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AENOR
GESTIÓN
DE LA CALIDAD
ISO 9001

English Delivery Only: JPA and Hibernate

Duración: 3 Días   Código del Curso: HIBI   Método de Impartición: Curso Remoto (Virtual)

Temario:

*** Course delivered in English (UK) ***JPA and Hibernate Course Overview
Hibernate is the primary JPA implementation and the most popular Java ORM framework. It dramatically reduces boilerplate code,eliminates vendor specific SQL,and eases the reading and writing of composite objects and specialisations to the database.
This JPA and Hibernate course delivered using JPA v3 and Hibernate v6,focuses on the practical aspects of using the framework as part of the technology stack. Attendees will learn how to persist the instances of classes that follow natural object-oriented idioms including composition and inheritance.
Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

Curso Remoto (Abierto)

Nuestra solución de formación remota o virtual, combina tecnologías de alta calidad y la experiencia de nuestros formadores, contenidos, ejercicios e interacción entre compañeros que estén atendiendo la formación, para garantizar una sesión formativa superior, independiente de la ubicación de los alumnos.

Dirigido a:

Who will the Course Benefit?

Objetivos:

■ Course Objectives

■ This course aims to provide the delegate with the knowledge to be able to develop (or contribute to the development of) enterprise-level Java applications that use JPA and Hibernate to read from and write to relational databases.

Prerequisitos:

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Delegates attending this course should be competent Java developers who have a good understanding of OO principles and are able to build simple applications that exploit APIs including Collections,IO,and JDBC in particular. This knowledge can be obtained by attendance on the pre-requisite Java Programming 1 / Java Developer course.

Siguientes cursos recomendados:

Further Learning

■ Developing Applications with Java EE
■ Core Spring (4 day)

Contenido:

JPA and Hibernate Training Course Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: INTRODUCTION TO HIBERNATE

- The problems with JDBC
- About ORM
- The relationship between JPA and Hibernate
- Hibernate architecture
- Installing Hibernate
- Configuring the SessionFactory (XML and Java)
- Obtaining and using a Session (basic)

Session 2: BASIC ENTITY MAPPING

- About entity mapping
- XML mapping
- Annotation mapping
- Entity types
- Value types
- Embeddable types
- Collections
- Key generation

Session 3: THE HIBERNATE SESSION

- About the Hibernate Session
- Transient,persistent,and detached entity states
- Hibernate transactions
- Using the Session to perform basic CRUD operations   JPA and Hibernate Training Course Course Contents - DAY 2

Session 4: COMPOSITE MAPPING

- About composite mapping
- One-to-one
- One-to-many
- Many-to-many
- Uni vs bi-directional associations
- Cascading
- Eager vs lazy fetching
- The n+1 problem

Session 5: INHERITANCE MAPPING

- About inheritance mapping
- Mapped superclass
- Single table
- Joined table
- Table per class
- Polymorphic queries JPA and Hibernate Training Course Course Contents - DAY 3

Session 6: HIBERNATE QUERY LANGAUGE (HQL)

- About Hibernate Query Language (HQL)
- Basic queries
- Querying for a subset of the class's fields
- Literal,ordinal,and named parameters
- Single result queries
- Functions
- Queries with joins
- Eager fetching
- Ordering
- Grouping
- Native queries
- Named queries
- An introduction to criteria queries

Session 7: THE JPA ENTITYMANAGER

- About the JPA EntityManager
- Configuring the EntityManagerFactory (XML and Java)
- Obtaining and using an EntityManager (basic)
- About the Persistence Context
- About the JPA Query Language (JPQL)
- JPA EntityManager vs Hibernate Session

Session 8: PERFORMANCE TUNING

- Discovering performance issues
- Choosing the right fetch type
- Query-specific fetching
- Using Sets,not Lists,for many-to-many associations
- Having the database do the heavy lifting
- First and second-level cache
- Performing bulk updates

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

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