Java Persistence With Hibernate Second Edition Meap

Implement JPA repositories and harness the performance of Redis in your applications.

JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. Summary JUnit is the gold standard for unit testing Java applications. Filled with powerful new features designed to automate software testing, JUnit 5 boosts your productivity and helps avoid debugging nightmares. Whether you're just starting with JUnit or you want to ramp up on the new features, JUnit in Action, Third Edition has you covered. Extensively revised with new code and new chapters, JUnit in Action, Third Edition is an up-to-date guide to smooth software testing. Dozens of hands-on examples illustrate JUnit 5's innovations for dependency injection, nested testing, parameterized tests, and more. Throughout, you'll learn how to use JUnit 5 to automate your testing, for a process that consumes less resources, and gives you more time for developing. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology The JUnit framework is the gold standard for unit testing Java applications—and knowing it is an essential skill for Java developers. The latest version, JUnit 5, is a total overhaul, now supporting modern Java features like Lambdas and Streams. About the book JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. You'll benefit from author Catalin Tudose's unique "pyramid" testing strategy, which breaks the testing process into layers and sets you on the path to bug-free code creation. What's inside Migrating from JUnit 4 to 5 Effective test automation Test-driven development and behavior-driven development Using mocks for test isolation Connecting JUnit 5 with Maven or Gradle About the reader For intermediate Java developers. About the author Catalin Tudose has a Ph.D. in Computer Science, and over 15 years of experience as a Senior Java Developer and Technical Team Lead. Previous editions were authored by Petar Tahchiev, Felipe Leme, Gary Gregory, and Vincent Massol. Table of Contents PART 1 - JUNIT 1 JUnit jump-start 2 Exploring core JUnit 3 JUnit architecture 4 Migrating from JUnit 4 to JUnit 5 5 Software testing principles PART 2 - DIFFERENT TESTING STRATEGIES 6 Test quality 7 Coarse-grained testing with stubs 8 Testing with mock objects 9 In-container testing PART 3 - WORKING WITH JUNIT 5 AND OTHER TOOLS 10 Runing JUnit tests from Maven 3 11 Running JUnit tests from Gradle 6 12 JUnit 5 IDE support 13 Coninuous integration with JUnit 5 PART 4 - WORKING WITH MODERN FRAMEWORKS AND JUNIT 5 14 JUnit 5 extension model 15 Presentation-layer testing 16 Testing Spring applications 17 Testing Spring Boot applications 18 Testing a REST API 19 Testing database applications PART 5 - DEVELOPING APPLICATIONS WITH JUNIT 5 20 Test-driven development with JUnit 5 21 Behavior-driven development in JUnit 5 22 Implementing a test pyramid strategy with JUnit 5

Grails is a full stack framework which aims to greatly simplify the task of building serious web applications for the JVM. The concepts within Grails, like interceptors, tag libs, and Groovy Server Pages (GSP), make those in the Java community feel right at home. Grails' foundation is on solid open source technologies such as Spring, Hibernate, and SiteMesh, which gives it even more potential in the Java space: Spring provides powerful inversion of control and MVC, Hibernate brings a stable, mature object relational mapping technology with the ability to integrate with legacy systems, and SiteMesh handles flexible layout control and page decoration. Grails complements these with additional features that take advantage of the coding-by-convention paradigm such as dynamic tag libraries, Grails object relational mapping, Groovy Server Pages, and scaffolding. Graeme Rocher, Grails lead and founder, and Jeff Brown bring you completely up-to-date with their authoritative and fully comprehensive guide to the Grails 2 framework. You'll get to know all the core features, services, and Grails extensions via plug-ins, and understand the roles that Groovy and Grails are playing in the changing Web.

A guide to using Hibernate covers such topics as ORM, application architecture, and developer tools.

Hibernate

Spring Batch in Action

A Problem-Solution Approach

Hibernate Made Easy

In-Depth Advice for Tuning and Programming Java 8, 11, and Beyond

Spring Boot Persistence Best Practices

JDBC has simplified database access in Java applications, but a few nagging wrinkles remain—namely, persisting Java objects to relational databases. With this book, you'll learn how the Spring Framework makes that job incredibly easy with dependency injection, template classes, and object-relational-mapping (ORM). Through sample code, you'll discover how Spring streamlines the use of JDBC and ORM tools such as Hibernate, the Java Persistence API (JPA), and Java Data Objects (JDO). If you're a Java developer familiar with Spring (perhaps through O'Reilly's Just Spring tutorial) and want to advance your data access skills, this book shows you how. Learn how to use Spring's basic and advanced data access tools Work with Spring's JdbcTemplate class to separate non-critical code from business code Eliminate placeholder variables in your queries with the NamedParameterJdbcTemplate class Use Spring's template classes to perform batch executions Operate inserts on database tables without writing any SQL statements Learn about Spring's support for Hibernate as an object-relational-mapping tool Use JPA as a standards-based ORM—alone or with Spring support Move data from a relational to a non-relational database with JDO

McKenzie brings to light the idea that a technology that is fun and easy to use should also be fun and easy to learn. Building upon simple, straightforward examples, this book explores the key concepts needed to leverage the Hibernate framework. (Computer Books)

Coding and testing are generally considered separate areas of expertise. In this practical book, Java expert Scott Oaks takes the approach that anyone who works with Java should be adept at understanding how code behaves in the Java Virtual Machine—including the tunings likely to help performance. This updated second edition helps you gain in-depth knowledge of Java application performance using both the JVM and the Java platform. Developers and performance engineers alike will learn a variety of features, tools, and processes for improving the way the Java 8 and 11 LTS releases perform. While the emphasis is on production-supported releases and features, this book also features previews of exciting new technologies such as ahead-of-time compilation and experimental garbage collections. Understand how various Java platforms and compilers affect performance Learn how Java garbage collection works Apply four principles to obtain best results from performance testing Use the JDK and other tools to learn how a Java application is performing Minimize the garbage collector's impact through tuning and programming practices Tackle performance issues in Java APIs Improve Java-driven database application performance

