Pro Java Ee Spring Patterns Best Practices And Design Strategies Implementing Java Ee Patterns With The Spring Framework Experts Voice In Open Source

Pro Java EE Spring PatternsBest Practices and Design Strategies Implementing Java EE Patterns with the Spring FrameworkApress

Pro Spring updates the perennial bestseller with the latest that the Spring Framework 4 has to offer. Now in its fourth edition, this popular book is by far the most comprehensive and definitive treatment of Spring available. With Pro Spring, you'll learn Spring basics and core topics, and share 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 the various tiers or parts of an enterprise Java application: transactions, web and presentation 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. 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 such as Hibernate, Groovy, MyBatis, and more. Spring now works with Java EE and JPA 2 as

well. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom.

Explains how to leverage Java's architecture and mechanisms to design enterprise applications and considers code modularity, nonduplication, network efficiency, maintainability, and reusability.

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

Master Java EE design pattern implementation to improve yourdesign skills and your application's architecture Professional Java EE Design Patterns is the perfectcompanion for anyone who wants to work more effectively with JavaEE, and the only resource that covers both the theory andapplication of design patterns in solving real-world problems. Theauthors guide readers through both the fundamental and advancedfeatures of Java EE 7, presenting patterns throughout, anddemonstrating how they are used in day-to-day problem solving. As the most popular programming language in community-drivenenterprise software, Java EE provides an API and runtimeenvironment that is a superset of Java SE. Written for the juniorand experienced Java EE developer seeking to improve design qualityand effectiveness, the book covers areas including: Implementation and problem-solving with design patterns

Connection between existing Java SE design patterns and newJava EE concepts Harnessing the power of Java EE in design patterns Individually-based focus that fully explores each pattern Colorful war-stories showing how patterns were used in thefield to solve real-life problems Unlike most Java EE books that simply offer descriptions orrecipes, this book drives home the implementation of the pattern toreal problems to ensure that the reader learns how the patternsshould be used and to be aware of their pitfalls. For the programmer looking for a comprehensive guide that isactually useful in the everyday workflow, Professional Java EEDesign Patterns is the definitive resource on the market.

Summary Enterprise Java Microservices is an example-rich tutorial that shows how to design and manage large-scale Java applications as a collection of microservices. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Large applications are easier to develop and maintain when you build them from small, simple components. Java developers now enjoy a wide range of tools that support microservices application development, including right-sized app servers, open source frameworks, and well-defined patterns. Best of all, you can build microservices applications using your existing Java skills. About the Book Enterprise Java Microservices teaches you to design and build JVM-based microservices applications. You'll start by learning how microservices designs compare to traditional Java EE applications. Always practical,

author Ken Finnigan introduces big-picture concepts along with the tools and techniques you'll need to implement them. You'll discover ecosystem components like Netflix Hystrix for fault tolerance and master the Just enough Application Server (JeAS) approach. To ensure smooth operations, you'll also examine monitoring, security, testing, and deploying to the cloud. What's inside The microservices mental model Cloud-native development Strategies for fault tolerance and monitoring Securing your finished applications About the Reader This book is for Java developers familiar with Java EE. About the Author Ken Finnigan leads the Thorntail project at Red Hat, which seeks to make developing microservices for the cloud with Java and Java EE as easy as possible. Table of Contents PART 1 MICROSERVICES BASICS Enterprise Java microservices Developing a simple RESTful microservice Just enough Application Server for microservices Microservices testing Cloud native development PART 2 -IMPLEMENTING ENTERPRISE JAVA MICROSERVICES Consuming microservices Discovering microservices for consumption Strategies for fault tolerance and monitoring Securing a microservice Architecting a microservice hybrid Data streaming with Apache Kafka

