

Spring Mvc Hibernate Mysql Integration Crud Example

Many bookstores offer numerous choices of books on Java Server Programming; however, most of these books are intricate and complex to grasp. So, what are your chances of picking up the right one? If this question has been troubling you, be rest assured now! This book, Java Server Programming: Java EE 5 (J2EE 1.5) Black Book, Platinum Edition, is a one-time reference book that covers all aspects of Java EE in an easy-to-understand approach for example, how an application server runs; how GlassFish Application server deploys a Java application; a complete know-how of design patterns, best practices, and design strategies; working with Java related technologies such as NetBeans IDE 6.0, Hibernate, Spring, and Seam frameworks; and proven solutions using the key Java EE technologies, such as JDBC, Servlets, JSP, JSTL, RMI, JNDI, JavaMail, Web services, JCA, Struts, JSF, UML, and much more& All this, as the book explores these concepts with appropriate examples and executable applications no doubt, every aspect of the book is worth its price.

Summary A developer-focused guide to writing applications using Spring Boot. You'll learn how to bypass the tedious configuration steps so that you can concentrate on your application's behavior. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology The Spring Framework simplifies enterprise Java development, but it does require lots of tedious configuration work. Spring Boot radically streamlines spinning up a Spring application. You get automatic configuration and a model with established conventions for build-time and runtime dependencies. You also get a handy command-line interface you can use to write scripts in Groovy. Developers who use Spring Boot often say that they can't imagine going back to hand configuring their applications. About the Book Spring Boot in Action is a developer-focused guide to writing applications using Spring Boot. In it, you'll learn how to bypass configuration steps so you can focus on your application's behavior. Spring expert Craig Walls uses interesting and practical examples to teach you both how to use the default settings effectively and how to override and customize Spring Boot for your unique environment. Along the way, you'll pick up insights from Craig's years of Spring development experience. What's Inside Develop Spring apps more efficiently Minimal to no configuration Runtime metrics with the Actuator Covers Spring Boot 1.3 About the Reader Written for readers familiar with the Spring Framework. About the Author Craig Walls is a software developer, author of the popular book Spring in Action, Fourth Edition, and a frequent speaker at conferences. Table of Contents Bootstarting Spring Developing your first Spring Boot application Customizing configuration Testing with Spring Boot Getting Groovy with the Spring Boot CLI Applying Grails in Spring Boot Taking a peek inside with the Actuator Deploying Spring Boot applications APPENDIXES Spring Boot developer tools Spring Boot starters Configuration properties Spring Boot dependencies

Describes thirty open source tools that are designed to improve Java development practices, including build tools, quality metrics tools, unit testing tools, issue management tools, and continuous integration tools.

Over 50 recipes to help you build dynamic and powerful real-time Java Hibernate applications About This Book Learn to associate JDBC and Hibernate with object persistence Manage association mappings, implement basic annotations and learn caching Get to grips with Hibernate fundamentals from installation to developing a business application with this step-by-step guide Who This Book Is For This is book for Java developers who now want to learn Hibernate. Good knowledge and understanding of Java is preferred to allow efficient programming of the core elements and applications; it would be helpful if readers are familiar with the basics of SQL. What You Will Learn Set up and install Hibernate on your system and explore different ways in which Hibernate can be configured Learn the basic concepts and fundamentals of Java Hibernate Define mappings without a use of XML file using Annotations Persist collection elements such as list, map, set and array Explore the various mapping options and learn to work with Hibernate associations Understand advanced Hibernate concepts such as caching and inheritance Develop an engaging and robust real-world hibernate application based on a common business scenario Integrate Hibernate with other frameworks to develop robust enterprise applications In Detail Hibernate is a database independent technology, so the same code will work for all databases. It helps a Java developer write a query by mapping Java bean to database tables and help create tuned queries that boost performance. Even with limited SQL knowledge one can easily perform database operations. This makes the development faster and more accurate than JDBC. Hibernate supports useful features like connection pooling, caching, and inheritance etc. This book will provide a useful hands-on guide to Hibernate to accomplish the development of a real-time Hibernate application. We will start with the basics of Hibernate, which include setting up Hibernate – the pre-requisites and multiple ways of configuring Hibernate using Java. We will then dive deep into the fundamentals of Hibernate such as SessionFactory, session, criteria, working with objects and criteria. This will help a developer have a better understanding of how Hibernate works and what needs to be done to run a Hibernate application. Moving on, we will learn how to work with annotations, associations and collections. In the final chapters, we will see explore querying, advanced Hibernate concepts and integration with other frameworks. Style and approach This book is a practical guide filled with carefully organized step-by-step instructions. All recipes are arranged in an easy-to understand and clear manner allowing you to apply the solutions to other situations.

Spring 5.0 Cookbook

Hibernate Tips

Spring 5 Design Patterns

A Problem-Solution Approach

Fowler

Spring Data

Practical Software Architecture Solutions from the Legendary Robert C. Martin (" Uncle Bob ") By applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin (" Uncle Bob ") reveals those rules and helps you apply them. Martin ' s Clean Architecture doesn ' t merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you ' ve come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you ' ll face – the ones that will make or break your projects. Learn what software architects need to achieve – and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what ' s critically important and what ' s merely a " detail " Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager – and for every programmer who must execute someone else ' s designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.