With over 75 million downloads per month, Spring Boot is the most widely used Java framework available. Its ease and power have revolutionized application development from monoliths to microservices. Yet Spring Boot's simplicity can also be confounding. How do developers learn enough to be productive immediately? This practical book shows you how to use this framework to write successful mission-critical applications. Mark Heckler from VMware, the company behind Spring, guides you through Spring Boot's architecture and approach, covering topics such as debugging, testing, and deployment. If you want to develop cloud native Java or Kotlin applications with Spring Boot rapidly and effectively--using reactive programming, building APIs, and creating database access of all kinds--this book is for you. Learn how Spring Boot simplifies cloud native application development and deployment Build reactive applications and extend communication across the network boundary to create distributed systems Understand how Spring Boot's architecture and approach increase developer productivity and application portability Deploy Spring Boot applications for production workloads rapidly and reliably Monitor application and system health for optimal performance and reliability Debug, test, and secure cloud-based applications painlessly

Mastering Java Persistence API (JPA)

Optimize Java Persistence Performance in Spring Boot Applications

The Definitive Guide to Grails 2

Hibernate Recipes

Hibernate Search in Action

Java Persistence from Beginner to Pro

Learn how to use the core Hibernate APIs and tools as part of the Spring Framework. This book illustrates how these two frameworks can be best utilized. Other persistence solutions available in Spring are also shown including the Java Persistence API (JPA). Spring Persistence with Hibernate, Second Edition has been updated to cover Spring Framework version 4 and Hibernate version 5. After reading and using this book, you'll have the fundamentals to apply these persistence solutions into your own mission-critical enterprise Java applications that you build using Spring. Persistence is an important set of techniques and technologies for accessing and using data, and ensuring that data is mobile regardless of specific applications and contexts. In Java development, persistence is a key factor in enterprise, e-commerce, and other transaction-oriented applications. Today, the agile and open source Spring Framework is the leading out-of-the-box, open source solution for enterprise Java developers; in it, you can find a number of Java persistence solutions. What You'll Learn Use Spring Persistence, including using persistence tools in Spring as well as choosing the best Java persistence frameworks outside of Spring Take advantage of Spring Framework features such as Inversion of Control (IoC), aspect-oriented programming (AOP), and more Work with Spring JDBC, use declarative transactions with Spring, and reap the benefits of a lightweight persistence strategy Harness Hibernate and integrate it into your Spring-based enterprise Java applications for transactions, data processing, and more Integrate JPA for creating a well-layered persistence tier in your enterprise Java application Who This Book Is For This book is ideal for developers interested in learning more about persistence framework options on the Java platform, as well as fundamental Spring concepts. Because the book covers several persistence frameworks, it is suitable for anyone interested in learning more about Spring or any of the frameworks covered. Lastly, this book covers advanced topics related to persistence architecture and design patterns, and is ideal for beginning developers looking to learn more in these areas.

The agile, lightweight, open-source Spring Framework continues to be the de facto leading enterprise Java application development framework for today's Java programmers and developers. It works with other leading open-source, agile and lightweight Java technologies like Hibernate, Groovy, MyBatis, and more. Spring now also works with Java EE and JPA 2 as well. Pro Spring 3 updates the bestselling Pro Spring with the latest that the Spring Framework has to offer: version 3.1. At 1000 pages, this is by far the most comprehensive Spring book available, thoroughly exploring the power of Spring. With Pro Spring 3, you'll learn Spring basics and core topics, and gain access to the authors' insights and real–world experiences with remoting, Hibernate, and EJB. Beyond the basics, you'll learn how to leverage the Spring Framework to build various tiers or parts of an enterprise Java application like transactions, the web and presentations tiers, deployment, and much more. A full sample application allows you to apply many of the technologies and techniques covered in this book and see how they work together. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom.

Solutions for modular, functional, reactive, GUI, network, and multithreaded programming Key FeaturesExplore the latest features of Java 11 to implement efficient and reliable codeDevelop memory-efficient applications, understanding new garbage collection in Java 11Create restful webservices and microservices with Spring boot 2 and DockerBook Description For more than three decades, Java has been on the forefront of developing robust software that has helped versatile businesses meet their requirements. Being one of the most widely used programming languages in history, it's imperative for Java developers to discover effective ways of using it in order to take full advantage of the power of the latest Java features. Java 11 Cookbook offers a range of software development solutions with simple and straightforward Java 11 code examples to help you build a modern software system. Starting with the installation of Java, each recipe addresses various problem by explaining the solution and offering insights into how it works. You'll explore the new features added to Java 11 that will make your application modular, secure, and fast. The book contains recipes on functional programming, GUI programming, concurrent programming, and database programming in Java. You'll also be taken through the new features introduced in JDK 18.3 and 18.9. By the end of this book, you'll be equipped with the skills required to write robust, scalable, and optimal Java code effectively. What you will learnSet up JDK and understand what's new in the JDK 11 installationImplement object-oriented designs using classes and interfacesManage operating system processesCreate a modular application with clear dependenciesBuild graphical user interfaces using JavaFXUse the new HTTP Client APIExplore the new diagnostic features in Java 11Discover how to use the new JShell REPL toolWho this book is for The book is for intermediate-to-advanced Java programmers who want to make their applications fast, secure, and scalable.

HIGHLIGHT Hibernate Search in Action presents the concepts and techniques a Java developer needs to add full-featured search to enterprise applications. Author Emmanuel Bernard is the lead developer of the Hibernate Search project at RedHat/JBoss. DESCRIPTION Enterprise and web applications require full-featured, "Google-quality" search ......

