



Selenium testing 7000/-

## Java basic

### Section 1

- **Introduction to programming**
- Introduction to java
- JDK installation
- Keywords, Identifiers, variables
- Operators
- Method/Functions
- Flow Control Statements
- Arrays
- Strings
- Interactive programs in java using Scanner

### Section 2

#### Object Oriented Programming System

- Classes and Objects
- Object creation
- Reference variable
- Global and local variables
- Constructors
- Aggregation
- Composition
- Inheritance \*\*\*
- Method Overloading
- Method Overriding
- Abstract classes
- Interfaces
- Typecasting
- JVM architecture
- Polymorphism
- Abstraction
- Java packages
- Access Specifies

### Section 3

#### Java Built-in packages and API

- \* Overview of java API

- \* Object class
- \* String, String Buffer and String Builder
- \* Exception Handling
- \* Threads and multithreading
- \* Wrapper Classes
- \* Data Structures
- \* JAVA COLLECTION FRAMEWORKS\*\*\*
- \* File Handling
- \* Serialization
- \* Garbage Collector
- Encapsulation

## Selenium

- **Automation Testing**
  - o What is Automation Testing?
  - o When we Switch to Automation Testing?
  - o Why Automation testing?/Advantages
  - o Disadvantages
  - o Automation Testing Tools
- **Selenium**
  - o What is Selenium
  - o Why Selenium? / Advantages
  - o What are its versions?
  - o What all OS, Browsers, and Programming Languages it Support?
- Java-Selenium Architecture
- WebDriver Architecture
- Basic Selenium Program to Open and close Browser
- Runtime Polymorphism Program in Selenium
- WebDriver abstract methods
- Locators
- Xpath, its Types and cases
  - o Handling Multiple Elements
  - o Handling Synchronisation issue by using implicitlyWait and Explicitly Wait
  - o Handling Dropdown (static and dynamic)
  - o Handling Keyboard and Mouse Actions
  - o Taking Screenshot
  - o Handling Disabled Element
  - o Performing Scroll down Action
  - o WebElement Interface Methods
  - o Handling Popups (web-based and Window-based)
  - o Handling Frames
  - o Handling New Windows/New Tabs
- **AUTOMATION FRAMEWORK**
  - o Stages and Types of Framework
  - o Explanation of Hybrid Framework with a combination of

- Data-Driven
- Keyword-Driven
- Method-Driven
  - POM (Page Object Model)
- **TestNG**
  - Fetching TestNG Report
  - Batch Execution
  - TestNG Flags and Annotations
  - Assertion
  - Grouping Execution
  - Data Parameterisation
  - Data driven through DataProvider
  - Parallel Execution
  - Distributed Parallel Execution
  - Cross Browser Parallel Execution
- **Modular Frameworks**
- **Hybrid Framework**
  - Hybrid Framework Architecture
  - Introduction to Maven, GitHub and Jenkins

data base

## 1 - Introduction

- What Is Database?
- What is Database Management System (DBMS)?
- What is Relational Model ?
- Introduction to RDBMS .
- Brief on E.F CODD .

## 2 - Datatypes and Constraints

- What are Datatypes ?
- Types and Examples .
- How to use .
- What are Constraints?
- Types and Examples.
- How to use.

## 3 - Statements in SQL

- Data Definition Language (DDL)
- Data Manipulation Language (DML)
- Transaction Control Language (TCL)
- Data Control Language (DCL)
- Data Query Language (DQL)

#### 4- **Software installation**

- Installing and set up of software
- Working on Oracle 10g.

#### 5- **Data Query Language (DQL)**

- Select
- From
- Where
- Group By
- Having
- Order By

#### 6 -**Operators**

- Types and Examples

#### 7- **Functions in SQL**

- Single Row Functions
- Multi Row Functions
- Max ()
- Min ()
- Sum ()
- Avg ()
- Count ()

#### 8-**Sub Query**

- Introduction to Sub Query
- Working of Sub Query
- Query Writing and Execution
- Types of Sub Query
  1. Single Row Sub Query
  2. Multi Row Sub Query
- Nested Sub Query.

#### 10- **Pseudo Columns**

- Introduction on Pseudo Columns
- ROWID
- ROWNUM
- Working and Usage.

#### 11- **JOINS**

- What Is Join?
- Types of Joins.
- Cartesian Join
- Inner Join
- Outer Join
- Self-Join
- Queries and Examples.

## 12- Co- Related Sub Query

- Working and Examples

## 13- Data Definition Language (DDL)

- Create
- Rename
- Alter
- Truncate
- Drop

## 14- Data Manipulation Language (DML)

- Insert
- Update
- Delete

## 15- Transaction Control Language (TCL)

- Commit
- Save point
- Rollback

## 16- Data Control Language (DCL)

- Grant
- Revoke

## 17 - Normalization

- Introduction to Normalization
- Types of Normal Forms
- Examples.

## 18- E R Diagrams

- Introduction to ERD
- Examples.

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