

# JAVA

1. Java Introduction
2. JDK, JRE, JVM
3. Core Java (SE)
4. Java IDE Tool
5. Coding Standards
6. Packages
7. Data Types
  - Primitive & Non Primitive
8. Wrapper Class
9. OOPS (Class, Method, Object)
10. Types Of OOPS
11. Inheritance
12. Polymorphism
  - Method Overloading / Static Binding
  - Method Overriding / Dynamic Binding
13. Abstraction
  - Abstract Class
  - Interface
14. Encapsulation
15. Control Statements
  - Conditional
  - Looping
  - Jumping
  - Operators
16. Arrays (1D & 2D)
17. String – C (Java lang) and its Types & Function
  - Literal
  - Non Literal
  - Immutable
  - Mutable
18. Collection – I Java Util

**List – I Java Util**  
**Set – I Java Util**  
**Map – I Java Util**  
**Collections – C**  
**Generics**

**19. Access Modifiers / Non Access Modifiers**

<b>Private</b>	<b>Abstract</b>
<b>Default</b>	<b>Static</b>
<b>Protected</b>	<b>Final</b>
<b>Public</b>	<b>Transient, Synchronized, Volatile</b>

**20. Types of Variables**

**Local**  
**Instance / Object**  
**Static / Class**

**21. Storage in Java (Heap & Stack)**

**22. Constructor**

**Non Parameterized (Default constructor)**  
**Parameterized (Argument based constructor)**

**23. Exception and Handling**

**Unchecked / Runtime**  
**Checked / Compile time**

**24. Scanner-C Java Util**

**25. File Operation (File - C) Java Io**

**26. Enum (Class / Interface)**

**27. Enumeration, Iterator, List Iterator**

**28. Garbage Collection**

**29. Regular Expression**

**31. Data Binding & Type Casting**

# SELENIUM

1. Automation
2. Selenium & its components Parameter
3. Selenium Architecture
4. WebDriver – I
5. WebElement –I
6. Locators
7. Xpath & Axes & CSS Selector Hub
8. Debug
9. Radio Button & CheckBox
10. Keyboard Action using Senkeys
11. Get location, Get Size, Get CssValue
12. No. of Links in a webpage
13. Handling Auto Suggestion
14. Handling Dynamic Elements / Visibility of Web elements
15. DropDown (Select Class)
16. JavascriptExecutor – I
17. TakesScreenshot – I
18. Alert - I
19. Web Table – Dynamic
20. Actions – C
21. Robot – C
22. Windows Handling / Window Pop-Up
23. Frames
24. Wait – I (Synchronization / AJAX Call)
25. Broken Links / Broken Image
26. File Upload / Download
  - Send keys
  - Robot class
  - Auto IT
  - Wget.exe ->Download
27. Chrome options & Desired Capabilities

- 28. Tool Tip in Webpage
- 29. Web driver support Headless browser – HTML unit Browser
- 30. Selenium Exception & Handling
- 31. Cookies Handling and Session & Cache
- 32. Selenium Extent Reports

## FRAMEWORKS

### Data Driven Testing

### Design Pattern

- Page Object Model
- Singleton
- Factory Pattern

### J Unit

- Fixtures, Annotations & Assertions
- J unit Class
- J unit Suite Classes
- J unit Runner Classes

## TEST NG

1. Test NG Features & Annotation
2. Priority
3. Ignore
4. Invocation count
5. Assert (Soft & Hard)
6. Suite Level Execution (testng.xml)
7. Parameter from XML File & @optional parameter
8. Data Provider use in same class & another class
9. Parallel execution
  - Method
  - Tests
  - Classes

- 10. Thread Count and Time out**
- 11. Rerun Manual**
- 12. Rerun Automatically when we know the TC's Failed**
- 13. Rerun Automatic (Listener)**
- 14. Grouping & Dependency grouping**
- 15. Cross Browser Testing**
- 16. TDD VS BDD**
- 17. Reports (Index, Html, E mailable & LogMsg)**

## **CUCUMBER (BDD)**

- 1. Cucumber Definition & Architecture**
- 2. Annotation of J unit**
- 3. Gherkin Language**
- 4. Feature file & Step Definition Package**
- 5. Cucumber Options**
- 6. Test Runner Class**
- 7. Cucumber Integration J unit / Test Ng**
- 8. Data Table – C**
- 9. Hooks Class Extends Base Class**
- 10. Tags used Grouping Scenario & Feature File**
- 11. Cucumber JVM Reports with Screenshots of failed testcase**
- 12. Cucumber Re run**
- 13. Cucumber Project Explain by steps**

**ECLIPSE**

**MAVEN**

**GIT / GIT HUB**

**JIRA - ZEPHYR**

**AGILE SCRUM BOARD**

**JENKINS**

**SQL**

# SOFTWARE TESTING TECHNIQUE

- + PROJECT VS PRODUCT
- + SDLC / STLC
- + METHODOLOGYS
- + WATERFALL
- + SPIRAL
- + PROTOTYPE
- + V MODEL
- + TYPES OF TESTING
- + UNIT TESTING
- + INTEGRATION
- + SYSTEM INTEGRATION TESTING
- + ACCEPTANCE TESTING (UAT)
- + GUI / UI TEST
- + FUNCTIONAL VS NON FUNCTIONAL TESTING
- + PRINCIPLE OF SOFTWARE TESTING
- + KINDS OF TESTING (SMOKE, SANITY, REGRESSION, RE TEST, EXPLORATORY, ADHOC, MONKEY, POSITIVE, NEGATIVE, ENE TO END TESTING)
- + TEST DESIGN TECHNIQUE
- + TEST PLAN TEMPLATE
- + TEST CASE TEMPLATE
- + PRIORITY & SEVERITY
- + RTM (TRACEBILITY METRICS)
- + DEFECT / BUG LIFE CYCLE
- + TEST CYCLE CLOSURE
- + TEST METRICS
- + AGILE PRINCIPLE & SCRUM TEAM
- + SCRUM TERMINOLOGY(STORY POINTS, BURN DOWN CHART )
- + AGILE (ROLES ARTIFACTS CEREMONIES)
- + MEETINGS – SPIRINT GROMMING, PLANNING, REVIEW, RETROSPECTIVES AND WALKTHROUGH AND INSPECTION.