A Lightweight Introduction to the Hibernate Framework

Mastering Hibernate

Beginning Hibernate

JUnit in Action

Hibernate in Action

Just Hibernate

Summary Grails in Action, Second Edition is a comprehensive introduction to Grails 2 focused on making you super-productive fast. In this totally revised new edition, you'll master Grails 2.3 core skills as you apply TDD techniques to developing a full-scale Twitter clone. Along the way you'll learn the latest single-page web app UI techniques, work with NoSQL backends, integrate with enterprise messaging, and implement a complete RESTful API for your services. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology It may be time for you to stop reconfiguring, rewriting, and recompiling your Java web apps. Grails, a Groovy-powered web framework, hides all that busy work so you can concentrate on what your applications do, not how they're built. In addition to its famously intuitive dev environment and seamless integration with Spring and Hibernate, the new Grails 2.3 adds improved REST support, better protection against attacks from the web, and better dependency resolution. About the Book Grails in Action, Second Edition is a comprehensive introduction to Grails 2. In this totally revised edition you'll master Grails as you apply TDD techniques to a full-scale example (a Twitter clone). Along the way you'll learn single-page web app techniques, work with NoSQL back ends, integrate with enterprise messaging, implement a RESTful API ... and more. No Java or Groovy knowledge is required. Some web development and OOP experience is helpful. What's Inside Covers Grails 2.3 from the ground up Agile delivery and testing using Spock How to use and manage plugins Tips and tricks from the trenches About the Authors There's no substitute for experience: Glen Smith and Peter Ledbrook have been fixtures in the Grails community, contributing code, blogging, and speaking at conferences worldwide, since Grails 0.2. Table of Contents PART 1 INTRODUCING GRAILS Grails in a hurry The Groovy essentials PART 2 CORE GRAILS Modeling the domain 63 Creating the initial UI Retrieving the data you need Controlling application flow Services and data binding Developing tasty forms, views, and layouts PART 3 EVERYDAY GRAILS Building reliable applications Using plugins: just add water Protecting your application Exposing your app to other programs Single-page web applications (and other UI stuff) Understanding Spring and transactions PART 4 ADVANCED GRAILS Understanding events, messaging, and scheduling NoSQL and Grails Beyond compile, test, run Grails in the cloud BONUS ONLINE CHAPTERS Advanced GORM kung fu Developing plugins

If you're looking for a short, sweet, and simple introduction (or reintroduction) to Hibernate, this is the book you want. Through clear real-world examples, you'll learn Hibernate and object-relational mapping from the ground up, starting with the basics. Then you'll dive into the framework's moving parts to understand how they work in action. Storing Java objects in relational databases is usually a challenging and complex task for any Java developer, experienced or not. This book, like others in the Just series, delivers a concise, example-driven tutorial for Java beginners. You'll gain enough knowledge and confidence to start working on real-world projects with Hibernate. Compare how JDBC and Hibernate work with object persistence Learn how annotations are used to create Hibernate applications Understand how to persist and retrieve Java data structures Focus on the fundamentals of associations and their mappings Delve into advanced concepts such as caching, inheritance, and types Walk through the Hibernate Query Language API, with examples Develop Java Persistence API applications, using Hibernate as the provider Work hands-on with code snippets to understand the technology

Spring Security in Action shows you how to prevent cross-site scripting and request forgery attacks before they do damage. You'll start with the basics, simulating password upgrades and adding multiple types of authorization. As your skills grow, you'll adapt Spring Security to new architectures and create advanced OAuth2 configurations. By the time you're done, you'll have a customized Spring Security configuration that protects against threats both common and extraordinary. Summary While creating secure applications is critically important, it can also be tedious and time-consuming to stitch together the required collection of tools. For Java developers, the powerful Spring Security framework makes it easy for you to bake security into your software from the very beginning. Filled with code samples and practical examples, Spring Security in Action teaches you how to secure your apps from the most common threats, ranging from injection attacks to lackluster monitoring. In it, you'll learn how to manage system users, configure secure endpoints, and use OAuth2 and OpenID Connect for authentication and authorization. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Security is non-negotiable. You rely on Spring applications to transmit data, verify credentials, and prevent attacks. Adopting "secure by design" principles will protect your network from data theft and unauthorized intrusions. About the book Spring Security in Action shows you how to prevent cross-site scripting and request forgery attacks before they do damage. You'll start with the basics, simulating password upgrades and adding multiple types of authorization. As your skills grow, you'll adapt Spring Security to new architectures and create advanced OAuth2 configurations. By the time you're done, you'll have a customized Spring Security configuration that protects against threats both common and extraordinary. What's inside Encoding passwords and authenticating users Securing endpoints Automating security testing Setting up a standalone authorization server About the reader For experienced Java and Spring developers. About the author Laurentiu Spilca is a dedicated development lead and trainer at Endava, with over ten years of Java experience. Table of Contents PART 1 - FIRST STEPS 1 Security Today 2 Hello Spring Security PART 2 - IMPLEMENTATION 3 Managing users 4 Dealing with passwords 5 Implementing authentication 6 Hands-on: A small secured web application 7 Configuring authorization: Restricting access 8 Configuring authorization: Applying restrictions 9 Implementing filters 10 Applying CSRF protection and CORS 11 Hands-on: A separation of responsibilities 12 How does OAuth 2 work? 13 OAuth 2: Implementing the authorization server 14 OAuth 2: Implementing the resource server 15 OAuth 2: Using JWT and cryptographic signatures 16 Global method security: Pre- and postauthorizations 17 Global method security: Pre- and postfiltering 18 Hands-on: An OAuth 2 application 19 Spring Security for reactive apps 20 Spring Security testing

Java Persistence with HibernateSimon and Schuster

Spring Boot: Up and Running

Persistence Made Easy Using Java EE8, JPA and Spring

Better, Faster, Lighter Java

More than 70 solutions to common Hibernate problems

Simplified Data Persistence with Hibernate and JPA (Java Persistence API) Annotations

Realize Java's Capabilities Spanning RDBMS, ORM, JDBC, Caching, Locking, Transaction Management, and JPQL (English Edition)

When you use Hibernate in your projects, you quickly recognize that you need to do more than just add @Entity annotations to your domain model classes. Real-world applications often require advanced mappings, complex queries, custom data types and caching. Hibernate can do all of that. You just have to know which annotations and APIs you need to use. Hibernate Tips - More than 70 solutions to common Hibernate problems shows you how to efficiently implement your persistence layer with Hibernate's basic and advanced features. Each Hibernate Tip consists of one or more code samples and an easy to follow step-by-step explanation. You can also download an example project with executable test cases for each Hibernate Tip. Throughout this book, you will get more than 70 ready-to-use solutions that show you how to: - Define standard mappings for basic attributes and entity associations. - Implement your own attribute mappings and support custom data types. - Use Hibernate's Java 8 support and other proprietary features. - Read data from the database with JPQL, Criteria API, and native SQL queries. - Call stored procedures and database functions. This book is for developers who are already working with Hibernate and who are looking for solutions for their current development tasks. It's not a book for beginners who are looking for extensive descriptions of Hibernate's general concepts. The tips are designed as self-contained recipes which provide a specific solution and can be accessed when needed. Most of them contain links to related tips which you can follow if you want to dive deeper into a topic or need a slightly different solution. There is no need to read the tips in a specific order. Feel free to read the book from cover to cover or to just pick the tips that help you in your current project.

