Java 8 training provides in-depth knowledge to the delegates about the functional interfaces, streams, lambda expressions and new Java 8 API. Java is a most popular programming language, and it is also a platform for developing the web enterprise, desktop and mobile applications. Throughout the training, the delegates will able to understand all the new features of Java 8 and also understand the usage of these features simply and intuitively. The delegates will understand how to use optional and default methods while writing java 8 code.

Java 8 is the most awaited release of Java. With the help of the Java 8 training, the delegates will be able to understand about the Lambda Expressions, Method References and Functional Interfaces. The training provides a complete knowledge to the delegates about the Default Methods, New Date/Time API, Optional Class and the Streams concepts. The training introduces the delegates with the most powerful feature added in Java 8:- Lambdas and how the delegates can be used to make their code brief, declarative and elegant.

The delegates will get to know about the Streams introduced in Java 8 as well as their difference from Collections in Java. The delegates also learn about the advanced operations on Streams such as partitioning, grouping and parallel streams. The course also provides knowledge about the Java 8, which introduced a feature of Default methods in interfaces. The delegates will also go through some functional programming aspects and their blending with existing Java codes.

Prerequisites

For attending this training, the delegates should have basic knowledge about working of Core Java concepts, and they also have a basic understanding of few design patterns.

Course Objectives

After the completion of what's new in Java 8? Certification Training at Silicon Beach Training, the delegates will be able:

- Understand lambdas, syntax, their background and implementation details of lambdas
- Understand how to build lambda expressions with the use of the default library interfaces
- Learn how to employ the new Nashorn JavaScript Engine
- Understand how to build lambda expressions with the use of the proper syntax
- Understand how to employ the new Date/Time API
- Learn about the flight Recorder and Mission Control
- Employ new concurrent lambda features
- Understand the difference between functions to classes and why that's relevant to lambdas
- Understand the differences in bytecode produced when using lambdas
- Understand the usage of method references
- Understand about the scoping and "effectively "

Introducing Java 8

- Quick Recap of Java,
- Drivers of Change in Java
- Effects of Big Data world and new frameworks favouring functional programming
- Behaviour Parameterization
- Anonymous Classes, Lambdas

Introducing Lambdas

- Lambdas in Summary
- Some Lambda Examples
- Lambda Use Cases
- Functional Interfaces
- Lambda in Practice

Working with Streams

- Introduction to Streams, Stream Basics in Java 8
- Java Collections Vs Streams, Different Stream Operations
- Stream Sources
- Creating and Using Collectors
- Reducing and Summarization of Streams
- Grouping and Data partitioning operations in Streams
- Introduction to Parallel Streams
- Using Parallel streams effectively
- About the Fork/Join
- Refactoring a Code to Lambda expressions
- Testing Lambdas
- Introduction to Default Methods
- Use Cases of Default Methods
- Resolution rules

Defaults, Optionals and more

- What's wrong with Nulls in Java
- Moving from Nulls to Optional
- Optionals in Depth
- New Date and time API in Java8
- Reasons to go for new API
- Common Operations with New Date API
- Quick Functional Programming Refresher
- Understand about the Functional Programming techniques

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