A hands-on guide to creating, monitoring, and tuning a high performance Spring web application Key Features Understand common performance pitfalls and improve your application's performance Build and deploy strategies for complex applications using the microservice architecture Understand internals of JVM - the core of all Java Runtime Environments Book Description While writing an application, performance is paramount. Performance tuning for real-world applications often involves activities geared toward detecting bottlenecks. The recent release of Spring 5.0 brings major advancements in the rich API provided by the Spring framework, which means developers need to master its tools and techniques to achieve high performance applications. Hands-On High Performance with Spring 5 begins with the Spring framework's core features, exploring the integration of different Spring projects. It proceeds to evaluate various Spring specifications to identify those adversely affecting performance. You will learn about bean wiring configurations, aspect-oriented programming, database interaction, and Hibernate to focus on the metrics that help identify performance bottlenecks. You will also look at application monitoring, performance optimization, JVM internals, and garbage collection optimization. Lastly, the book will show you how to leverage the microservice architecture to build a high performance and resilient application. By the end of the book, you will have gained an insight into various techniques and solutions to build and troubleshoot high performance Spring-based applications. What you will learn Master programming best practices and performance improvement with bean wiring Analyze the performance of various AOP implementations Explore database interactions with Spring to optimize design and configuration Solve Hibernate performance issues and traps Leverage multithreading and concurrent programming to improve application performance Gain a solid foundation in JVM performance tuning using various tools Learn the key concepts of the microservice architecture and how to monitor them Perform Spring Boot performance tuning, monitoring, and health checks Who this book is for If you ' re a Spring developer who ' d like to build high performance applications and have more control over your application's performance in production and development, this book is for you. Some familiarity with Java, Maven, and Eclipse is necessary.

This two-volume set (LNAI 9875 and LNAI 9876) constitutes the refereed proceedings of the 8th International Conference on Collective Intelligence, ICCCI 2016, held in Halkidiki, Greece, in September 2016. The 108 full papers presented were carefully reviewed and selected from 277 submissions. The aim of this conference is to provide an internationally respected forum for scientific research in the computer-based methods of collective intelligence and their applications in (but not limited to) such fields as group decision making, consensus computing, knowledge integration, semantic web, social networks and multi-agent systems.

This book gathers a selection of peer-reviewed papers presented at the third Big Data Analytics for Cyber-Physical System in Smart City (BDCPS 2021) conference, held in Shanghai, China, on Nov. 27, 2021. The contributions, prepared by an international team of scientists and engineers, cover the latest advances made in the field of machine learning, and big data analytics methods and approaches for the data-driven co-design of communication, computing, and control for smart cities. Given its scope, it offers a valuable resource for all researchers and professionals interested in big data, smart cities, and cyber-physical systems.

From Novice to Professional

An End-to-end Approach

Spring Recipes

Spring Live

Learn Microservices with Spring Boot

Proceedings of the 2020 Intelligent Systems Conference (IntelliSys) Volume 2

Gain insight into how hexagonal architecture can help to keep the cost of development low over the complete lifetime of an application Key FeaturesExplore ways to make your software flexible, extensible, and adaptableLearn new concepts that you can easily blend with your own software development styleDevelop the mindset of building maintainable solutions instead of taking shortcutsBook Description We would all like to build software architecture that yields adaptable and flexible software with low development costs. But, unreasonable deadlines and shortcuts make it very hard to create such an architecture. Get Your Hands Dirty on Clean Architecture starts with a discussion about the conventional layered architecture style and its disadvantages. It also talks about the advantages of the domain-centric architecture styles of Robert C. Martin's Clean Architecture and Alistair Cockburn's Hexagonal Architecture. Then, the book dives into hands-on chapters that show you how to manifest a hexagonal architecture in actual code. You'll learn in detail about different mapping strategies between the layers of a hexagonal architecture and see how to assemble the architecture elements into an application. The later chapters demonstrate how to enforce architecture boundaries. You'll also learn what shortcuts produce what types of technical debt and how, sometimes, it is a good idea to willingly take on those debts. After reading this book, you'll have all the knowledge you need to create applications using the hexagonal architecture style of web development. What you will learnIdentify potential shortcomings of using a layered architectureApply methods to enforce architecture boundariesFind out how potential shortcuts can affect the software architectureProduce arguments for when to use which style of architectureStructure your code according to the architectureApply various types of tests that will cover each element of the architectureWho this book is for This book is for you if you care about the architecture of the software you are building. To get the most out of this book, you must have some experience with web development. The code examples in this book are in Java. If you are not a Java programmer but can read object-oriented code in other languages, you will be fine. In the few places where Java or framework specifics are needed, they are thoroughly explained.

Enterprise Integration Patterns provides an invaluable catalog of sixty-five patterns, with real-world solutions that demonstrate the formidable of messaging and help you to design effective messaging solutions for your enterprise. The authors also include examples covering a variety of different integration technologies, such as JMS, MSMQ, TIBCO ActiveEnterprise, Microsoft BizTalk, SOAP, and XSL. A case study describing a bond trading system illustrates the patterns in practice, and the book offers a look at emerging standards, as well as insights into what the future of enterprise integration might hold. This book provides a consistent vocabulary and visual notation framework to describe large-scale integration solutions across many technologies. It also explores in detail the advantages and limitations of asynchronous messaging architectures. The authors present practical advice on designing code that connects an application to a messaging system, and provide extensive information to help you determine when to send a message, how to route it to the proper destination, and how to monitor the health of a messaging system. If you want to know how to manage, monitor, and maintain a messaging system once it is in use, get this book.