Summary Spring Batch in Action is an in-depth guide to writing batch applications using Spring Batch. Written for developers who have basic knowledge of Java and the Spring lightweight container, the book provides both a best-practices approach to writing batch jobs and comprehensive coverage of the Spring Batch framework. About the Technology Even though running batch jobs is a common task, there's no standard way to write them. Spring Batch is a framework for writing batch applications in Java. It includes reusable components and a solid runtime environment, so you don't have to start a new project from scratch. And it uses Spring's familiar programming model to simplify configuration and implementation, so it'll be comfortably familiar to most Java developers. About the Book Spring Batch in Action is a thorough, in-depth guide to writing efficient batch applications. Starting with the basics, it discusses the best practices of batch jobs along with details of the Spring Batch framework. You'll learn by working through dozens of practical, reusable examples in key areas like monitoring, tuning, enterprise integration, and automated testing. No prior batch programming experience is required. Basic knowledge of Java and Spring is assumed. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book. What's Inside Batch programming from the ground up Implementing data components Handling errors during batch processing Automating tedious tasks Table of Contents PART 1 BACKGROUND Introducing Spring Batch Spring Batch concepts PART 2 CORE SPRING BATCH Batch configuration Running batch jobs Reading data Writing data Processing data Implementing bulletproof jobs Transaction management PART 3 ADVANCED SPRING BATCH Controlling execution Enterprise integration Monitoring jobs Scaling and parallel processing Testing batch applications

Learn how to correctly utilize the most popular Object-Relational Mapping tool for your Enterprise application About This Book Understand the internals of Hibernate and its architecture, and how it manages Entities, Events, Versioning, Filters, and Cache Observe how Hibernate bridges the gap between object-oriented concepts and relational models Discover how Hibernate can address architectural concerns such as Transaction, Database Multi-tenancy, Clustering, and Database Shards Who This Book Is For Mastering Hibernate is intended for those who are already using or considering using Hibernate as the solution to address the problem of Object Relational Mapping. If you are already using Hibernate, this book will help you understand the internals and become a power user of Hibernate. What You Will Learn Understand the internals of a Hibernate session and how Entities are managed Declare better mapping between entity classes and database tables Manage entity associations and collections Fetch data not just by entity ID, but also using HQL, Criteria Objects, Filters, and Native SQL Observe the first and second level caches and find out how to manage them Collect statistics and metrics data for further observation Make your application work with multi-tenant databases In Detail Hibernate has been so successful since its inception that it even influenced the Java Enterprise Edition specification in that the Java Persistence API was dramatically changed to do it the Hibernate way. Hibernate is the tool that solves the complex problem of Object Relational Mapping. It can be used in both Java Enterprise applications as well as .Net applications. Additionally, it can be used for both SQL and NoSQL data stores. Some developers learn the basics of Hibernate and hit the ground quickly. But when demands go beyond the basics, they take a reactive approach instead of learning the fundamentals and core concepts. However, the secret to success for any good developer is knowing and understanding the tools at your disposal. It's time to learn about your tool to use it better This book first explores the internals of Hibernate by discussing what occurs inside a Hibernate session and how Entities are managed. Then, we cover core topics such as mapping, querying, caching, and we demonstrate how to use a wide range of very useful annotations. Additionally, you will learn how to create event listeners or interceptors utilizing the improved architecture in the latest version of Hibernate. Style and approach This book takes a close look at the core topics, and helps you understand the complex topics by showing you examples and giving you in-depth discussions.

This guide walks the reader through the ins and outs of using Hibernate, from installation and configuration, to complex associations and composite types.

Just Spring Data Access

Hibernate Quickly

Spring Data

Java Persistence with Jpa 2.1

Lambdas, streams, functional and reactive programming

Pro JPA 2

This book is the second edition to my previous book: Java Persistence with JPA (Outskirts Press, Denver, March 2010, ISBN: 978-1-4327-5585-0). It adds the new features of JPA 2.1, reorganizes some existing chapters, and updates code examples and tools. The goal of this book is to provide a concise and comprehensive coverage of JPA 2.1, which is part of Java EE 7 but can be used in Java SE as well. Concepts are illustrated through code examples for easy understanding. It may serve as an introductory text for Java developers who do not know anything about JPA, and a reference book for experienced JPA developers who may look up for concepts and code snippets while they develop complex JPA applications. This book covers Java Persistence API 2.1, the latest Java technology on persisting Java objects to relational databases. This is a new Java persistence standard based on object-relational mapping and utilizing object-oriented features of Java. It is expected to gradually replace JDBC and proprietary object-relational mapping frameworks and libraries for most Java applications with database access. JPA makes software development fun and leads to improved productivity. The book introduces concepts, techniques, and application trade-offs in a manner that is easy to understand and provides many code examples for an online book ordering system. The Java source code and database DDL scripts are freely downloadable from the author's web site. The book contains instructions on how to run the code examples so that the reader can easily learn the concepts through running the code. The book is suitable for Java developers and architects who want to learn this new and standard technology, but may not have prior knowledge of JPA. This book is also aimed at experienced JPA developers who may use this book as a reference, by providing complete coverage of JPA 2.1. It has a special chapter on JPA design patterns and performance tuning. This book will prove to be valuable for novice a

