

Training program:

Java - advanced programming, OO, functional and patterns

Info:

Name:	Java - advanced programming, OO, functional and patterns
Code:	advanced-Java Pro
Category:	Advanced Java
Target audience:	developers
Duration:	3 days
Format:	50% lecture / 50% workshop

Training program

1. Modern Java

1.1. Lambda, Optional/Stream/CompletableFuture, java.time

1.2. G1GC, JPMS, Unified JVM logging, VarHandles, Stackwalker, Collections Factory Methods, Spin-wait hints

1.3. Local-variable type-inference, Parallel Full GC dla G1, Time-Based Release Versioning

1.4. Epsilon, Http Client, LocalVariable syntax for Lambdas, Flight Recorder, Low-overhead heap profiling, ZGC

1.5. Project Amber, Valhalla, Loom

2. Functional thinking with TDD

2.1. lambdy

2.2. monady

2.3. streamy

2.4. Collectors and Spliterators

3. Practical patterns and their functional impl

3.1. Command

3.2. Strategy

3.3. Template Method

3.4. Observer

3.5. Decorator

3.6. Chain of Responsibility

4. SOLID

4.1. Single Responsibility Principle

4.2. Open-closed Principle

4.3. Liskov Substitution

4.4. Interface Segregation

4.5. Dependency Inversion

4.6. Hexagonal Architecture

5. Concurrency introduction

5.1. java.util.concurrent

5.2. ExecutorService

6. Effective java receipies

7. Libraries

7.1. Lombok

7.2. Guava/Commons

7.3. Vavr

8. Introduction to Project Reactor