouse Release, and Mouse Move)

- Implementation of the Robot Class

- Advantages and Disadvantages of the Robot Class

- Selenium Robot Framework for Page Crawling and Data Extraction

Hands-On

- Running Test Scripts on Selenium Grid
- Robot Class Methods

Skills You Will Learn

- Implementing Selenium Grid
- Robot Class Methods (KeyBoard Methods)
- Robot Class Methods (Mouse Methods)

Selenium IDE and Page Object Model

Topics

- What is Selenium IDE?
- Features of Selenium IDE
- Selenium IDE Interface
- Selenese in Selenium IDE
- Why Page Object Model (POM)?
- What is Page Factory?
- Implementing POM Using Selenium WebDriver
- Implementing POM with Page Factory

Hands-On

- Test Case in Selenium IDE

- Page Object Model Using Selenium WebDriver

- Page Object Model with Page Factory

Skills You Will Learn

- Implementing Selenium IDE

- Selenese in Selenium

- Basics of Page Object Model

Automation Frameworks - I

Topics

- Introduction to Selenium Frameworks

- Types of Selenium Frameworks

- Introduction to Data-Driven Test Framework

- Advantages and Disadvantages of Data-Driven Test Framework

- Best Practices of Data-Driven Testing

- Apache POI

- Data Providers

Hands-On

- Selenium Framework Working

- Hybrid Test Frameworks

- Data-Driven Test Framework Using POI and Data Providers

- Data-Driven Testing

- Apache with Page Object Model

Skills You Will Learn

- Selenium WebDriver Working

- Selenium Commands in WebDriver

- Data-Driven Test

- Apache

Automation Frameworks - II

Topics

- Introduction to Keyword-Driven Test Framework

- Uses of Keyword-Driven Test Framework

- Keyword-Driven Framework Components

- Advantages and Limitations of Keyword-Driven Testing

- Implement Keyword-Driven Framework

- Introduction to Hybrid Driven Test Framework

- Advantages and Limitations of Hybrid Test Framework

- Implementing Hybrid Test Framework

- Use of Log4j

- Use of Listeners

- Introduction to Jenkins

- Configuring Jenkins to Invoke Selenium Tests

Hands-On

- Keyword-Driven Testing Framework

- Keyword-Driven Testing Implementation

- Hybrid Test Framework Implementation

- Log4j

- Jenkins

Skills You Will Learn

- Website Testing with Keyword Driven

- Hybrid Testing Implementation

- Logging Using Log4j

- Jenkins

IFrames, Actions Class, and Dropdowns

Topics

- What is an IFrame?

- Identifying an IFrame

- Switching to IFrames Using Selenium WebDriver

- Select Class in Selenium WebDriver

- Methods Under Select Class

- Handling Dropdowns and Multiple Select Operations Using Select Class

- Methods for Handling Keyboard and Mouse-Based Interactions

- Testing Drag and Drop and Mouse Hover Functionality Using Actions Class

Hands-On

- IFrames in Selenium

- Handling IFrames Using Selenium WebDriver

- Handling Select Class in WebDriver

- Handling Dropdowns and Multiple Select Operations

- Handling Keyboard and Mouse-Based Interactions Using Actions Class

- Testing Mouse Functionality on WebDriver

Skills You Will Learn

- IFrames Handling

- Handling Select Class and Dropdowns

- Handling Keyboard and Mouse-Based Interactions

- Working on Mouse-Driven WebDriver Functionality

BDD Framework with Cucumber

Topics

- Agile Testing

- Behavior Driven Development (BDD)

- Advantages and Limitations of BDD

- Cucumber Fundamentals—About Cucumber

- Gherkin Syntax in Cucumber

- Step Definition for Cucumber Feature File

- Advantages of Cucumber

- Implementing BDD Framework Using Cucumber

Hands-On

- BDD with Cucumber

Skills You Will Learn

- Agile Testing

- BDD Framework

- Gherkin

- Cucumber