

# Java Community Class

This Java Community session is intended to assist tech enthusiasts in learning the most popular programming language in the technology sector. This course covers the majority of Java Language features in great detail. These classes don't require any prerequisites.

Duration :

Language : English

Price : None

## What you will learn?

- Variables and Operators
- Conditional statements and Loops
- Arrays
- Class and Objects
- Inheritance
- Abstraction
- Package and Interface
- Exception Handling
- Multithreading
- Collection API
- Lambda Expression
- TreeSet
- HashSet
- LinkedHashSet
- Collection Hierarchy

## Features

- Course material
- Course resources
- On demand recorded videos
- Practical exercises
- Quizzes
- Assignments
- Course completion certificate

## Requirements

- System with Internet Connection
- Interest to learn

- Dedication

# Course Curriculum

## Day - 1

- Basic Understanding of Computer
- Basic feature of Java

## Day - 2

- Main method
- Classes and Objects(Basics)
- Statically typed vs Dynamically types PL
- Variables and data types
- Naming Convention

## Day - 3

- Operators in Java
- Incrementation and Decrementation
- Conditional statement

## Day - 4

- Loops intro
- for - while - do while
- Nested loops

## Day - 5

- Object creation
- instance variable vs local variables
- Methods

## Day - 6

- Why array?
- What is an Array?
- How to create an array
- Buffer over run and ArrayIndexOutOfBoundsException
- Disadvantages of Array in Java

## **Day - 7**

- String Introduction
- Types of string
- Immutable string
- Ways to compare and memory map String constant pool
- Inbuilt methods in String class
- Concatination
- Mutable String
- String Buffer vs String Builder
- Inbuilt Methods

## **Day - 8**

- Need of Encapsulation
- What is Encapsulation?
- Private members
- Shadowing problem and this keyword
- Setters ,Getters
- Constructor,
- this()

## **Day - 9**

- Inheritance intro
- extends keyword
- Types of Inheritance
- Types of methods Inherited, overridden, specialized
- Abstract keyword and Abstraction
- Abstract class and Abstract method
- Final keyword in Java

## **Day - 10**

- What is interface
- Need of Interface
- Different use cases of Interface
- Abstract vs interface
- Functional Interface
- What is Lambda Expression

- Different ways to create Lambda Expression

## **Day - 11**

- What is an Exception?
- try catch
- Multiple catch block
- Handling vs Ducking an Exception
- Hierachy of an Exception class

## **Day - 12**

- Why Collection ?
- ArrayList
- LinkedList
- PriorityQueue
- ArrayDeque
- TreeSet
- HashSet
- LinkedHashSet
- Collection Hierarchy