If you need to learn Spring, look no further than this widely beloved and comprehensive guide! Fully revised for Spring 5.3, and packed with interesting real-world examples to get your hands dirty with Spring. In Spring in Action, 6th Edition you will learn: Building reactive applications Relational and NoSQL databases Integrating via HTTP and REST-based services, and sand reactive RSocket services Reactive programming techniques Deploying applications to traditional servers and containers Securing applications with Spring Security Over the years, Spring in Action has helped tens of thousands of developers get a major productivity boost from Spring. This new edition of the classic bestseller covers all of the new features of Spring 5.3 and Spring Boot 2.4 along with examples of reactive programming, Spring Security for REST Services, and bringing reactivity to your databases. You'll also find the latest Spring best practices, including Spring Boot for application setup and configuration. About the technology Spring is required knowledge for Java developers! Why? Th is powerful framework eliminates a lot of the tedious configuration and repetitive coding tasks, making it easy to build enterprise-ready, production-quality software. The latest updates bring huge productivity boosts to microservices, reactive development, and other modern application designs. It's no wonder over half of all Java developers use Spring. About the book Spring in Action, Sixth Edition is a comprehensive guide to Spring's core features, all explained in Craig Walls' famously clear style. You'll put Spring into action as you build a complete database-backed web app step-by-step. This new edition covers both Spring fundamentals and new features such as reactive flows, Kubernetes integration, and RSocket. Whether you're new to Spring or leveling up to Spring 5.3, make this classic bestseller your bible! What's inside Relational and NoSQL databases Integrating via RSocket and REST-based services Reactive programming techniques Deploying applications to traditional servers and containers About the reader For beginning to intermediate Java developers. About the author Craig Walls is an engineer at VMware, a member of the Spring engineering team, a popular author, and a frequent conference speaker. Table of Contents PART 1 FOUNDATIONAL SPRING 1 Getting started with Spring 2 Developing web applications 3 Working with data 4 Working with nonrelational data 5 Securing Spring 6 Working with configuration properties PART 2 INTEGRATED SPRING 7 Creating REST services 8 Securing REST 9 Sending messages asynchronously 10 Integrating Spring PART 3 REACTIVE SPRING 11 Introducing Reactor 12 Developing reactive APIs 13 Persisting data reactively 14 Working with RSocket PART 4 DEPLOYED SPRING 15 Working with Spring Boot Actuator 16 Administering Spring 17 Monitoring Spring with JMX 18 Deploying Spring

Summary Building on the bestselling first edition, EJB 3 in Action, Second Edition tackles EJB 3.2 head-on, through numerous code samples, real-life scenarios, and illustrations. This book is a fast-paced tutorial for Java EE 6 business component development using EJB 3.2, JPA 2, and CDI. Besides covering the basics of EJB 3.2, this book includes in-depth EJB 3.2 internal implementation details, best practices, design patterns, and performance tuning tips. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book The EJB 3 framework provides a standard way to capture business logic in manageable server-side modules, making it easier to write, maintain, and extend Java EE applications. EJB 3.2 provides more enhancements and intelligent defaults and integrates more fully with other Java technologies, such as CDI, to make development even easier. EJB 3 in Action, Second Edition is a fast-paced tutorial for Java EE business component developers using EJB 3.2, JPA, and CDI. It tackles EJB head-on through numerous code samples, real-life scenarios, and illustrations. Beyond the basics, this book includes internal implementation details, best practices, design patterns, performance tuning tips, and various means of access including Web Services, REST Services, and WebSockets. Readers need to know Java. No prior experience with EJB or Java EE is assumed. What's Inside Fully revised for EJB 3.2 POJO persistence with JPA 2.1 Dependency injection and bean management with CDI 1.1 Interactive application with WebSocket 1.0 About the Authors Debu Panda, Reza Rahman, Ryan Cuprak, and Michael Remijan are seasoned Java architects, developers, authors, and community leaders. Debu and Reza coauthored the first edition of EJB 3 in Action. Table of Contents PART 1 OVERVIEW OF THE EJB LANDSCAPE What's what in EJB 3 A first taste of EJB PART 2 WORKING WITH EJB COMPONENTS Building business logic with session beans Messaging and developing MDBs EJB runtime context, dependency injection,and crosscutting logic Transactions and security Scheduling and timers Exposing EJBs as web services PART 3 USING EJB WITH JPA AND CDI JPA entities Managing entities JPQL Using CDI with EJB 3 PART 4 PUTTING EJB INTO ACTION Packaging EJB 3 applications Using WebSockets with EJB 3 Testing and EJB

A high-performance data access layer must resonate with the underlying database system. Knowing the inner workings of a relational database and the data access frameworks in use can make the difference between a high-performance enterprise application and one that barely crawls. This book is a journey into Java data access performance tuning. From connection management, to batch updates, fetch sizes and concurrency control mechanisms, it unravels the inner workings of the most common Java data access frameworks. The first part aims to reduce the gap between application developers and database administrators. For this reason, it covers both JDBC and the database fundamentals that are of paramount importance when reducing transaction response times. In this first part, you'll learn about connection management, batch updates, statement caching, result set fetching and database transactions. The second part demonstrates how you can take advantage of JPA and Hibernate without compromising application performance. In this second part, you'll learn about the most efficient Hibernate mappings (basic types, associations, inheritance), fetching best practices, caching and concurrency control mechanisms. The third part is dedicated to jOOQ and its powerful type-safe querying capabilities, like window functions, common table expressions, upsert, stored procedures and database functions.

Spring Persistence with Hibernate

Java Performance

Java 11 Cookbook

EJB 3 in Action

Pro Spring 3

Beginning Hibernate 6

Persistence is an important set of techniques and technologies for accessing and transacting data, and ensuring that data is mobile regardless of specific applications and contexts. In Java development, persistence is a key factor in enterprise, e-commerce, and other transaction-oriented applications. Today, the Spring framework is the leading out-of-the-box solution for enterprise Java developers; in it, you can find a number of Java Persistence solutions. This book gets you rolling with fundamental Spring Framework 3 concepts and integrating persistence functionality into enterprise Java applications using Hibernate, the JavaTM Persistence API (JPA) 2, and the Grails Object Relational Mapping tool, GORM. Covers core Hibernate fundamentals, demonstrating how the framework can be best utilized within a Spring application context Covers how to use and integrate JPA 2, found in the new Java EE 6 platform Covers how to integrate and use the new Grails persistence engine, GORM

A concise introduction to Hibernate's many configuration and design options distills the open source object/relational persistence and query service into digestible pieces with many code examples, practical usage scenarios, and coverage of the tools available. Original. (Advanced)