This book adopts a unique approach to helping enterprise Java developers learn Spring 4 fast. Rather than filled with disjointed, piecemeal samples to show Spring features one at a time, it is designed to base your total Spring learning experience on a functioning, end-to-end integrated sample named SOBA (Secure Online Banking Application), which runs on any one of the three operating systems (Windows, Linux and Mac OS X), any one of the four Java App Servers (Tomcat, GlassFish, JBoss and WebLogic), and any one of the four RDBMS (MySQL, PostgreSQL, Oracle and SQL Server). The book also includes another standalone sample application named MyNotes, which is simpler than SOBA. Specifically, this book helps you learn the following latest Spring technologies: * Spring Core Framework * Spring MVC Web Framework * Spring Data Access Framework (JDBC and Hibernate) * Spring RESTful Web Services Framework * Spring Security Framework * Spring Transaction Management Framework * Spring Validation Framework * Spring Aspect Oriented Programming (AOP) Framework * Spring Testing * Spring Integration with EJB * Spring Web Flow Framework At the end of your learning experience with this book, you will gain truly applicable skills and will be able to start contributing to the success of your Spring-based enterprise application project immediately.

Learn and implement various techniques related to testing, monitoring and optimization for microservices architecture. Key Features Learn different approaches for testing microservices to design and implement, robust and secure applications Become more efficient while working with microservices Explore Testing and Monitoring tools such as JMeter, Ready API,and AppDynamics Book Description Microservices are the latest "right" way of developing web applications. Microservices architecture has been gaining momentum over the past few years, but once you've started down the microservices path, you need to test and optimize the services. This book focuses on exploring various testing, monitoring, and optimization techniques for microservices. The book starts with the evolution of software architecture style, from monolithic to virtualized, to microservices architecture. Then you will explore methods to deploy microservices and various implementation patterns. With the help of a real-world example, you will understand how external APIs help product developers to focus on core competencies. After that, you will learn testing techniques, such as Unit Testing, Integration Testing, Functional Testing, and Load Testing. Next, you will explore performance testing tools, such as JMeter, and Gatling. Then, we deep dive into monitoring techniques and learn performance benchmarking of the various architectural components. For this, you will explore monitoring tools such as Appdynamics, Dynatrace, AWS CloudWatch, and Nagios. Finally, you will learn to identify, address, and report various performance issues related to microservices. What you will learn Understand the architecture of microservices and how to build services Establish how external APIs help to accelerate the development process Understand testing techniques, such as unit testing, integration testing, end-to-end testing, and UI/functional testing Explore various tools related to the performance testing, monitoring, and optimization of microservices Design strategies for performance testing Identify performance issues and fine-tune performance Who this book is for This book is for developers who are involved with microservices architecture to develop robust and secure applications. Basic knowledge of microservices is essential in order to get the most out of this book.

Building a RESTful Web Service with Spring

A Brain-Friendly Guide

A Craftsman's Guide to Software Structure and Design

Beginning JBoss Seam

Building Web Apps with Spring 5 and Angular

2021 International Conference on Big Data Analytics for Cyber-Physical System in Smart City

This is the first book covering the use of the Spring Framework and integrating the Flex Framework so that enterprise Java developers can now add a Rich Internet Application front end to their "back end."

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-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.

Since development first began on Spring in 2003, there's been a constant buzz about it in Java development publications and corporate IT departments. The reason is clear: Spring is a lightweight Java framework in a world of complex heavyweight architectures that take forever to implement. Spring is like a breath of fresh air to overworked developers.In Spring, you can make an object secure, remote, or transactional, with a couple of lines of configuration instead of embedded code. The resulting application is simple and clean. In Spring, you can work less and go home early, because you can strip away a whole lot of the redundant code that you tend to see in most J2EE applications. You won't be nearly as burdened with meaningless detail. In Spring, you can change your mind without the consequences bleeding through your entire application. You'll adapt much more quickly than you ever could before.Spring: A Developer's Notebook offers a quick dive into the new Spring framework, designed to let you get hands-on as quickly as you like. If you don't want to bother with a lot of theory, this book is definitely for you. You'll work through one example after another. Along the way, you'll discover the energy and promise of the Spring framework.This practical guide features ten code-intensive labs that'll rapidly get you up to speed. You'll learn how to do the following, and more: install the Spring Framework set up the development environment use Spring with other open source Java tools such as Tomcat, Struts, and Hibernate master AOP and transactions utilize ORM solutions As with all titles in the Developer's Notebook series, this no-nonsense book skips all the boring prose and cuts right to the chase. It's an approach that forces you to get your hands dirty by working through one instructional example after another-examples that speak to you instead of at you. 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.

Spring Data Standard Guide

Recipes to build, test, and run Spring applications efficiently

Professional Java Development with the Spring Framework

Designing, Building, and Deploying Messaging Solutions

Spring Boot Persistence Best Practices

Pro Spring

Pro Spring MVC provides in-depth coverage of Spring MVC and Spring Web Flow, two highly customizable and powerful web frameworks brought to you by the developers and community of the Spring Framework. Spring MVC is a modern web application framework built upon the Spring Framework, and Spring Web Flow is a project that complements Spring MVC for building reusable web controller modules that encapsulate rich page navigation rules. Along with detailed analysis of the code and functionality, plus the first published coverage of Spring Web Flow 2.x, this book includes numerous tips and tricks to help you get the most out of Spring MVC, Spring Web Flow, and web development in general. Spring MVC and Spring Web Flow have been upgraded in the new Spring Framework 3.1 and are engineered with important considerations for design patterns and expert object-oriented programming techniques. This book explains not only the design decisions of the frameworks, but also how you can apply similar designs and techniques to your own code. This book takes great care in covering every inch of Spring MVC and Spring Web Flow to give you the complete picture. Along with all the best known features of these frameworks, you'll discover some new hidden treasures. You'll also learn how to correctly and safely extend the frameworks to create customized solutions. This book is for anyone who wishes to write robust, modern, and useful web applications with the Spring Framework.

