

## Selenium course content

<b>Class Room:</b> Training Fee & Duration : 5K & 45 Hours	<b>Online</b> Training Fee & Duration : 7K & 45 Hours
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### **Introduction**

- What is Automation Testing?
- What is selenium?
- How selenium works.

### **Java:**

- Java Keywords
- Java Data Types
- Declarations and Access Control
- Operators and Assignments
- Flow Control
- Typecasting
- Arrays
- Object Oriented Programming Concepts:
  - Introduction
  - Class
  - Object
  - Local, Instance and static variables
  - Constructors
  - this keyword
  - Inheritance and Types
  - Working with superclasses and subclasses
  - Using types of polymorphism such as overloading, overriding, and dynamic binding
  - Abstraction
  - Encapsulation
  - Abstract classes
  - Interfaces
- String Processing:
  - String manipulation with String Builder and String Buffer
  - Essential String Methods
- Exceptions and Assertions:
  - Introduction
  - Exceptions categories
  - Standard Java Exception classes
  - Using Try-catch and finally clause
- I/O Streams:
  - I/O using Java
  - Files (Create/Read/Write operations on files)
- Wrapper Classes:
  - Introduction
  - Byte, Short, Integer, Long
  - Float, Double
  - Character



Boolean classes

Collections:

Introduction to Collections framework

util Package

List, Set and Map

**Selenium:**

SELENIUM IDE

SELENIUM RC - Deprecated

WEBDRIVER

GRID

**SELENIUM IDE:**

Different ways of identifying Elements:

Locators Identification.

ID

Name

Class

Link

CSS

Xpath

DOM

**WebDriver :**

What is webdriver

How to use

Launching application in multiple browser

Method level explanation with examples

Switching windows ,alerts , frames

Waits - Implicit wait

Explicit wait

Fluent Waits

Select Box handling

Actions Class

Listeners -EventFiring WebDriver

Annotations

Capturing the screenshots

**Grid:**

Remote WebDriver

Capabilities

Hub

Node

Json Configurations

Executions on multi node/multi OS/multi browser

Parallel Executions

**TestNG:**

Introduction

Installation

Annotations

Attributes in annotations.

@DataProvider  
@Parameters  
@Listenersh  
testng.xml

**Reporting:**

TestNG Reports  
ReportNG Reports  
Extent Reports

**Maven:**

Installation  
Configuration  
Terminology  
Life Cycles

**Design Patterns:**

Page Object Model  
Page Factory  
Data Driven DP

**Data Access Related Tools:**

POI - To Handle Excel sheets  
JSON  
Properties File

**SCM Tools - GIT**

Installations  
Usage  
Terminology  
Clone  
Pull  
merge  
Push  
Commit

**Jenkins:**

Introduction  
Installation  
Configuration of plugins  
Configuration of Jenkins  
Job Creation  
Integration with GITTools

**AutoIT** - To handle download

Introduction  
Installation  
Java Plugin  
Examples

**Selenium Frameworks**

- Implementing all above concepts

**Cucumber Framework**

- Installation and usage

**Protractor Framework**

- Installation and usage