Master Java persistence using the industry-leading tools Spring Data and Hibernate. Java Persistence with Spring Data and Hibernate dives deep into persistence with the most popular available tools including Spring Data JPA, Spring Data JDBC, Spring Data REST, JPA, and Hibernate. Begin with a hands-on introduction to object-relational mapping (ORM), then dive into mapping strategies for linking up objects and your database. You ' ll learn about the different approach to transactions for both Hibernate and Spring Data, and even how to deliver Java persistence with non-relational databases. Finally, you ' ll explore testing strategies for persistent applications to keep your code clean and bug free. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Summary Java Persistence with Hibernate, Second Edition explores Hibernate by developing an application that ties together hundreds of individual examples. In this revised edition, authors Christian Bauer, Gavin King, and Gary Gregory cover Hibernate 5 in detail with the Java Persistence 2.1 standard (JSR 338). All examples have been updated for the latest Hibernate and Java EE specification versions. About the Technology Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. Persistence—the ability of data to outlive an instance of a program—is central to modern applications. Hibernate, the most popular Java persistence tool, offers automatic and transparent object/relational mapping, making it a snap to work with SQL databases in Java applications. About the Book Java Persistence with Hibernate, Second Edition explores Hibernate by developing an application that ties together hundreds of individual examples. You'll immediately dig into the rich programming model of Hibernate, working through mappings, queries, fetching strategies, transactions, conversations, caching, and more. Along the way you'll find a well-illustrated discussion of best practices in database design and optimization techniques. In this revised edition, authors Christian Bauer, Gavin King, and Gary Gregory cover Hibernate 5 in detail with the Java Persistence 2.1 standard (JSR 338). All examples have been updated for the latest Hibernate and Java EE specification versions. What's Inside Object/relational mapping concepts Efficient database application design Comprehensive Hibernate and Java Persistence reference Integration of Java Persistence with EJB, CDI, JSF, and JAX-RS * Unmatched breadth and depth About the Reader The book assumes a working knowledge of Java. About the Authors Christian Bauer is a member of the Hibernate developer team and a trainer and consultant. Gavin King is the founder of the Hibernate project and a member of the Java Persistence expert group (JSR 220). Gary Gregory is a principal software engineer working on application servers and legacy integration. Table of Contents PART 1 GETTING STARTED WITH ORM Understanding object/relational persistence Starting a project Domain models and metadata PART 2 MAPPING STRATEGIES Mapping persistent classes Mapping value types Mapping inheritance Mapping collections and entity associations Advanced entity association mappings Complex and legacy schemas PART 3 TRANSACTIONAL DATA PROCESSING Managing data Transactions and concurrency Fetch plans, strategies, and profiles Filtering data PART 4 WRITING QUERIES Creating and executing queries The query languages Advanced query options Customizing SQL

Spring in Action, Sixth Edition

Spring Data Standard Guide

From Novice to Professional

Rapid Java Persistence and Microservices

A Developer's Notebook

Sometimes the simplest answer is the best. Many Enterprise Java developers, accustomed to dealing with Java's spiraling complexity, have fallen into the habit of choosing overly complicated solutions to problems when simpler options are available. Building server applications with "heavyweight" Java-based architectures, such as WebLogic, JBoss, and WebSphere, can be costly and cumbersome. When you've reached the point where you spend more time writing code to support your chosen framework than to solve your actual problems, it's time to think in terms of simplicity.In Better, Faster, Lighter Java, authors Bruce Tate and Justin Gehtland argue that the old heavyweight architectures are unwieldy, complicated, and contribute to slow and buggy application code. As an alternative means for building better applications, the authors present two "lightweight" open source architectures: Hibernate--a persistence framework that does its job with a minimal API and gets out of the way, and Spring--a container that's not invasive, heavy or complicated.Hibernate and Spring are designed to be fairly simple to learn and use, and place reasonable demands on system resources. Better, Faster, Lighter Java shows you how they can help you create enterprise applications that are easier to maintain, write, and debug, and are ultimately much faster.Written for intermediate to advanced Java developers, Better, Faster, Lighter Java, offers fresh ideas--often unorthodox--to help you rethink the way you work, and techniques and principles you'll use to build simpler applications. You'll learn to spend more time on what's important. When you're finished with this book, you'll find that your Java is better, faster, and lighter than ever before.

Get started with Hibernate, an open source Java persistence layer and gain a clear introduction to the current standard for object-relational persistence in Java. This updated edition includes the new Hibernate 6.0 framework which covers new configuration, new object relational mapping changes, and enhanced integration with the more general Spring, Boot and Quarkus and other Java frameworks. The book keeps its focus on Hibernate without wasting time on nonessential third-party tools, so you'll be able to immediately start building transaction-based engines and applications. Experienced authors Joseph Ottinger with Dave Minter and Jeff Linwood provide more in-depth examples than any other book for Hibernate beginners. They present their material in a lively, example-based manner—not a dry, theoretical, hard-to-read fashion. What You'll Learn Build enterprise Java-based transaction-type applications that access complex data with Hibernate Work with Hibernate 6 using a present-day build process Integrate into the persistence life cycle Search and query with the new version of Hibernate Keep track of versioned data with Hibernate Envers Who This Book Is For Programmers experienced in Java with databases (the traditional, or connected, approach), but new to open-source, lightweight Hibernate.

You can choose several data access frameworks when building Java enterprise applications that work with relational databases. But what about big data? This hands-on introduction shows you how Spring Data makes it relatively easy to build applications across a wide range of new data access technologies such as NoSQL and Hadoop. Through several sample projects, you'll learn how Spring Data provides a consistent programming model that retains NoSQL-specific features and capabilities, and helps you develop Hadoop applications across a wide range of use-cases such as data analysis, event stream processing, and workflow. You'll also discover the features Spring Data adds to Spring's existing JPA and JDBC support for writing RDBMS-based data access layers. Learn about Spring's template helper classes to simplify the use of database-specific functionality Explore Spring Data's repository abstraction and advanced query functionality Use Spring Data with Redis (key/value store), HBase (column-family), MongoDB (document database), and Neo4j (graph database) Discover the GemFire distributed data grid solution Export Spring Data JPA-managed entities to the Web as RESTful web services Simplify the development of HBase applications, using a lightweight object-mapping framework Build example big-data pipelines with Spring Batch and Spring Integration

Hibernate continues to be the most popular out-of-the-box framework solution for Java Persistence and data/database accessibility techniques and patterns. It is used for e-commerce–based web applications as well as heavy-duty transactional systems for the enterprise. Gary Mak, the author of the best-selling Spring Recipes, now brings you Hibernate Recipes. This book contains a collection of code recipes and templates for learning and building Hibernate solutions for you and your clients. This book is your pragmatic day-to-day reference and guide for doing all things involving Hibernate. There are many books focused on learning Hibernate, but this book takes you further and shows how you can apply it practically in your daily work.

