# CURRICULA OVERVIEW

NINT RENTED RENTE

Victor Rentea – Independent Trainer
www.victorrentea.ro

#### PROGRAMMING LANGUAGE AGNOSTIC:

# DESIGN PATTERNS & PRINCIPLES - 1 DAY

Aims to improve the design skills of the developers. Discusses the most useful OOP and Functional Programming patterns. An engaging mix of theoretical concepts with hands-on practice on exercises distilled from real-world problems, either (a) simplified, language agnostic, or (b) implemented on Spring. <a href="http://victorrentea.ro/#patterns">http://victorrentea.ro/#patterns</a>

# CLEAN CODE & CODING DOJO – 1 DAY

Covers best practices in crafting clean, simple code that is easy to understand and maintain. Based on the "Clean Code" reference book, plus many additions, nuances and discussions. During the second half of the day we apply these principles solving 1-2 coding katas, discovering more ideas and techniques useful in day-to-day practice. http://victorrentea.ro/#clean-code

## UNIT TESTING & TDD – 1 DAY

Teaches developers WHY and HOW to write expressive, reliable and maintainable unit tests. We discuss principles and practical techniques, work a TDD kata together, learn about Mocks, and Behavior-Driven Design. Optionally, we can cover unit-testing code talking to a database. http://victorrentea.ro/#unit-testing

#### JAVA ONLY:

# SPRING FRAMEWORK – 1-3 DAYS

Adjusted to the needs of the participants, we can cover all/some of: @Autowired, life-cycles, aspects, @Value, MVC, @Transactional, @Async, Spring Boot, Spring Data JPA, Spring Batch, Spring Cloud (+other Spring topic you want). We'll build an app from scratch, during a continuous hands-on workshop. <a href="http://victorrentea.ro/#spring">http://victorrentea.ro/#spring</a>

## JPA - 2 DAYS

The first day we cover the most useful 'static' ORM features. Split in teams, the developers will annotate a domain model observing the generated schema. During the second day, we discuss the runtime behavior of JPA, tips & tricks, best practices and common pitfalls, experimenting each feature ourselves. <a href="http://victorrentea.ro/#jpa">http://victorrentea.ro/#jpa</a>

# JAVA 8 BEST PRACTICES - 1 DAY

Learn Lambdas, Streams and Completable Futures hands-on, from scratch, during a full-day workshop. Includes a live-coding marathon proving design principles and best practices with Java 8. Recommended even for those already experienced in Java8. <a href="http://victorrentea.ro/#java8">http://victorrentea.ro/#java8</a>

# JAVA PERFORMANCE – 2 DAYS

Learn about the Just-In-Time Compiler, Garbage Collector, writing micro-benchmarks, designing robust parallel code and techniques for debugging multithreaded code. A mix of theory and hands-on exercises. Includes a "bring your own problem" section, to discuss or attempt to solve real issues the participants have/have had. <a href="http://victorrentea.ro/#performance">http://victorrentea.ro/#performance</a>

**Other topics:** Scala, Java EE Stack, myBatis, WSDL webservices, Pragmatic UML, XSD+JAXB, Architectures, <u>your topic?</u>