When creating complex Java enterprise applications, do you spend a lot of time thumbing through a myriad of books and other resources searching for what you hope will be the API that's right for the project at hand? Java Database Best Practices rescues you from having to wade through books on each of the various APIs before

figuring out which method to use! This comprehensive guide introduces each of the dominant APIs (Enterprise JavaBeans, Java Data Objects, the Java Database Connectivity API (JDBC) as well as other, lesser-known options), explores the methodology and design components that use those APIs, and then offers practices most appropriate for different types and makes of databases, as well as different types of applications. Java Database Practices also examines database design, from table and database architecture to normalization, and offers a number of best practices for handling these tasks as well. Learn how to move through the various forms of normalization, understand when to denormalize, and even get detailed instructions on optimizing your SQL queries to make the best use of your database structure. Through it all, this book focuses on practical application of these techniques, giving you information that can immediately be applied to your own enterprise projects. Enterprise applications in today's world are about data-- whether it be information about a product to buy, a user's credit card information, or the color that a customer prefers for their auto purchases. And just as data has grown in importance, the task of accessing that data has grown in complexity. Until now, you have been left on your own to determine which model best suits your application, and how best to use your chosen API. Java Database Practices is the one stop reference book to help you determine what's appropriate for your specific project at hand. Whether it's choosing between an alphabet soup of APIs and technologies--EJB, JDO, JDBC, SQL, RDBMS, OODBMS,

and more on the horizon, this book is an indispensable resource you can't do without. Java Enterprise Edition (Java EE) continues to be one of the leading Java technologies and platforms. Beginning Java EE 7 is the first tutorial book on Java EE 7. Step by step and easy to follow, this book describes many of the Java EE 7 specifications and reference implementations, and shows them in action using practical examples. This definitive book also uses the newest version of GlassFish to deploy and administer the code examples. Written by an expert member of the Java EE specification request and review board in the Java Community Process (JCP), this book contains the best information possible, from an expert's perspective on enterprise Java technologies. What you'll learn Get started with the latest version of the Java EE Platform. Explore and use the EJB and JPA APIs from entities to session beans to message driven beans, and more. Discover web tier development APIs including JSF, Facelets and Expression Language. Uncover SOAP web services, RESTful web services, and more available in this latest Java EE. Create dynamic user interfaces for your enterprise and transactional Java applications. Who this book is for This book is for Java or Spring programmers with some experience and those new to Java EE platform. Architects will also find information about how to layer their Java EE applications. Table of Contents Java EE 7 Environment Context and Dependency Injection Bean Validation Java Persistence API Object-Relational Mapping Managing Persistent Object Enterprise Java Beans Callbacks, Timer Service, and Authorization Interceptors and Transactions

JavaServer Faces Processing and Navigation XML and JSON Messaging SOAP Web Services RESTful Web Service

Get up to speed on the principal technologies in the Java Platform, Enterprise Edition 7, and learn how the latest version embraces HTML5, focuses on higher productivity, and provides functionality to meet enterprise demands. Written by Arun Gupta, a key member of the Java EE team, this book provides a chapter-by-chapter survey of several Java EE 7 specifications, including WebSockets, Batch Processing, RESTful Web Services, and Java Message Service. You'll also get self-paced instructions for building an end-to-end application with many of the technologies described in the book, which will help you understand the design patterns vital to Java EE development. Understand the key components of the Java EE platform, with easy-to-understand explanations and extensive code samples Examine all the new components that have been added to Java EE 7 platform, such as WebSockets, JSON, Batch, and Concurrency Learn about RESTful Web Services, SOAP XML-based messaging protocol, and Java Message Service Explore Enterprise JavaBeans, Contexts and Dependency Injection, and the Java Persistence API Discover how different components were updated from Java EE 6 to Java EE 7

Discover how different software architectural models can help you solve problems, and learn best practices for the software development cycle Key Features Learn concepts related to software architecture and embrace them using the latest features of Spring 5