*Readers will witness a real application being built with Spring framework, which is a very hot topic. *Aspect Oriented Programming (AOP) is most up to date at time of book's release; AOP is a hot topic right now. *Will be endorsed by Open Source Spring Framework founder and head, Rod Johnson (plus a Foreward, name on cover, and/or possible Spring logo).

Most professional web based projects are structured, documented and executed using the Spring 3 as the application development framework and Hibernate 4 as the Object Relational Mapping library with MySQL Server 5 as the data store. Spring 3 With Hibernate 4 Project For Professionals shows how to build and use this programming stack to develop a structured, documented, modestly sized project. It walks you through building and documenting a Book Management and Sales System [featuring a Shopping cart integrated with a payment gateway]. Topics Covered in the Book Key Topics Spring 3.2.0.M1 Hibernate 4.1.4 MySQL 5.5.25 Spring Security 3.1 Spring Web MVC NetBeans IDE 7.1.2 This Book Serves as a ready reference, with several add-ons and technologies, covering modestly sized project containing a Back-end with Master and Transaction data entry forms and a Front-end with application homepage and the shopping cart Illustrates real project documentation including Case Study, Business Requirements, Software Requirement Specifications, Data Dictionary, Table Definitions and Directory Structure, End User Manual and Software Design Document What You'll Learn? Shopping Cart integrated with a Payment Gateway for accepting payments using Credit Cards [Google Wallet] Tag Clouds, Session Management, Dispatch Emails [using JavaMail] Access based User Management and Restricted page access protection

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.

Computational Collective Intelligence

Java Server Programming Java Ee5 Black Book, Platinum Ed (With Cd)

Intelligent Systems and Applications

Volume 2

Developing Enterprise Java Applications With Spring Frameworks

Java Power Tools

Build a microservices architecture with Spring Boot, by evolving an application from a small monolith to an event-driven architecture composed of several services. This book follows an incremental approach to teach microservice structure, test-driven development, Eureka, Ribbon, Zuul, and end-to-end tests with Cucumber. Author Moises Macero follows a very pragmatic approach to explain the benefits of using this type of software architecture, instead of keeping you distracted with theoretical concepts. He covers some of the state-of-the-art techniques in computer programming, from a practical point of view. You'll focus on what's important, starting with the minimum viable product but keeping the flexibility to evolve it. What You'll Learn Build microservices with Spring Boot Use event-driven architecture and messaging with RabbitMQ Create RESTful services with Spring Master service discovery with Eureka and load balancing with Ribbon Route requests with Zuul as your API gateway Write end-to-end tests for an event-driven architecture using Cucumber Carry out continuous integration and deployment Who This Book Is For Those with at least some prior experience with Java programming. Some prior exposure to Spring Boot recommended but not required.

This book adopts a unique approach to helping enterprise Java Web application developers learn the latest Spring Frameworks fast. Rather than filled with disjointed, piecemeal samples to show Spring features one at a time, it is designed to put your total Spring learning experience on a functioning, end-to-end, integrated sample Secure Online Banking Application (SOBA), which runs on Windows 7, Linux and Mac X. You will gain hands-on experience with how Spring integrates with JDBC, Hibernate and one of the three database platforms of your choice (MySQL, Microsoft SQL Server, or Oracle).You can build SOBA with Apache Ant or Maven and run it on Tomcat 6 or Tomcat 7. This book also features Spring, Hibernate and Maven 3 with another standalone sample application, which is simpler than SOBA.Using SOBA as an experimental learning platform, this book helps you learn the following latest Spring technologies:* Spring's Core Framework* Spring's MVC Web Framework* Spring's Data Access Framework (JDBC and Hibernate)* Spring's RESTful Web Services Framework* Spring's Security Framework* Spring's Transaction Management Framework* Spring's Validation Framework* Spring's Aspect Oriented Programming (AOP) Framework* Building Spring/Hibernate based enterprise web applications with Maven 3At the end of your learning experience with this book, you will gain truly applicable skills and will be able to start contributing to the success of your Spring-based enterprise application project immediately.

Learn various design patterns and best practices in Spring 5 and use them to solve common design problems. About This Book Explore best practices for designing an application Manage your code easily with Spring's Dependency Injection pattern Understand the benefits that the right design patterns can offer your toolkit Who This Book Is For This book is for developers who would like to use design patterns to address common problems while designing an app using the Spring Framework and Reactive Programming approach. A basic knowledge of the Spring Framework and Java is assumed. What You Will Learn Develop applications using dependency injection patterns Learn best practices to design enterprise applications Explore Aspect-Oriented Programming relating to transactions, security, and caching. Build web applications using traditional Spring MVC patterns Learn to configure Spring using XML, annotations, and Java. Implement caching to improve application performance. Understand concurrency and handle multiple connections inside a web server. Utilizing Reactive Programming Pattern to build Reactive web applications. In Detail Design patterns help speed up the development process by offering well tested and proven solutions to common problems. These patterns coupled with the Spring framework offer tremendous improvements in the development process. The book begins with an overview of Spring Framework 5.0 and design patterns. You will understand the Dependency Injection pattern, which is the main principle behind the decoupling process that Spring performs, thus making it easier to manage your code. You will learn how GoF patterns can be used in Application Design. You will then learn to use Proxy patterns in Aspect Oriented Programming and remoting. Moving on, you will understand the JDBC template patterns and their use in abstracting database access. Then, you will be introduced to MVC patterns to build Reactive web applications. Finally, you will move on to more advanced topics such as Reactive streams and Concurrency. At the end of this book, you will be well equipped to develop efficient enterprise applications using Spring 5 with common design patterns Style and approach The book takes a pragmatic approach, showing various design patterns and best-practice considerations, including the Reactive programming approach with the Spring 5 Framework and ways to solve common development and design problems for enterprise applications.

