

AGENDA

Java 25 Training: Stream Gatherers, Unnamed Variables & All New Features Since Java 21

2 days · Individual date · On-site or online · German / English · Customizable agenda · Certificate of completion

We won't follow the listed order strictly. Instead, we'll alternate between major features, smaller topics, and theory – keeping the course engaging and balanced, and helping you better retain the material.

Major Features:

- Unnamed Variables & Patterns
- Foreign Function & Memory API
- Markdown Documentation Comments
- Stream Gatherers
- Synchronize Virtual Threads without Pinning
- Scoped Values
- Compact Source Files and Instance Main Methods

Other New Features:

- Module Import Declarations
- Launch multi-file source-code programs
- Console methods with explicit `Locale`
- Class-File API
- Key Derivation Function API

API Enhancements:

- `Locale`-dependent list patterns
- Support for `Duration` until another `Instant`

Garbage Collection:

- G1 GC improvements
- ZGC: Generational mode by default

Performance / Memory Footprint:

- Compact Object Headers
- Ahead-of-Time Class Loading & Linking
- Relax alignment of array elements
- Change `LockingMode` default from `LM_LEGACY` to `LM_LIGHTWEIGHT`
- Linking run-time images without JMODs

Deprecations & Removals:

- `Thread.countStackFrames()`
- Old core reflection implementation
- Deprecations and removals in `sun.misc.Unsafe`
- `Thread.suspend()`, `resume()` und `ThreadGroup.suspend()`, `resume()`, `stop()`
- Security Manager

Looking Ahead:

- Primitive Types in patterns, `instanceof`, and `switch`
- Stable Values
- Vector API
- Structured Concurrency