

# Selenium

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*Dear Student,*

*Based upon your enquiry we are pleased to send you the course curriculum for Selenium*

*Given below is the brief description for the course you are looking for:*

- **What is Selenium; understand difference between RC and Selenium 2 and Selenium 3**
- **Selenium IDE:**
  - ✓ Recording and Play
  - ✓ Export recorded steps in java
  - ✓ Understand code structure
  - ✓ Setup environment
- **Understand Locators:**
  - ✓ id
  - ✓ name
  - ✓ cssSelector
  - ✓ xpath
  - ✓ link text
  - ✓ partial linkText
  - ✓ tagName
  - ✓ className
- **Check web element (Text box, Radio, checkbox etc) is enable/disable and displayed on page or not**
- **Check Radio button and Check box is selected or not**

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- **Use keyboard, Mouse over, Handle java script alert, Handle page cookies, page refresh**
- **Run test in different (Firefox, IE, Chrome)**
- **Unit Testing Framework: JUnit**
  - ✓ Junit Annotations
  - ✓ Test Suite in JUnit
  - ✓ Understanding JUnit Results
- **Handle Ajax list, iFrame**
- **JAVA**
  - ✓ Class, Objects, Constructor
  - ✓ Method Overloading
  - ✓ Method Overriding
  - ✓ Exception Handling (try catch)
  - ✓ Inheritance
  - ✓ Super, Static, this keyword
  - ✓ Final, Finally and Finalize
  - ✓ Abstract classes and Interface
  - ✓ Collection Framework (List, Set, Hash map, Hash table)
- **Handle multiple browser windows, Web tables and Calendar**
- **Selenium Wait (implicit, Explicit, Fluent and ExpectedConditions)**

## ➤ Unit Testing Framework: TestNG

- ✓ TestNG annotations
- ✓ XML suite and parameterization
- ✓ Parallel test execution
- ✓ TestNG Listener
- ✓ Re-Run failed Tests

## ➤ Execute java Script(JavaScriptExecutor), Scroll browser window

## ➤ Take Screenshot

- ✓ when tests fail
- ✓ Specific Element
- ✓ Entire page

## ➤ Handle Flash Objects, Upload/Download Files using SIKULI

## ➤ Upload/Download Files using AUTOIT

## Frameworks

- ✓ Data Driven/Hybrid Framework
- ✓ Read/Write Data from Properties and Excel File
- ✓ Building reusable methods
- ✓ Validation and Verification
- ✓ Generate Keywords and use in framework
- ✓ Generate reports (Extent Report)

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## ➤ **CICD – DevOps, Build Automation Tools and Report Generation**

### ✓ ANT (JUnit and TestNG XSLT Reports)

- Understand build.xml
- Download and Configure ANT
- Configure project and Creating batch file
- Run tests and generate XSLT report

### ✓ MAVEN (Run Junit and TestNG test cases, generate sure-fire report)

- Download and Configure Maven
- Understand POM.xml
- Concept of Local and Central repository
- Understand dependencies
- Configure project and creating batch files
- Run tests and generate Surefire report

## ➤ **Cucumber Framework**

- ✓ About BDD (Behavior Driven Framework)
- ✓ How Cucumber implements BDD
- ✓ Feature File, Gherkin Syntax
- ✓ Hooks, Data Tables
- ✓ Test Execution and Report Generation

## ➤ Page Object and Page Factory

- ✓ Concept of Page Object and One to One mapping
- ✓ Implement Page Object
- ✓ @FindBy, @FindAll
- ✓ Implement Page Factory
- ✓ Initialize Elements

## ➤ Git and GitHub / Jenkins

- ✓ GIT and GitHub Essentials
- ✓ Installing GIT, GIT Bash and GIT GUI
- ✓ Creating Repository on Github
- ✓ Push code in Github Repository
- ✓ Configure project with Jenkins
- ✓ Test Execution

## ➤ DB Connectivity (MySQL)

## ➤ Selenium Grid (Cross platform testing)

- ✓ Need of Selenium Grid
- ✓ Concept of HUB and NODES
- ✓ Hub and Node Configuration with JSON
- ✓ RemoteWebDriver Class
- ✓ Test Execution on Different Node (Machine)
- ✓ Test Execution on Cloud (SauceLabs, BrowserStack, CrossBrowser)

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## Course Details

Course Duration	3 Months
Fees	11000/-
Study Material	<a href="https://tutorial.techaltum.com/SeleniumTutorial.html">https://tutorial.techaltum.com/SeleniumTutorial.html</a>
Placement	yes, <a href="http://www.techaltum.org/">http://www.techaltum.org/</a>

## Trainer Profile (Mr. Amit Tyagi)

**Mr Amit Tyagi**

*(Sr Software Tester on Selenium Automation)*

Total 9+ Years' Experience in Software Testing Automation Field.

Having 8+ Experience in Selenium automation and Mobile Application Testing.

Also Involved in Corporate Training from last 6 Years.