



ActiveLearning, Inc.

Unit 810 Medical Plaza Ortigas Bldg.
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Introduction to Hibernate

Duration: 3 days

You Will Learn How To:

- Implement object persistence with Hibernate
- Map objects to databases using XML and annotations
- Optimize data access with Hibernate Query Language (HQL)

Course Benefits

Moving data back and forth from a database system and the object model of a Java application is harder than it seems to be. In this course, Java developers learn how to quickly build enterprise Java applications using the industry-standard Hibernate framework. Through intensive hands-on exercises, you learn how to bridge the gap between object-oriented domain models and relational database systems.

Who Should Attend

Architects, programmers, engineers, managers and those involved in the development of complex enterprise-level Java applications. Knowledge of Java at the level of Course 321 - Java Programming, plus real-world Java programming experience, is assumed.

Course Content

Introduction

- What is Hibernate?
- Object Relational Mapping
- JDBC vs Hibernate
- Installing Hibernate
- Using Hibernate with an IDE

Getting Started

- POJOs and Persistence
- Creating Hibernate Mappings
- Configuration
- SessionFactory
- Session
- Working with Entities
- Transactions
- Queries
- Tying Everything Together



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Mapping with Annotations

- Introduction to Annotations
- Annotation Pros and Cons
- Using Annotations in Your Application
- Mapping Entities and Tables
- Mapping Columns and Data Types
- Mapping Associations
- Mapping Collections

Mapping with XML

- Mapping Entities and Tables
- Mapping Columns and Data Types
- Mapping Associations
- Mapping Collections

Working with Persistent Objects

- Object states in Hibernate
- Common Hibernate Methods
- Working with Entities
- Working with Bidirectional Associations
- Flushing the Session
- Cascading Operations
- Orphans
- Lazy Associations

Querying with HQL

- The Hibernate Query Language
- Retrieving Data
- Using Operators
- Sorting Results
- Using Aggregate Functions
- Grouping Results
- Using Joins
- Using Parameters

Transactions and Concurrency

- Hibernate and Thread-Safety
- Introducing the `HibernateUtil` Class
- Committing and Rolling Back Transactions