Discover architectural models and learn when to apply them Gain knowledge of architectural principles and how they can be used to provide accountability and rationale for architectural decisions Book Description Spring 5 and its ecosystem can be used to build robust architectures effectively. Software architecture is the underlying piece that helps us accomplish our business goals whilst supporting the features that a product demands. This book explains in detail how to choose the right architecture and apply best practices during your software development cycle to avoid technical debt and support every business requirement. Choosing the right architecture model to support your business requirements is one of the key decisions you need to take when a new product is being created from scratch or is being refactored to support new business demands. This book gives you insights into the most common architectural models and guides you when and where they can be used. During this journey, you'll see cutting-edge technologies surrounding the Spring products, and understand how to use agile techniques such as DevOps and continuous delivery to take your software to production effectively. By the end of this book, you'll not only know the ins and outs of Spring, but also be able to make critical design decisions that surpass your clients' expectations. What you will learn Understand the key principles of software architecture Uncover the most common architectural models available Analyze scenarios where an architecture model should be used Implement agile techniques to take your software to production Secure the products you are working on Master tricks that will help you build

high-performant applications Use cutting-edge technologies to build products Who this book is for If you're an experienced Spring developer aspiring to become an architect of enterprise-grade applications, this book is for you. It's also ideal for software architects who want to leverage Spring to create effective application blueprints. 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, ecommerce, 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 catalog of solutions to commonly occurring design problems, presenting 23 patterns that allow designers to create flexible and reusable designs for object-oriented software. Describes the circumstances in which each pattern is applicable, and discusses the consequences and trade-offs of using the pattern within a larger design.

Patterns are compiled from real systems, and include code for implementation in object-oriented programming languages like C++ and Smalltalk. Includes a bibliography. Annotation copyright by Book News, Inc., Portland, OR

Software engineering and computer science students need a resource that explains how to apply design patterns at the enterprise level, allowing them to design and implement systems of high stability and quality. Software Architecture Design Patterns in Java is a detailed explanation of how to apply design patterns and develop software architectures. It provides in-depth examples in Java, and guides students by detailing when, why, and how to use specific patterns. This textbook presents 42 design patterns, including 23 GoF patterns. Categories include: Basic, Creational, Collectional, Structural, Behavioral, and Concurrency, with multiple examples for each. The discussion of each pattern includes an example implemented in Java. The source code for all examples is found on a companion Web site. The author explains the content so that it is easy to understand, and each pattern discussion includes Practice Questions to aid instructors. The textbook concludes with a case study that pulls several patterns together to demonstrate how patterns are not applied in isolation, but collaborate within domains to solve complicated problems.

Build Java-based enterprise applications using the open source Eclipse Jakarta EE platform. This feature-packed book teaches you enterprise Java development top to bottom. It covers Java web-tier development using servlets, JavaServer Faces (JSF),

RESTful applications, and SON. You'll also cover Java data-tier development using persistence and transaction handling, messaging services, remote procedure calls, concurrency, and security to round out a complete Java-based enterprise application. Step by step and easy to follow, Beginning Jakarta EE includes many practical examples. Written by a Java expert and consultant, this book contains the best information possible on enterprise Java technologies. You'll see that Jakarta EE is the next evolution of Java EE 8 and how it is one of the leading Java platforms for enterprise application development. What You Will Learn Build enterprise Java applications using Jakarta EE Set up your development environment Create page-flow web applications with JSF Write single-page web applications with REST and JSON Persist data using JPA in Jakarta EE Build enterprise Java modules using EJBs and CDI Work with transaction engines using JTA Secure, log, and monitor your Jakarta EE applications Who This Book Is For Beginning Java EE application developers with some experience of Java 8.

The Spring framework is a widely adopted enterprise and general Java framework. The release of Spring Framework 3.0 has added many improvements and new features for Spring development. Written by Gary Mak, author of the bestseller Spring Recipes, and Josh Long, an expert Spring user and developer, Spring Enterprise Recipes is one of the first books on Spring 3.0. This key book focuses on Spring Framework 3.0, the latest version available, and a framework-related suite of tools, extensions, plug-ins,

