

Java Latest Releases – Most Important Updates Made in Java 8-14 Releases

Course 6946 – 16 Hours

Overview

Latest long-term Java release based on new features offered as part of Java 8 – 12. This updates are meaningful since Java 11 will have 8 years support as planned, and Java 12, short-term release, published during the 1st quarter of 2019. In addition, this version provides a built-in mature API for Reactive programming along with more flexible environment and provides the basis for Spring WebFlux.

The course straightens the line regarding Java 8 Functional programming & streams API, details regarding Reactive programming offered in Java 9 Flow API.

This course also explores the new features included in 9,10,11,12,13&14. The course introduces Reactive Programming and other latest APIs. The course also details about environmental updates, new utilities & deprecated ones.

Who Should Attend

- Experienced Java developers that wants to learn about latest Java evolution in Syntax, API and environment offered in latest Java releases

Prerequisites

- Experience in Java programming
- Familiarity with Java 7 APIs
- Familiarity with Java Internals

Course Contents

Java 8

Functional Programming

- Functional Interfaces
- Method refs
- Optionals
- Default methods in interfaces

Streams

- Pipeline manipulation
- Terminal operations
- Collectors
- Parallel-streams

Java 9

API & code

- Reactive programming with flow
- Collection Factories
- Stream API new features
- Private interface methods
- HTTP/2 API
- Stack walking

Environmental

- Modular Java & Jlink
- Jshell
- Multi version jars
- G1 made default

Java 10

API & code

Java 11

Syntax

- var supported in LAMBDA
- java.lang.String new methods
- Predicate.not()
- incubator becomes java.net
- Reference clone() update

Environmental

- Removed tools
- Excluded APIs
- Application CDS -Module support
- Single-file launch
- Compiling threads lazy allocation
- G1 update
- ZGC – Experimental

Java 12

Syntax

- Switch assignments
- java.lang.String new methods
- Collectors.teeing()

Environments

- G1 abortion policy

Java 13

Syntax

- Triple quotes block
- String New methods
- Switch expression enhancement
- Socket & ServerSocket Impl update

Environments

- App CDS simplified
- ZGC enhancement

Java 14

Syntax & APIs

- Switch Expressions made permanent
- Text Blocks – triple quotes - separators
- 'instanceof' pattern matching
- 'record' data classes

Environment

- NullPointerException – enhanced reporting