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 Spring 3 with Hibernate 4 Project for Professionals

Spring Boot in Action

Clean Architecture

A Practical Approach to RESTful Services using RabbitMQ, Eureka, Ribbon, Zuul and Cucumber

Head First Java

Build seven web development projects with Spring MVC, Angular 6, JHipster, WebFlux, and Spring Boot 2

A complete guide to build robust and scalable web applications with Spring and Angular. About This Book This hands on guide will teach you how to build an end-to-end modern web application using Spring and Angular. It is easy to read and will benefit Java developers who have been used to develop the back-end part of web application while front-end (UI) has been left for UI developers. Learn the core aspects involved in developing the backend and the UI, right from designing to integrating and deploying. Who This Book Is For This book is targeted towards Java Web Developers with a basic knowledge of Spring who want to build complete web applications in a fast and effective way. They will want to gain a stronghold on both frontend and backend development to advance in their careers. What You Will Learn Set up development environment for Spring Web App and Angular app. Process web request and response and build REST API endpoints. Create data access components using Spring Web MVC framework and Hibernate Use Junit 5 to test your application Learn the fundamental concepts around building Angular Configure and use Routes and Components. Protect Angular app content from common web vulnerabilities and attacks. Integrate Angular apps with Spring Boot Web API endpoints Deploy the web application based on CI and CD using Jenkins and Docker containers In Detail Spring is the most popular application development framework being adopted by millions of developers around the world to create high performing, easily testable, reusable code. Its lightweight nature and extensibility helps you write robust and highly-scalable server-side web applications. Coupled with the power and efficiency of Angular, creating web applications has never been easier. If you want build end-to-end modern web application using Spring and Angular, then this book is for you. The book directly heads to show you how to create the backend with Spring, showing you how to configure the Spring MVC and handle Web requests. It will take you through the key aspects such as building REST API endpoints, using Hibernate, working with Junit 5 etc. Once you have secured and tested the backend, we will go ahead and start working on the front end with Angular. You will learn about fundamentals of Angular and Typescript and create an SPA using components, routing etc. Finally, you will see how to integrate both the applications with REST protocol and deploy the application using tools such as Jenkins and Docker. Style and approach This is a straightforward guide that shows how to build a complete web application in Angular and Spring.

Over 100 hands-on recipes to build web applications easily and efficiently IN Spring 5.0 About This Book Solve real-world problems using the latest features of the Spring framework like Reactive Streams and the Functional Web Framework. Learn how to use dependency injection and aspect-oriented programming to write compartmentalized and testable code. Understand when to choose between Spring MVC and Spring Web Reactive for your projects Who This Book Is For Java developers who would like to gain in-depth knowledge of how to overcome problems that they face while developing great Spring applications. It will also cater to Spring enthusiasts, users and experts who need an arena for comparative analysis, new ideas and inquiries on some details regarding Spring 5.0 and its previous releases. A basic knowledge of Spring development is essential What You Will Learn Understand how functional programming and concurrency in JDK 1.9 works, and how it will affect Spring 5.0 Learn the importance and application of reactive programming in creating services, and also the process of creating asynchronous MVC applications Implement different Spring Data modules Integrate Spring Security to the container Create applications and deploy using Spring Boot Conceptualize the architecture behind Microservices and learn the details of its implementation Create different test cases for the components of Spring 5.0 components In Detail The Spring framework has been the go-to framework for Java developers for quite some time. It enhances modularity, provides more readable code, and enables the developer to focus on developing the application while the underlying framework takes care of transaction APIs, remote APIs, JMX APIs, and JMS APIs. The upcoming version of the Spring Framework has a lot to offer, above and beyond the platform upgrade to Java 9, and this book will show you all you need to know to overcome common to advanced problems you might face. Each recipe will showcase some old and new issues and solutions, right from configuring Spring 5.0 container to testing its components. Most importantly, the book will highlight concurrent processes, asynchronous MVC and reactive programming using Reactor Core APIs. Aside from the core components, this book will also include integration of third-party technologies that are mostly needed in building enterprise applications. By the end of the book, the reader will not only be well versed with the essential concepts of Spring, but will also have mastered its latest features in a solution-oriented manner. Style and Approach This book follows a cookbook style approach, presenting a problem and showing you how to overcome it with useful recipes. The examples provided will help you code along as you learn.