modules, and more—all of which you may want and need for building three-tier Java EE applications. Build Spring enterprise and Java EE applications from the ground up using recipes from this book as templates to get you started, fast. Employ Spring Integration, Spring Batch and jBPM with Spring to bring your application's architecture to the next level. Use Spring's remoting, and messaging support to distribute your application, or bring your application to the cloud with GridGain and Terracotta. 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. Getting started with Spring Framework, Second Edition includes new chapters on Spring Web MVC, RESTful Web Services and Spring Security. This book is meant for Java developers with little or no knowledge of Spring Framework. All the examples shown in this book useSpring 4. You can download the examples (consisting of 60 sample projects) described in this book from the following Google Code project: https://code.google.com/p/getting-started-with-springframework-2edition/Chapter 1 – Introduction to Spring FrameworkChapter 2 – Spring Framework basicsChapter 3 - Configuring beansChapter 4 - Dependency injectionChapter 5 -Customizing beans and bean definitionsChapter 6 - Annotation-driven development with SpringChapter 7 - Database interaction using SpringChapter 8 - Messaging, emailing, asynchronous method execution, and caching using SpringChapter 9 - Aspect-oriented programmingChapter 10 – Spring Web MVC basicsChapter 11 – Validation and data binding in Spring Web MVCChapter 12 – Developing RESTful web services using Spring Web MVCChapter 13 – More Spring Web MVC – internationalization, file upload and asynchronous request processingChapter 14 – Securing applications using Spring SecurityThis book covers:-Specifying configuration metadata using XML and annotations- Programmatically configuring Spring container and beans- Configuring different types of bean properties- Bean lifecycle interfaces- Customizing beans using BeanPostProcessors and BeanFactoryPostProcessors-

Bean definition inheritance - SSR 250's and 330's annotations for dependency injection-Validation using JSR 303 (Bean Validation API) annotations and Spring's Validator interface -SpEL (Spring Expression Language) - Caching using Spring's cache abstraction- Sending and receiving JMS messages using Spring- Aspect-oriented programming support in Spring-Sending emails using Spring- Asynchronously executing methods using Spring- Task scheduling - Database interaction using JDBC and Hibernate- Programmatic and declarative transaction management- Developing web applications using Spring Web MVC- Data binding and validation in Spring Web MVC- Type conversion and formatting support in Spring- Spring's form tag library- Internationalization and file upload support- Asynchronous request processing- Developing RESTful Web Services using Spring Web MVC- Implementing web request security using Spring Security- Implementing method-level security using Spring Security- Implementing ACL-based security using Spring Security's ACL moduleThe book shows a simple internet banking application that is developed incrementally in each chapter of the book and covers the topics mentioned above. You can post your feedback and questions to the authors in the following Google Groups forum:groups.google.com/forum/#!forum/gettingstarted-with-spring-framework

The comprehensive Wrox guide for creating Java web applications for the enterprise This guide shows Java software developers and software engineers how to build complex web applications in an enterprise environment. You'll begin with an introduction to the Java Enterprise Edition and the basic web application, then set up a development application server environment, learn about the tools used in the development process, and explore numerous Java technologies and practices. The book covers industry-standard tools and technologies,

specific technologies, and underlying programming concepts. Java is an essential programming language used worldwide for both Android app development and enterprise-level corporate solutions As a step-by-step guide or a general reference, this book provides an all-inone Java development solution Explains Java Enterprise Edition 7 and the basic web application, how to set up a development application server environment, which tools are needed during the development process, and how to apply various Java technologies Covers new language features in Java 8, such as Lambda Expressions, and the new Java 8 Date & Time API introduced as part of JSR 310, replacing the legacy Date and Calendar APIs Demonstrates the new, fully-duplex WebSocket web connection technology and its support in Java EE 7, allowing the reader to create rich, truly interactive web applications that can push updated data to the client automatically Instructs the reader in the configuration and use of Log4j 2.0, Spring Framework 4 (including Spring Web MVC), Hibernate Validator, RabbitMQ, Hibernate ORM, Spring Data, Hibernate Search, and Spring Security Covers application logging, JSR 340 Servlet API 3.1, JSR 245 JavaServer Pages (JSP) 2.3 (including custom tag libraries), JSR 341 Expression Language 3.0, JSR 356 WebSocket API 1.0, JSR 303/349 Bean Validation 1.1, JSR 317/338 Java Persistence API (JPA) 2.1, full-text searching with JPA, RESTful and SOAP web services, Advanced Message Queuing Protocol (AMQP), and OAuth Professional Java for Web Applications is the complete Wrox guide for software developers who are familiar with Java and who are ready to build high-level enterprise Java web applications.