Java Persistence with Spring Data and Hibernate

For Hibernate 5

Modern Java in Action

Grails in Action

Covers JDBC, Hibernate, JPA and JDO

Hibernate Tips

Filled with sample case study, exercises, commonly faced issues/solutions, and important interview questions, this book is surely going to help developers to expand their skills in JPA. KEY FEATURES ● Covers every JPA capability with detailed examples. ● Explanation of popular JPA providers in detail as well as sample JPA code. ● Includes solutions geared toward developers, interview questions, and expert advice. DESCRIPTION 'Mastering Java Persistence API' is geared towards experiencing the functioning of JPA and the extent of its use in Java SE and Java EE applications. While the book's primary objective is to develop competence in JPA, it also takes a simpler approach to refresh readers on basic database management system concepts and how to design simple JPA applications. The book begins with the ideas like ORM, EJB

CMP, and the difficulties associated with data conversion from a database to an application and vice versa are handled spontaneously. The book discusses Table, Row, Column, Cell, and various forms of Relationships and progress sequentially through the JPA concepts. It also discusses database processes such as identity generation, sequencing, locking, querying, persisting, caching, and transaction management in detail and emphasizes how JPA handles them. Further, the book covers the architecture and setup of two of the most extensively used JPA provider implementations (Hibernate and EclipseLink) in detail. Additionally, this book includes sample functioning code for connecting to a MySQL database. Each JPA functionality is illustrated with a code snippet, making it easier to modify these features as the application develops. This book teaches both beginners and seasoned professionals how to integrate JPA concepts in their employment through numerous problems and answers spanning each of the topics. WHAT YOU WILL LEARN ⬮ Refresh your knowledge of relational database management system concepts in an object-oriented approach. ⬮ Using JPA, you can create a table, row, column, key, query, data type, etc. ⬮ Prepare for your first JPA project by working through the Mavenized Sample working code. ⬮ Identify various ways for object-oriented representation of relationships. ⬮ Acquire proficiency in various approaches for storing, caching, and transaction management. ⬮ Discover the inner workings of JPA providers, Hibernate, and EclipseLink, as well as their architecture. WHO THIS BOOK IS FOR This book is aimed at Java developers who wish to master JPA and develop JPA-based applications enthusiastically. To get the most out of this book, you should have a basic familiarity with Java programming. TABLE OF CONTENTS 1. Java Persistence API and Object-Relational Mapping 2. Tables – Attributes and Embeddable Objects 3. Operations – Identity, Sequencing and Locking 4. Relationships – Types and Strategies 5. Query Infrastructure 6. Entity Manager – Persisting, Caching, and Transaction 7. Hibernate and EclipseLink 8. Appendix Part 1: JPA Advanced Topics 9. Appendix Part 2: Sample JPA Application and Questions

Get started with the Hibernate 5 persistence layer and gain a clear introduction to the current standard for object-relational persistence in Java. This updated edition includes the new Hibernate 5.0 framework as well as coverage of NoSQL, MongoDB, and other related technologies, ranging from applications to big data. Beginning Hibernate is ideal if you're experienced in Java with databases (the traditional, or connected, approach), but new to open-source, lightweight Hibernate. The book keeps its focus on Hibernate without wasting time on nonessential third-party tools, so you'll be able to immediately start building transaction-based engines and applications. Experienced authors Joseph Ottinger with Dave Minter and Jeff Linwood provide more in-depth examples than any other book for Hibernate beginners. They present their material in a lively, example-based manner—not a dry, theoretical, hard-to-read fashion. What You'll Learn Build enterprise Java-based transaction-type applications that access complex data with Hibernate Work with Hibernate 5 using a present-day build process Use Java 8 features with Hibernate Integrate into the persistence life cycle Map using Java's annotations Search and query with the new version of Hibernate Integrate with MongoDB using NoSQL Keep track of versioned data with Hibernate Envers Who This Book Is For Experienced Java developers interested in learning how to use and apply object-relational persistence in Java and who are new to the Hibernate persistence framework.

Pro JPA 2, Second Edition introduces, explains, and demonstrates how to use the new Java Persistence API (JPA) 2.1 from the perspective of one of the specification creators. A one-of-a-kind resource, it provides both theoretical and extremely practical coverage of JPA usage for both beginning and advanced developers. Authors Mike Keith and Merrick Schincariol take a hands – on approach, based on their wealth of experience and expertise, by giving examples to illustrate each concept of the API and showing how it is used in practice. The examples use a common model from an overriding sample application, giving readers a context from which to start and helping them to understand the examples within an already familiar domain. After completing the book, you will have a full understanding of JPA and be able to successfully code applications using its annotations and APIs. The book also serves as an excellent reference guide during initial and later JPA application experiences. Hands-on examples for all aspects of the JPA specification Expert insight about various aspects of the API and when they are useful Portability hints to provide increased awareness of the potential for non – portable JPA code What you'll learn How to get started with enterprise applications using JPA 2.1 Simple and advanced object – relational mapping techiques How to use the complete Entity Manager API How to create queries using the query language (JP QL) and the Criteria API Locking, concurrency, and other advanced concepts How to use XML mapping files and descriptors How to package and deploy your Java Persistence applications How to test your Java Persistence applications Who this book is for The book generally targets enterprise and persistence developers who fall in one of three categories: Those who are new to persistence; we will offer an introduction to persistence and to the basic concepts so these readers can have solid base from which to become proficient at JPA. Those who know and/or use existing ORM persistence products such as Hibernate or TopLink/EclipseLink. Those who have already used JPA and want to learn about newer features introduced by JPA 2.1, or have a good reference book to consult when they develop JPA applications. In general, we assume that the reader is knowledgeable with Java, SQL, and JDBC, and has a little knowledge of Java EE. Table of Contents Introduction Getting Started Enterprise Applications Object Relational Mapping Collection Mapping Entity Manager Using Queries Java Persistence Query Language Criteria Advanced Object Relational Mapping Advanced Queries Advanced Topics XML Mapping Files Packaging and Deployment Testing

