



Testing Shastra

JAVA-SELNIUM

SYLLABUS

WITH **CUCUMBER 5**

Duration: 100Hrs
Mode of Training: Online (Webx Meeting)
Time: Sat, Sun 3pm to 5pm IST

For more info., Call on:

+91-9130502135

Core Java:

- Introduction to Java
- Installation of Java in windows and Mac
- Data Types and Operators
- Writing first Java program
- Introduction to class
- Control Statements (For, while, do-while, for-each etc.)
- Array (Single Dimension, Multi-Dimension). [Array Interview questions.](#)
- Introduction to blocks and methods.
- Object Oriented Programming Concepts
 - Encapsulation
 - Data Hiding
 - Abstraction
 - Polymorphism
 - Inheritance
 - Constructor
 - [Singleton Pattern](#)
- Exception Handling
 - Checked vs Unchecked Exception
 - Handling Exception using try-catch
 - [throws](#) keyword

- [throw](#) keyword
- [finally](#) block
- Custom Exceptions
- Collection Framework:
 - Introduction
 - Different Interfaces of Collection
 - Methods of Collection
 - Methods of List Interface
 - Methods of Set interface
 - Methods of Queue Interface
 - Intro to ArrayList, LinkedList, Vector, Stack, their methods and constructors
 - Intro to HashSet, LinkedHashSet, TreeSet
 - Intro to PriorityQueue, BlockingQueue
 - Intro to Map interface and its methods
 - Intro. to HashMap, LinkedHashMap and TreeMap
 - Iterators in Collection
 - [Comparable and Comparator](#)

Selenium:

- Introduction to Selenium
- Components of Selenium: IDE, RC, WebDriver, Grid
- Introduction to WebDriver
- WebDriver interface and its methods.
- How to launch different browsers using Selenium
- Launching url
- Introduction to WebElements
- Finding WebElements using different locator strategies
- Introduction to XPATH:
 - Absolute vs Relative XPATH
 - Writing Dynamic XPATH
 - XPATH functions
 - XPATH Axeses
- Introduction to CSSSelector:
 - Functions of CSSSelector
 - Different symbols of CSSSelector
- Handling Radio buttons, Checkboxes, links and buttons
- Handling dropdown using Select class
- Handling Windows and Frames
- Handling Alerts and Popups
- Waits in Selenium (Implicit and Explicit)
- Handling Mouse and Keyboard actions
- Robot class
- Exceptions of Selenium
- Taking Screenshot using [AShot](#) and Selenium
- File upload and download using [AutoIt](#)

TestNG:

- Introduction to TestNG
- Different annotations of TestNG
- Introduction to [testing.xml](#) file
- Different parameters of @Test annotation
- Writing first testcase
- Failing first test case
- Assertions (SoftAssert and Hard Assert)
- Creating dependency (Hard Dependency and Soft Dependency)
- Groups in TestNG
- Parameterization in TestNG
- DataProvider in TestNG
- Providing data from Excel, CSV and properties file
- [Cross browser Testing](#)
- Taking screenshot when test fails
- Different Listeners in TestNG

ExtentReport

Log4j, Git, Maven

Keyword Driven Framework

Page Object Model

- Creating Page classes
- @FindBy
- @CacheLookuo
- PageFactory class

Cucumber 5

- Introduction to BDD
- Story of 3 amigos
- Installation of Cucumber
- Different Gherkin keywords
- Writing StepDefinitions
- **Cucumber Expressions:**
 - Parameter types
 - Custom Parameter types
 - Optional text
 - Alternative text
- Checking Assertions
- Data Tables
- Hooks
- Tags
- Cucumber Reporting

Integration of Extent Report with Cucumber 5