The upcoming Java 9 module system will affect existing applications and offer new ways of creating modular and maintainable applications. With this hands-on book, Java developers will

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fearn not only about the joys of modularity, but also about the patterns needed to create truly modular and reliable applications. Authors Sander Mak and Paul Bakker teach you the concepts behind the Java 9 module system, along with the new tools it offers. You'll also gain learn how to modularize existing code and how to build new Java applications in a modular way. Understand Java 9 module system concepts Master the patterns and practices for building truly modular applications Migrate existing applications and libraries to Java 9 modules Use JDK 9 tools for modular development and migration

The rise of Ruby on Rails has signified a huge shift in how we build web applications today; it is a fantastic framework with a growing community. There is, however, space for another such framework that integrates seamlessly with Java. Thousands of companies have invested in Java, and these same companies are losing out on the benefits of a Rails-like framework. Enter Grails. Grails is not just a Rails clone. It aims to provide a Rails-like environment that is more familiar to Java developers and employs idioms that Java developers are comfortable using, making the adjustment in mentality to a dynamic framework less of a jump. 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 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. Since its release, Spring Framework has transformed virtually every aspect of Java development including web applications, security, aspect-oriented programming, persistence, and messaging. Spring Batch, one of its newer additions, now brings the same familiar Spring idioms to batch processing. Spring Batch addresses the needs of any batch process, from the complex calculations performed in the biggest financial institutions to simple data migrations that occur with many software development projects. Pro Spring Batch is intended to answer three questions: What? What is batch processing? What does it entail? What makes it different from the other applications we are developing? What are the challenges inherent in the development of a batch process? Why? Why do batch processing? Why can't we just process things as we get them? Why do we do batch processing differently than the web applications that we currently work on? How? How to implement a robust, scalable, distributed batch processing system using open-source frameworks Pro Spring Batch gives concrete examples of how each piece of functionality is used and why it would be used in a real-world application. This includes providing tips that the "school of hard knocks" has taught author Michael Minella during his experience with Spring Batch. Pro Spring Batch includes examples of I/O options that are not mentioned in the official user's guide, as well as performance tips on things like how to limit the impact of maintaining the state of your jobs. The author also walks you through, from end to end, the design and implementation of a batch process based upon a

theoretical real-world example. This includes basic project setup, implementation, testing, tuning and scaling for large volumes.

Real World Java EE Patterns - Rethinking Best Practices (http://realworldpatterns.com) discusses patterns and best practices in a structured way, with code from real world projects. The rewritten and re-edited version of this book covers: an introduction into the core principles and APIs of Java EE 6, principles of transactions, isolation levels, CAP and BASE, remoting, pragmatic modularization and structure of Java EE applications, discussion of superfluous patterns and outdated best practices, patterns for domain driven and service oriented components, custom scopes, asynchronous processing and parallelization, real time HTTP events, schedulers, REST optimizations, plugins and monitoring tools, and fully functional JCA 1.6 implementation. Real World Java EE Patterns--Rethinking Best Practices will not only help experienced developers and architects to write concise code, but especially help you to shrink the codebase to unbelievably small sizes: -).

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.

