Java Spring and Hibernate Training: Developing Enterprise Java Applications

Level: Advanced

RATING: 4.70/5 Based on 161 Reviews

Increase productivity, accelerate development, and quickly build enterprise Java applications with this Spring and Hibernate training course. Learn how to simplify development and reduce code complexity with Spring, and use Hibernate — a framework for persisting Java objects in a relational database — to minimize time spent on the low-level implementation of database storage. Through intensive hands-on exercises, you gain the skills to implement high-performance applications while reducing development time; apply robust transaction-handling policies; and modularize functionality using Aspect Oriented Programming (AOP). You also learn how to optimize data access with Hibernate Query Language (HQL).

Key Features of this Java Spring and Hibernate Training

- After-course instructor coaching benefit
- Learning Tree end-of-course exam included
- After-course computing sandbox included

You Will Learn How To

- Build scalable, high-performance applications while reducing development time
- Leverage Spring IOC to implement transaction-aware, flexible business objects
- Store and retrieve data objects with Hibernate
- Integrate Spring and Hibernate

Choose the Training Solution That Best Fits Your Individual Needs or Organizational Goals

Live, Instructor-Led - In Class & Live, Online Training

PRODUCT #517 - $2990

- 4-day instructor-led training course
- After-course instructor coaching benefit
- Learning Tree end-of-course exam included
- Earn 23 NASBA credits (live, in-class training only)

Training At Your Site - Team Training

PRODUCT #517 - $2990

- Bring this or any training to your organization
- Full-scope program development
- Delivered when, where, and how you want it
- Blended learning models
- Tailored content
- Expert team coaching

In Class & Live, Online Training

Java Spring and Hibernate Course Information

- Requirements
  - Knowledge at the level of:
    - Course 471, Java Programming Introduction
  - Three to six months of Java programming experience
You should be able to:

- Understand Java classes, the inheritance model, polymorphism, and encapsulation
- Use fundamental standard edition Java APIs
- Apply object-oriented analysis and design, including defining classes and creating objects

Java Spring and Hibernate Course Outline

- **Introducing the Spring Framework**

  Spring architecture fundamentals
  
  - Identifying Spring application components
  - Defining the n-tier application architecture

  Applying Inversion of Control (IoC) and Dependency Injection (DI)
  
  - Delegating object creation to the Spring bean factory
  - Controlling bean creation with scopes and methods

- **Constructing an Effective DataAccess Tier with Spring**

  Simplifying data access with JDBC templates
  
  - Streamlining runaway code with JDBC templates
  - Structuring queries and callbacks for maintainability

  Abstracting the Data Access Layer
  
  - Supporting the Data Access Object (DAO) pattern
  - Achieving implementation independence with platform agnostic exceptions

  Managing transactions
  
  - Analyzing Java EE transaction support
  - Controlling transactions with Spring transaction manager
  - Declaring transaction policies with XML and annotations

- **Building a Web Tier with Spring MVC**

  Processing web requests
  
  - Analyzing Spring MVC architecture
  - Mapping requests to controllers with annotations
  - Processing commands, form submissions and wizards

  Rendering the response
  
  - Spring JSP support
  - View technology alternatives with Velocity

  Building Ajax controllers
  
  - Establishing the requirements for Ajax controllers
  - Implementing REST-style URLs

- **Persisting Objects with Hibernate**

  Integrating Hibernate
  
  - Simplifying data access with O/R mapping
  - Unraveling the Hibernate architecture
  - Deploying and configuring Hibernate

  Generating Hibernate applications
  
  - Developing the persistent class
  - Storing and retrieving Java objects

- **Handling Complex Object Relationships**
The role of the Hibernate Session

- Establishing a thread-safe session object
- Defining object states: transient, persistent, detached

Mapping collections

- Persisting and retrieving collections
- Preserving collection order for data integrity

Strategies for building object associations

- Specifying one-to-many and many-to-many relationships
- Controlling the association life cycle

Effectively mapping inheritance relationships

- Applying class rules for inheritance
- Techniques for class-database mapping

Optimizing Data Access

Applying Hibernate Query Language (HQL)

- Improving structure with named queries
- Augmenting HQL with native SQL
- Maximizing Hibernate performance

Team Training

Java Spring and Hibernate Training FAQs

- What is Spring and Hibernate?
  
  Spring and Hibernate is an application framework and inversion of control container for Java. Spring is a Java framework that simplifies and optimizes development, and Hibernate is an Object-to-Relational-Mapping (ORM) framework that simplifies access between a Java application and a database.

- Can I learn to develop Java enterprise applications with Spring & Hibernate online?

  Yes! We know your busy work schedule may prevent you from getting to one of our classrooms which is why we offer convenient online training to meet your needs wherever you want, including online training.

Schedule of events

In the Classroom — OR — Live, Online

Tuition — Standard: $2990  Government: $2659

Dec 17 - 20 Online (AnyWare)** (4 Days)
Jan 14 - 17 Toronto / Online (AnyWare) (4 Days)
Feb 4 - 7 Ottawa / Online (AnyWare)** (4 Days)
Mar 3 - 6 Rockville, MD / Online (AnyWare) (4 Days)
Apr 14 - 17 New York / Online (AnyWare) (4 Days)
May 12 - 15 Herndon, VA / Online (AnyWare) (4 Days)
Jun 16 - 19 Alexandria, VA / Online (AnyWare) (4 Days)
Jul 14 - 17 Toronto / Online (AnyWare) (4 Days)
Aug 4 - 7 Ottawa / Online (AnyWare) (4 Days)
Sep 1 - 4 Rockville, MD / Online (AnyWare) (4 Days)