Gain all the essentials you need to create scalable microservices, which will help you solve real challenges when deploying services into production. This book will take you through creating a scalable data layer with polygot persistence. You'll cover data access and query patterns in Spring and JPA in high-performance environments. As part of this topic, you'll see the advantages of multiple persistence frameworks in Java and especially the easy persistence offered by NoSQL databases and reactive web solutions. The last few chapters present advanced concepts that are useful for very high-performance real-time applications: you'll implement applications using Spring's good support for Web sockets in their raw form as well as for connecting to message brokers such as RabbitMQ. This can be useful for applications such as navigation systems and gaming platforms. What You Will LearnBuild end-to-end modern applications using microservices, persistence essentials, reactive web, and other high-performance concepts Master Spring's configuration options Secure microservices efficiently Monitor your services post deployment Who This Book Is For Java developers and architects interested in microservices.

High-Performance Java Persistence

Spring Security in Action

Java Persistence with Hibernate

A definitive guide to learning the key concepts of modern application development, 2nd Edition

Enterprise and web applications require full-featured, "Google-quality" searchcapabilities, but such features are notoriously difficult to implement and maintain.Hibernate Search builds on the Lucene feature set and offers an easyto-implement interface that integrates seamlessly with Hibernate-the leadingdata persistence solution for Java applications. Hibernate Search in Action introduces both the principles of enterprise searchand the implementation details a Java developer will need to use HibernateSearch effectively. This book blends the insights of the Hibernate Search leaddeveloper with the practical techniques required to index and manipulate data,assemble and execute search queries, and create smart filters for better searchresults. Along the way, the reader masters performance-boosting concepts likeusing Hibernate Search in a clustered environment and integrating with thefeatures already in your applications. This book assumes you're a competent Java developer with some experienceusing Hibernate and Lucene. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book.

This book is a collection of developer code recipes and best practices for persisting data using Spring, particularly Spring Boot. The book is structured around practical recipes, where each recipe discusses a performance case or performance-related case, and almost every recipe has one or more applications. Mainly, when we try to accomplish something (e.g., read some data from the database), there are several approaches to do it, and, in order to choose the best way, you have to know the implied trades-off from a performance perspective. You'll see that in the end, all these penalties slow down the application. Besides presenting the arguments that favor a certain choice, the application is written in Spring Boot style which is quite different than plain Hibernate. Persistence is an important set of techniques and technologies for accessing and using data, and this book demonstrates that data is mobile regardless of specific applications and contexts. In Java development, persistence is a key factor in enterprise, ecommerce, cloud and other transaction-oriented applications. After reading and using this book, you'll have the fundamentals to apply these persistence solutions into your own mission-critical enterprise Java applications that you build using Spring. What You Will Learn Shape *-to-many associations for best performancesEffectively exploit Spring Projections (DTO) Learn best practices for batching inserts, updates and deletes Effectively fetch parent and association in a single SELECTLearn how to inspect Persistent Context contentDissect pagination techniques (offset and keyset)Handle queries, locking, schemas, Hibernate types, and more Who This Book Is For Any Spring and Spring Boot developer that wants to squeeze the persistence layer performances.

Summary Manning's bestselling Java 8 book has been revised for Java 9! In Modern Java in Action, you'll build on your existing Java language skills with the newest features and techniques. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Modern applications take advantage of innovative designs, including microservices, reactive architectures, and streaming data. Modern Java features like lambdas, streams, and the long-awaited Java Module System make implementing these designs significantly easier. It's time to upgrade your skills and meet these challenges head on! About the Book Modern Java in Action connects new features of the Java language with their practical applications. Using crystal-clear examples and careful attention to detail, this book respects your time. It will help you expand your existing knowledge of core Java as you master modern additions like the Streams API and the Java Module System, explore new approaches to concurrency, and learn how functional concepts can help you write code that's easier to read and maintain. What's inside Thoroughly revised edition of Manning's bestselling Java 8 in Action New features in Java 8, Java 9, and beyond Streaming data and reactive programming The Java Module System About the Reader Written for developers familiar with core Java features. About the Author Raoul-Gabriel Urma is CEO of Cambridge Spark. Mario Fusco is a senior software engineer at Red Hat. Alan Mycroft is a University of Cambridge computer science professor; he cofounded the Raspberry Pi Foundation.

Table of Contents PART 1 - FUNDAMENTALS Java 8, 9, 10, and 11: what's happening? Passing code with behavior parameterization Lambda expressions PART 2 - FUNCTIONAL-STYLE DATA PROCESSING WITH STREAMS Introducing streams Working with streams Collecting data with streams Parallel data processing and performance PART 3 - EFFECTIVE PROGRAMMING WITH STREAMS AND LAMBDAS Collection API enhancements Refactoring, testing, and debugging Domain-specific languages using lambdas PART 4 - EVERYDAY JAVA Using Optional as a better alternative to null New Date and Time API Default methods The Java Module System PART 5 - ENHANCED JAVA CONCURRENCY Concepts behind CompletableFuture and reactive programming CompletableFuture: composable asynchronous programming Reactive programming PART 6 - FUNCTIONAL PROGRAMMING AND FUTURE JAVA EVOLUTION Thinking functionally Functional programming techniques Blending OOP and FP: Comparing Java and Scala Conclusions and where next for Java

This book is written for users experienced in using Java with databases but inexperienced in the use of the open source, lightweight Hibernate, the most popular de-facto object-relational mapping and database-oriented application development framework. The book has plentiful examples and handy reference sections, including a comprehensive reference for Hibernate O/R mapping strategies. Beginning Hibernate 3 is packed with brand-new information on the latest release of the Hibernate persistence layer and provides a clear introduction to the de facto standard for object relational persistence in Java. Readers will get started right away with building transaction-based engines and applications.