Solve all your Spring 5 problems using complete and real-world code examples. When you start a new project, you'll be able to copy the code and configuration files from this book, and then modify them for your needs. This can save you a great deal of work over creating a project from scratch. The recipes in Spring 5 Recipes cover Spring fundamentals such as Spring IoC container, Spring AOP/ AspectJ, and more. Other recipes include Spring enterprise solutions for topics such as Spring Java EE integration, Spring Integration, Spring Batch, Spring Remoting, messaging, transactions, and working with big data and the cloud using Hadoop and MongoDB. Finally, Spring web recipes cover Spring MVC, other dynamic scripting, integration with the popular Grails Framework (and Groovy), REST/web services, and more. You'll also see recipes on new topics such as Spring Framework 5, reactive Spring, Spring 5 microservices, the functional web framework and much more. This book builds upon the best-selling success of the previous editions and focuses on the latest Spring Framework features for building enterprise Java applications. What You'll Learn Get re-usable code recipes and snippets for core Spring, annotations and other development tools Access Spring MVC for web development Work with Spring REST and microservices for web services development and integration into your enterprise Java applications Use Spring Batch, NoSQL and big data for building and integrating various cloud computing services and resources

Integrate Java Enterprise Edition and other Java APIs for use in Spring Use Grails code and much more Who This Book Is For Experienced Java and Spring programmers. See how Domain-Driven Design (DDD) combines with Jakarta EE MicroProfile or Spring Boot to offer a complete suite for building enterprise-grade applications. In this book you will see how these all come together in one of the most efficient ways to develop complex software. Practical Domain-Driven Design in Enterprise Java starts by building out the Cargo Tracker reference application as a monolithic application using the Jakarta EE platform. By doing so, you will map concepts of DDD (bounded contexts, language, and aggregates) to the corresponding available tools (CDI, JAX-RS, and JPA) within the Jakarta EE platform. Once you have completed the monolithic application, you will walk through the complete conversion of the monolith to a microservices-based architecture, again mapping the concepts of DDD and the corresponding available tools within the MicroProfile platform (config, discovery, and fault tolerance). To finish this section, you will examine the same microservices architecture on the Spring Boot platform. The final set of chapters looks at what the application would be like if you used the CQRS and event sourcing patterns. Here you'll use the Axon framework as the base framework. What You Will Learn Discover the DDD architectural principles and use the DDD design patterns Use the new Eclipse Jakarta EE platform Work with the Spring Boot framework Implement microservices design patterns, including context mapping, logic design, entities, integration, testing,

and security Carry out event sourcing Apply CQRS Who This Book Is For Junior developers intending to start working on enterprise Java; senior developers transitioning from monolithic- to microservices-based architectures; and architects transitioning to a DDD philosophy of building applications.

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. A complete practitioner's catalog of proven domain services design solutions that can help any organization leverage SOA's full benefits * *Provides a vocabulary of proven SOA design solutions, with concrete examples and code that is easy for architects to adapt and implement. *By Rob Daigneau, one of the industry's leading experts in complex systems integration. *Helps architects and IT leaders accurately set stakeholder expectations for major SOA initiatives. Service-oriented architectures are

typically called upon to deliver two general categories of services: enterprise services and domain services. Enterprise services are essentially composite services that typically leverage technologies such as message-oriented middleware. Domain services are the building blocks these composites depend upon. Each service category is best served by a distinct set of design solutions. This is the first book to systematically identify and explain best practice patterns for domain services. Rob Daigneau expands upon the Service Layer concept (covered expertly by Fowler in Patterns of Enterprise Application Architecture) domain services can be used with Enterprise Integration Patterns (made famous by Hohpe and Woolf). Daigneau begins by reviewing SOA concepts, illuminating the distinctions between enterprise and domain services, and identifying key relationships between domain services and other pattern groups. Next, he introduces each essential pattern for creating and delivering domain services, providing a vocabulary of design solutions that architects and other IT professionals can implement by referencing and adapting the concrete examples he supplies.

This workbook approach deepens understanding, builds confidence, and strengthens readers' skills. It covers all five categories of design pattern intent: interfaces, responsibility, construction, operations, and extensions.

