

# **Java Part 01: What's New**

**Modality: On Demand**

**Duration: 4 Hours**

## **About this course:**

The Java Part 1 is an intermediate level course for experienced Java programmers to enhance their knowledge regarding Java programming and learn about the new features and enhancements in the recent Java programming language. This course is geared for developers who have prior working knowledge of earlier versions of Java. Throughout the course, you will learn the best practices for taking advantage of the new functional programming constructs in Java as well as other new features in this major update to the Java programming language.

The course is part of the two course series on the latest version of Java programming language. This course helps the candidates to smoothly transition from the older versions of Java to the latest one. The two courses on Java programming cover all the new features and enhancements offered in the latest Java version and help the students to successfully master and implement the latest features and benefits of Java and become an effective Java developer.

The average salary of a Java Developer is **\$47,409** per year.

## **Course Objective:**

After successfully completing this course the students shall be able to completely understand and learn the language enhancements in the latest Java version. Furthermore, the students will be able to:

- Understand the data type enhancements
- Learn about new concurrent utilities
- Understand the concept of IO and New IO
- Learn to find files with NIO
- Learn to implement network protocols
- Understand the Stream Control Transport Protocol (SCTP)

## **Audience:**

- The course is intended for experienced developers who wish to get up and running with the latest version of Java programming language.
- The course is also helpful for candidates looking to reinforce their Java programming language skills and learn the best-practices in Java programming.

## **Prerequisite:**

- The course requires that the candidates must have prior experience and knowledge of Java programming.

- Ideally the candidates should be working with Java for at least six months to one year.

## Course Outline:

### Chapter 01: Language Enhancements

- **Topic A: Overview - Part 1**
- Overview - Part 2
- Overview - Part 3
- **Topic B: Language Enhancements - Part 1**
- Language Enhancements - Part 2
- Language Enhancements - Part 3
- **Topic C: Generic Type Inference - Part 1**
- Generic Type Inference - Part 2
- Generic Type Inference - Part 3
- **Topic D: Data Type Enhancements - Part 1**
- Data Type Enhancements - Part 2
- Data Type Enhancements - Part 3
- **Topic E: Enhancements - Part 1**
- Enhancements - Part 2
- Enhancements - Part 3

### Chapter 02: Concurrency Utilities

- **Topic A: New Concurrent Utilities - Part 1**
- New Concurrent Utilities - Part 2
- New Concurrent Utilities - Part 3
- **Topic B: ThreadLocalRandom Class - Part 1**
- ThreadLocalRandom Class - Part 2
- ThreadLocalRandom Class - Part 3
- **Topic C: Phaser Class - Part 1**
- Phaser Class - Part 2
- Phaser Class - Part 3

### Chapter 03: IO and New IO

- **Topic A: Java Stream Based File - Part 1**
- Java Stream Based File - Part 2
- Java Stream Based File - Part 3
- **Topic B: NIO Files Class - Part 1**
- NIO Files Class - Part 2
- NIO Files Class - Part 3
- **Topic C: NIO File System Operations - Part 1**
- NIO File System Operations - Part 2
- NIO File System Operations - Part 3

### Chapter 04: Files, Async, Change

- **Topic A: NIO Walking the Dir Tree - Part 1**
- NIO Walking the Dir Tree - Part 2
- NIO Walking the Dir Tree - Part 3
- **Topic B: Finding Files With NIO - Part 1**
- Finding Files With NIO - Part 2
- Finding Files With NIO - Part 3
- **Topic C: NIO Async Operations - Part 1**
- NIO Async Operations - Part 2
- NIO Async Operations - Part 3
- **Topic D: NIO Async Channel Group - Part 1**
- NIO Async Channel Group - Part 2
- NIO Async Channel Group - Part 3
- **Topic E: NIO Change Notification - Part 1**
- NIO Change Notification - Part 2
- NIO Change Notification - Part 3

## Chapter 05: Network Protocols

- **Topic A: Network Protocols - Part 1**
- Network Protocols - Part 2
- Network Protocols - Part 3
- **Topic B: SCTP - Part 1**
- SCTP - Part 2
- SCTP - Part 3
- **Topic C: SDP - Part 1**
- SDP - Part 2
- SDP - Part 3