The Spring framework is growing. It has always been about choice. Java EE focused on a few technologies, largely to the detriment of alternative, better solutions. When the Spring framework debuted, few would have agreed that Java EE represented the best-in-breed architectures of the day. Spring debuted to great fanfare, because it sought to simplify Java EE. Each release since marks the introduction of new features designed to both simplify and enable solutions. With version 2.0 and later, the Spring framework started targeting multiple platforms. The framework provided services on top of existing platforms, as always, but was decoupled from the underlying platform wherever possible. Java EE is a still a major reference point, but it's not the only target. OSGi (a promising technology for modular architectures) has been a big part of the SpringSource strategy here. Additionally, the Spring framework runs on Google App Engine. With the introduction of annotation-centric frameworks and XML schemas, SpringSource has built frameworks that effectively model the domain of a specific problem, in effect creating domain-specific languages (DSLs). Frameworks built on top of the Spring framework have emerged supporting application integration, batch processing, Flex and Flash integration, GWT, OSGi, and much more.

The Spring Framework is a major open source application development framework that makes Java/J2EE(TM) development easier and more productive. This book shows you not only what Spring can do but why, explaining its functionality and motivation to help you use all parts of the framework to develop successful applications. You will be guided through all the Spring features and see how they form a coherent whole. In turn, this will help you understand the rationale for Spring's approach, when to use Spring, and how to follow best practices.

All this is illustrated with a complete sample application. When you finish the book, you will be well equipped to use Spring effectively in everything from simple Web applications to complex enterprise applications. What you will learn from this book * The core Inversion of Control container and the concept of Dependency Injection * Spring's Aspect Oriented Programming (AOP) framework and why AOP is important in J2EE development * How to use Spring's programmatic and declarative transaction management services effectively * Ways to access data using Spring's JDBC functionality, iBATIS SQL Maps, Hibernate, and other O/R mapping frameworks * Spring services for accessing and implementing EJBs * Spring's remoting framework Who this book is for This book is for Java/J2EE architects and developers who want to gain a deeper knowledge of the Spring Framework and use it effectively. Wrox Professional guides are planned and written by working programmers to meet the real-world needs of programmers, developers, and IT professionals. Focused and relevant, they address the issues technology professionals face every day. They provide examples, practical solutions, and expert education in new technologies, all designed to help programmers do a better job.

Get Your Hands Dirty on Clean Architecture

Spring Persistence -- A Running Start

Java Hibernate Cookbook

Hands-On High Performance with Spring 5

Developing Enterprise Applications With Spring

Spring MVC Blueprints

Published with the developer in mind, firstPress technical briefs explore emerging technologies that have the potential to be critical for tomorrow's industry. Apress keeps developers one step ahead by presenting key information as early as possible in a PDF of 150 pages or less. Explore the future through Apress with Spring Persistence—A Running Start. This firstPress title gets readers rolling with the various fundamental Spring Framework Java Persistence concepts and offerings, as well as proven design patterns for integrating Spring Persistence functionality for complex and transaction-based enterprise Java applications. The Java platform offers several options for saving “long-lived” information, including JPA (Java Persistence API), Hibernate, iBatis, JDBC, and even JCR (Java Content Repository—a standard for interfacing with a content management system). This book helps readers decide which persistence solution is the most ideal for their application requirements, and shows how Spring can be leveraged to simplify the integration of their selected persistence framework into their enterprise application.

Design and implement real-world web-based applications using the Spring Framework 4.x specification based on technical documentation About This Book Learn all the details of implementing Spring 4.x MVC applications from basic core platform construction to advanced integration implementations Gain a complete reference guide to implementing the controllers, models, views, view resolvers, and other service-related components to solve various real-world problems Discover the possible optimal solutions for developers and experts to build enterprise and personal web-based applications Create a Spring MVC application that has a validation process and exception handling with the HTTP status codes Who This Book Is For This book is for competent Spring developers who wish to understand how to develop complex yet flexible applications with Spring MVC. You must have a good knowledge of JAVA programming and be familiar with the basics of Spring. What You Will Learn Set up and configure the Spring 4.x MVC platform from ground level up using the basic Spring Framework 4.x APIs Study requirements and manage solutions on file uploading transactions in Spring 4.x applications Configure, , and test Spring integration to the Hibernate, MyBatis, and JPA frameworks for database transactions Properly implement exception handlers and audit trails in Spring MVC applications Generate reports using JFreeChart, Google Charts, JasperReports, DynamicReports, FreeMarker, Velocity, and Spring's API known as ContentNegotiatingViewResolver Configure security and flexibility by adding Captcha, Spring Security, Spring Flow, Spring Portlets, JTA to improve data management performance Implement web services using Spring's RESTful implementation and other service-oriented integration plugins Design and implement a Spring 4.x application using AngularJS, ExtJs, Twitter Bootstrap, and Spring Mobile for responsive web design In Detail Spring MVC is the ideal tool to build modern web applications on the server side. With the arrival of Spring Boot, developers can really focus on the code and deliver great value, leveraging the rich Spring ecosystem with minimal configuration. Spring makes it simple to create RESTful applications, interact with social services, communicate with modern databases, secure your system, and make your code modular and easy to test. It is also easy to deploy the result on different cloud providers. This book starts all the necessary topics in starting a Spring MVC-based application. Moving ahead it explains how to design model objects to handle file objects. save files into a data store and how Spring MVC behaves when an application deals with uploading and downloading files. Further it highlights form transactions and the user of Validation Framework as the tool in validating data input. It shows how to create a customer feedback system which does not require a username or password to log in. It will show you the soft side of Spring MVC where layout and presentation are given importance. Later it will discuss how to use Spring Web Flow on top of Spring MVC to create better web applications. Moving ahead, it will teach you how create an Invoice Module that receives and transport data using Web Services By the end of the book you will be able to create efficient and flexible real-time web applications using all the frameworks in Spring MVC. Style and approach This book is a compendium of technical specification documents that will guide you through building an application using Spring 4.x MVC. Each chapter starts with a high-level wireframe design of the software followed by how to set up and configure different libraries and tools.