This revised edition of the best-selling book has been updated to reflect changes available in the latest version of Java including drag and drop, security enhancements,

the new applet deployment enhancements, and the new Java Naming and Directory Interface. It also includes new features such as the new Java sound API and its use in both applications and applets, plus expanded coverage of Java's JDBC data access capabilities. · Essential Java · Variables, Arrays, Strings · Operators, Conditionals and Loops- Object-Oriented Programming-Inheritance, Inner Classes and Interfaces- AWT: Applets, Applications and Event Handling- AWT: text Fields, Buttons, Checkboxes, Radio Buttons and Layouts- AWT: Lists, Choices, Text Areas, Scroll Bars and Scroll Panes AWT: Graphics, Images, text and Fonts AWT: Windows, Menus, And Dialog Boxes- Working with Streams: File and I/O Handling- Working with Multiple Threads-Swing: Applets, Applications and Pluggable Look and feel. Swing: text Fields, Buttons, Toggle Buttons, Check Boxes and Radio Buttons. Swing: Viewports, Scrolling, Sliders and Lists. Swing: Combo Boxes, progress Bars, Tooltips, Separators and Choosers. Swing: Layered Panes, Tabbed Panes, Split Panes and Layouts. Swing: Menus and ToolBars- Swing: Windows, Desktop Panes, Inner Frames and Dialog Boxes- Java and XML: Using Document Object model Java and XML: Using the Simple API for XML. Collections Creating Packages, Interfaces, JAR Files and Java Beans Exception Handling, Debugging and Advanced Topics

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

Build and deploy secure Spring Framework and Spring Boot-based enterprise Java applications with the Spring Security Framework. This book explores a comprehensive set of functionalities to implement industry-standard authentication and authorization mechanisms for Java applications. Pro Spring Security, Second Edition has been updated to incorporate the changes in Spring Framework 5 and Spring Boot 2. It is an advanced tutorial and reference that guides you through the implementation of the security features for a Java web application by presenting consistent examples built from the ground up. This book also provides you with a broader look into Spring security by including up-to-date use cases such as building a security layer for RESTful web services and Grails applications. What You Will Learn Explore the scope of security and how to use the Spring Security Framework Master Spring security architecture and design Secure the web tier in Spring Work with alternative authentication providers Take advantage of business objects and logic security Extend

Spring security with other frameworks and languages Secure the service layer Who This Book Is ForExperienced Spring and Java developers with prior experience in building Spring Framework or Boot-based applications.

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 bestin-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.

quide written by two of the JavaServer Faces (JSF) specification leads. The authors take you through real-world examples that demonstrate how these new features are used with other APIs in Java EE 8. You'll see the new and exciting ways JSF applications can use to communicate between a client and a server, such as using WebSockets, invoking bean methods directly from Ajax, executing client-side JavaScript when Ajax calls complete, and more Along the way you'll broaden your knowledge of JSF components and web APIs best practices, and learn a great deal about the internals of JSF and the design decisions that have been made when building the JSF API. For example, you'll see what artefacts are now CDI injectable, how CDI changed JSF internally, and what some of the caveats are when working with the CDI versions of a JSF artefact. Furthermore, you'll build an example application from scratch. After reading The Definitive Guide to JSF in Java EE 8, you'll be ready to build your own efficient and secure web applications. What You Will Learn Leverage the new features in JSF 2.3 in your existing applications Integrate JSF and CDI Use the brand new Component Search Expression framework, which enables you to more easily locate components from your template Extend the Component Search Expression framework with your own search operators Work with the different ways of mapping requests to JSF, make your application use extensionless URLs, and programmatically inspect which resources are present in your application Master the best practices for web application development and see which are obsolete Who This Book Is For

Existing JSF or Java developers who need to create a web UI. No prior knowledge of JSF is required, but the book does skew towards the more experienced developer. Concepts such as dependency injection and MVC are assumed to be known, as is a general knowledge about HTML, HTTP and other web standards.

