

Training program:

Advanced JPA

Info:

Name:	Advanced JPA
Code:	jpa-pro
Category:	Advanced Java
Target audience:	developers
Duration:	2 days
Format:	50% lecture / 50% workshop

Training program

1. Object-oriented modeling

1.1. Rich entities - Domain Driven Design building blocks

1.2. References and their owners

1.3. Aggregate roots - Base classes

1.4. ValueObjects - immutability

2. Architecture

2.1. Base DAO/Repository

2.2. Command-query Responsibility Segregation

3. Advanced mapping

3.1. Embedded Value Objects

3.2. One-to-Many

3.2.1. Set

3.2.2. Bag

3.2.3. List

3.3. performance

3.3.1. Proxy

3.3.2. Dynamic Update

3.4. Cascades

3.5. ID

3.5.1. natural

3.5.2. app generated UUID

3.6. Inheritance and alternatives

3.6.1. Party Archetype

3.6.2. Role Object Pattern

4. Events and callbacks**5. Performance pitfalls**

5.1. „n+1 Select problem“

5.1.1. detection

5.1.2. JOIN FETCH

5.1.3. Batch size

6. Batch operations pitfalls

6.1. L1 Cache

6.2. L2 Cache

6.3. versioning

7. Native SQL**8. Hibernate cache****9. Entity Manager - extended mode****10. Testability****11. Transactions****12. Blocking**

12.1. Optimistic

12.2. Pessimistic

13. Multi-tenant architecture