JBoss Seam represents the primary counter to the hot and successful Spring Framework and perhaps even Ruby on Rails framework. The open source lightweight Java EE 5 standards based JBoss Seam framework is a part of this second wave of open source lightweight Java that's taking place. This book aims to take advantage of this hot area. It gives an overview of Seam related JSF and EJB 3 as found in Java EE 5. It provides information on the tools to make development with Seam easier as well as a functioning in depth demo to truly learn how to use Seam. Tips and tricks to using Seam are also included.

The practice of enterprise application development has benefited from the emergence of many new enabling technologies. Multi-tiered object-oriented platforms, such as Java and .NET, have become commonplace. These new tools and technologies are capable of building powerful applications, but they are not easily implemented. Common failures in enterprise applications often occur because their developers do not understand the architectural lessons that experienced object developers have learned. Patterns of Enterprise Application Architecture is written in direct response to the stiff challenges that face enterprise application developers. The author, noted object-oriented designer Martin Fowler, noticed that despite changes in technology—from Smalltalk to CORBA to Java to .NET—the same basic design ideas can be adapted and applied to solve common problems. With the help of an expert group of contributors, Martin distills over forty recurring solutions into patterns. The result is an indispensable handbook of solutions that are applicable to any enterprise application platform. This book is actually two books in one. The first section is a short tutorial on developing enterprise applications, which you can read from start to finish to understand the scope of the book's lessons. The next section, the bulk of the book, is a detailed reference to the patterns themselves. Each pattern provides usage and implementation information, as well as detailed code examples in Java or C#. The entire book is also richly illustrated with UML diagrams to further explain the concepts. Armed with this book, you will have the knowledge necessary to make important architectural decisions about building an enterprise application and the proven patterns for use when building them. The topics covered include · Dividing an enterprise application into layers · The major approaches to organizing business logic · An in-depth treatment of mapping between objects and relational databases · Using Model-View-Controller to organize a Web presentation · Handling concurrency for data that spans multiple transactions · Designing distributed object interfaces

8th International Conference, ICCCI 2016, Halkidiki, Greece, September 28-30, 2016. Proceedings, Part II

Pro Flex on Spring

Optimize Java Persistence Performance in Spring Boot Applications

Spring REST

Master efficient application development with patterns such as proxy, singleton, the template method, and more

Spring 5.0 Projects

Spring REST is a practical guide for designing and developing RESTful APIs using the Spring Framework. This book walks you through the process of designing and building a REST application while taking a deep dive into design principles and best practices for versioning, security, documentation, error handling, paging, and sorting. This book provides a brief introduction to REST, HTTP, and web infrastructure. You will learn about several Spring projects such as Spring Boot, Spring MVC, Spring Data JPA, and Spring Security and the role they play in simplifying REST application development. You will learn how to build clients that consume REST services. Finally, you will learn how to use the Spring MVC test framework to unit test and integration test your REST API. After reading this book, you will come away with all the skills to build sophisticated REST applications using Spring technologies.

Discover the latest features of Spring framework by building robust, fast, and reactive web applications Key FeaturesTake advantage of all the features of Spring 5.0 with third party tools to build a robust back endSecure Spring based web application using Spring Security framework with LDAP and OAuth protocolDevelop robust and scalable microservice based applications on Spring Cloud, using Spring BootBook Description Spring makes it easy to create RESTful applications, merge with social services, communicate with modern databases, secure your system, and make your code modular and easy to test. With the arrival of Spring Boot, developers can really focus on the code and deliver great value, with minimal contour. This book will show you how to build various projects in Spring 5.0, using its features and third party tools. We'll start by creating a web application using Spring MVC, Spring Data, the World Bank API for some statistics on different countries, and MySQL database. Moving ahead, you'll build a RESTful web services application using Spring WebFlux framework. You'll be then taken through creating a Spring Boot-based simple blog management system, which uses Elasticsearch as the data store. Then, you'll use Spring Security with the LDAP libraries for authenticating users and create a central authentication and authorization server using OAuth 2 protocol. Further, you'll understand how to create Spring Boot-based monolithic application using JHipster. Toward the end, we'll create an online book store with microservice architecture using Spring Cloud and Netflix OSS components, and a task management system using Spring and Kotlin. By the end of the book, you'll be able to create coherent and flexible real-time web applications using Spring Framework. What you will learnBuild Spring based application using Bootstrap template and JQueryUnderstand the Spring WebFlux framework and how it uses Reactor libraryInteract with Elasticsearch for indexing, querying, and aggregating dataCreate a simple monolithic application using JHipsterUse Spring Security and Spring Security LDAP and OAuth libraries for AuthenticationDevelop a microservice-based application with Spring Cloud and NetflixWork on Spring Framework with KotlinWho this book is for This book is for competent Spring developers who wish to understand how to develop complex yet flexible applications with Spring. You must have a good knowledge of Java programming and be familiar with the basics of Spring.