Spring Web Flow is an exciting open-source framework for developing Java web applications. The framework improves productivity by addressing three major pain—points facing web application developers: user interface navigation control, state management, and modularity. The Definitive Guide to Spring Web Flow covers Spring Web Flow in detail by explaining its motivation and feature set, as well as providing practical guidance for using the framework to develop web applications successfully in a number of environments.

Pro Spring 2 is the perfect, simple answer for your lightweight, alternative Java EE development needs! Put simply, this book brings J2EE/Java EE "down to earth." Without the hassles of using the EJB 3 specification and similar, you can build lighter, better-performing agile enterprise Java-based applications using Spring Framework 2. The Spring framework can also integrate other noteworthy and hot open source tools like Apache Struts, Hibernate, OpenJPA, GlassFish, and many more. You'll work through a real, scalable enterprise application and build it from the ground up with Spring, using all the multiple web views and frameworks.

Master Spring basics and core topics, and share 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 the various tiers and parts of an enterprise Java application: transactions, web and presentation tiers, deployment, and much more. A full sample application allows you to apply many of the technologies and techniques covered in Pro Spring 5 and see how they work together. This book updates the perennial bestseller with the latest that the new Spring Framework 5 has to offer. Now in its fifth edition, this popular title is by far the most comprehensive and definitive treatment of Spring available. It covers the new functional web framework and interoperability with Java 9. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom. 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 such as Hibernate, Groovy, MyBatis, and more. Spring now works with Java EE and JPA 2 as well. What You'll Learn Discover what's new in Spring Framework 5 Use the Spring Framework with Java 9 Master data access and transactions Work with the new functional web framework Create microservices and other web services Who This Book Is For Experienced Java and enterprise Java developers and programmers. Some experience with Spring highly recommended. The Practitioner's Guide to Implementing SOA with Java EE Technologies This book

brings together all the practical insight you need to successfully architect enterprise solutions and implement them using SOA and Java EE technologies. Writing for senior IT developers, strategists, and enterprise architects, the authors cover everything from concepts to implementation, requirements to tools. The authors first review the Java EE platform's essential elements in the context of SOA and web services deployment, and demonstrate how Java EE has evolved into the world's best open source solution for enterprise SOA. After discussing standards such as SOAP, WSDL, and UDDI, they walk through implementing each key aspect of SOA with Java EE. Step by step, you'll learn how to integrate service-oriented web and business components of Java EE technologies with the help of process-oriented standards such as BPEL/CDL into a coherent, tiered enterprise architecture that can deliver a full spectrum of business services. Implementing SOA Using Java™ EE concludes with a section-length case study that walks through analyzing a company's requirements, creating an effective SOA architecture, and building a concise proof-of-concept prototype with NetBeans IDE. Coverage includes Using Java EE technologies to simplify SOA implementation Mastering messaging, service descriptions, registries, orchestration, choreography, and other essential SOA concepts Building an advanced web services infrastructure for implementing SOA Using Java Persistence API to provide for persistence Getting started with Java Business Integration (JBI), the new open specification for delivering SOA Implementing SOA at the web and business tiers Developing, configuring, and

deploying SOA systems with NetBeans IDE Constructing SOA systems with NetBeans SOA Pack

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.

"The Java™ landscape is littered with libraries, tools, and specifications. What's been lacking is the expertise to fuse them into solutions to real–world problems. These patterns are the intellectual mortar for J2EE software construction." —John Vlissides, coauthor of Design Patterns: Elements of Reusable Object-Oriented Software Pro Java[™] EE Spring Patterns focuses on enterprise patterns, best practices, design strategies, and proven solutions using key Java EE technologies including JavaServer Pages[™], Servlets, Enterprise JavaBeans[™], and Java Message Service APIs. This Java EE patterns resource, catalog, and guide, with its patterns and numerous strategies, documents and promotes best practices for these technologies, implemented in a very pragmatic way using the Spring Framework and its counters. This title Introduces Java EE application design and Spring framework fundamentals Describes a catalog of patterns used across the three tiers of a typical Java EE application Provides implementation details and analyses each pattern with benefits and concerns Describes the application of these patterns in a practical application scenario