A hands-on guide to building an enterprise-grade, scalable RESTful web service using the Spring Framework About This Book Follow best practices and explore techniques such as clustering and caching to achieve a scalable web service Leverage the Spring Framework to quickly implement RESTful endpoints Learn to implement a client library for a RESTful web service using the Spring Framework Who This Book Is For This book is intended for those who want to learn to build RESTful web services with the Spring Framework. To make best use of the code samples included in the book, you should have a basic knowledge of the Java language. Previous experience with the Spring Framework would also help you get up and running quickly. What You Will Learn Deep dive into the principles behind REST Expose CRUD operations through RESTful endpoints with the Spring Framework Devise response formats and error handling strategies, offering a consistent and flexible structure to simplify integration for service consumers Follow the best approaches for dealing with a service's evolution while maintaining backward compatibility Understand techniques to secure web services Comply with the best ways to test RESTful web services, including tips for load testing Optimize and scale web services using techniques such as caching and clustering In Detail REST is an architectural style that tackles the challenges of building scalable web services. In today's connected world, APIs have taken a central role on the web. APIs provide the fabric through which systems interact, and REST has become synonymous with APIs. The depth, breadth, and ease of use of Spring makes it one of the most attractive frameworks in the Java ecosystem. Marrying the two technologies is therefore a very natural choice. This book takes you through the design of RESTful web services and leverages the Spring Framework to implement these services. Starting from the basics of the philosophy behind REST, you'll go through the steps of designing and implementing an enterprise-grade RESTful web service. Taking a practical approach, each chapter provides code samples that you can apply to your own circumstances. This book goes beyond the use of Spring and explores approaches to tackle resilience, security, and scalability concerns. You'll learn techniques to deal with security in Spring and discover how to implement unit and integration test strategies. Finally, the book ends by walking you through building a Java client for your RESTful web service, along with some scaling techniques for it. Style and approach This book is a step-by-step, hands-on guide to designing and building RESTful web services. The book follows the natural cycle of developing these services and includes multiple code samples to help you.

The book Intelligent Systems and Applications - Proceedings of the 2020 Intelligent Systems Conference is a remarkable collection of chapters covering a wider range of topics in areas of intelligent systems and artificial intelligence and their applications to the real world. The Conference attracted a total of 545 submissions from many academic pioneering researchers, scientists, industrial engineers, students from all around the world. These submissions underwent a double-blind peer review process. Of those 545 submissions, 177 submissions have been selected to be included in these proceedings. As intelligent systems continue to replace and sometimes outperform human intelligence in decision-making processes, they have enabled a larger number of problems to be tackled more effectively.This branching out of computational intelligence in several directions and use of intelligent systems in everyday applications have created the need for such an international conference which serves as a venue to report on up-to-the-minute innovations and developments. This book collects both theory and application based chapters on all aspects of artificial intelligence, from classical to intelligent scope. We hope that readers find the volume interesting and valuable; it provides the state of the art intelligent methods and techniques for solving real world problems along with a vision of the future research.

Java and Flex Integration Bible

Pro Spring MVC: With Web Flow

A performance engineer's guide to the continuous testing and monitoring of microservices

Pattern Enterpr Applic Arch

Techniques for scaling and optimizing Spring and Spring Boot applications

A hands-on guide to creating clean web applications with code examples in Java

Aimed at users who are familiar with Java development, "Spring Live" is designed to explain how to integrate Spring into your projects to make software development easier. (Technology & Industrial)

Learning a complex new language is no easy task especially when it s an object-oriented computer programming language like Java. You might think the problem is your brain. It seems to have a mind of its own, a mind that doesn't always want to take in the dry, technical stuff you're forced to study. The fact is your brain craves novelty. It's constantly searching, scanning, waiting for something unusual to happen. After all, that's the way it was built to help you stay alive. It takes all the routine, ordinary, dull stuff and filters it to the background so it won't interfere with your brain's real work--recording things that matter. How does your brain know what matters? It's like the creators of the Head First approach say, suppose you're out for a hike and a tiger jumps in front of you, what happens in your brain? Neurons fire. Emotions crank up. Chemicals surge. That's how your brain knows. And that's how your brain will learn Java. Head First Java combines puzzles, strong visuals, mysteries, and soul-searching interviews with famous Java objects to engage you in many different ways. It's fast, it's fun, and it's effective. And, despite its playful appearance, Head First Java is serious stuff: a complete introduction to object-oriented programming and Java. You'll learn everything from the fundamentals to advanced topics, including threads, network sockets, and distributed programming with RMI. And the new. second edition focuses on Java 5.0, the latest version of the Java language and development platform. Because Java 5.0 is a major update to the platform, with deep, code-level changes, even more careful study and implementation is required. So learning the Head First way is more important than ever. If you've read a Head First book, you know what to expect--a visually rich format designed for the way your brain works. If you haven't, you're in for a treat. You'll see why people say it's unlike any other Java book you've ever read. By exploiting how your brain works, Head First Java compresses the time it takes to learn and retain--complex information. Its unique approach not only shows you what you need to know about Java syntax, it teaches you to think like a Java programmer. If you want to be bored, buy some other book. But if you want to understand Java, this book's for you.

Providing you with invaluable information for delivering rich, cross-platform Internet applications within the enterprise and across the web, this book shows you how to fully integrate Java and Flex. Pages of examples, step-by-step instructions, and from-the-field techniques guide you through the creation of your first Java/Flex applications.

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

Enterprise Integration Patterns

More than 70 solutions to common Hibernate problems

Hands-On Microservices - Monitoring and Testing

Spring: A Developer's Notebook

High-Performance Java Persistence