Real World Java Ee Patterns Rethinking Best Practices

"The definitive guide, not just for JUnit, but unit
testing in general."---Tyson S. Maxwell, Raytheon --
The surprisingly successful book Real World Java
EE Patterns-Rethinking Best Practices [press.adam-
bien.com] discusses the rethinking of legacy J2EE
patterns. Now, Real World Java EE Night Hacks
walks you through the Java EE 6 best practices and
patterns used to create a real world application
called "x-ray." X-ray is a high-performance blog
statistics application built with nothing but vanilla
Java EE 6 leveraging the synergies between the
JAX-RS, EJB 3.1, JPA 2, and CDI 1.0 APIs.
Foreword by James Gosling, Father of Java
"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

Get hands-on experience implementing 26 of the most common design patterns using Java and Eclipse. In addition to Gang of Four (GoF) design patterns, you will also learn about alternative design patterns, and understand the criticisms of design patterns with an overview of anti-patterns. For each pattern you will see at least one real-world scenario, a computer-world example, and a complete implementation including output. This book has three parts. The first part covers 23 Gang of Four (GoF) design patterns. The second part includes three alternative design patterns. The third part presents criticisms of design patterns with an overview of anti-patterns. You will work through easy-to-follow examples to understand the concepts in depth and you will have a collection of programs to port over to your own projects. A Q&A session is included in each chapter and covers the pros and cons of each

pattern. The last chapter presents FAQs about the design patterns. The step-by-step approach of the book helps you apply your skills to learn other patterns on your own, and to be familiar with the latest version of Java and Eclipse. What You'll Learn Work with each of the design patterns Implement design patterns in real-world applications Choose from alternative design patterns by comparing their pros and cons Use the Eclipse IDE to write code and generate output Read the in-depth Q&A session in each chapter with pros and cons for each design pattern Who This Book Is For Software developers, architects, and programmers
Summary Java Persistence with Hibernate, Second Edition explores Hibernate by developing an application that ties together hundreds of individual examples. In this revised edition, authors Christian Bauer, Gavin King, and Gary Gregory cover Hibernate 5 in detail with the Java Persistence 2.1 standard (JSR 338). All examples have been updated for the latest Hibernate and Java EE specification versions. About the Technology Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. Persistence—the ability of data to outlive an instance of a program—is central to modern applications. Hibernate, the most popular Java persistence tool, offers automatic and transparent object/relational mapping, making it a

snap to work with SQL databases in Java applications. About the Book Java Persistence with Hibernate, Second Edition explores Hibernate by developing an application that ties together hundreds of individual examples. You'll immediately dig into the rich programming model of Hibernate, working through mappings, queries, fetching strategies, transactions, conversations, caching, and more. Along the way you'll find a well-illustrated discussion of best practices in database design and optimization techniques. In this revised edition, authors Christian Bauer, Gavin King, and Gary Gregory cover Hibernate 5 in detail with the Java Persistence 2.1 standard (JSR 338). All examples have been updated for the latest Hibernate and Java EE specification versions. What's Inside Object/relational mapping concepts Efficient database application design Comprehensive Hibernate and Java Persistence reference Integration of Java Persistence with EJB, CDI, JSF, and JAX-RS * Unmatched breadth and depth About the Reader The book assumes a working knowledge of Java. About the Authors Christian Bauer is a member of the Hibernate developer team and a trainer and consultant. Gavin King is the founder of the Hibernate project and a member of the Java Persistence expert group (JSR 220). Gary Gregory is a principal software engineer working on application servers and legacy integration. Table of

Contents PART 1 GETTING STARTED WITH ORM Understanding object/relational persistence Starting a project Domain models and metadata PART 2 MAPPING STRATEGIES Mapping persistent classes Mapping value types Mapping inheritance Mapping collections and entity associations Advanced entity association mappings Complex and legacy schemas PART 3 TRANSACTIONAL DATA PROCESSING Managing data Transactions and concurrency Fetch plans, strategies, and profiles Filtering data PART 4 WRITING QUERIES Creating and executing queries The query languages Advanced query options Customizing SQL Get the deep insights you need to master efficient architectural design considerations and solve common design problems in your enterprise applications. Key Features The benefits and applicability of using different design patterns in JAVA EE Learn best practices to solve common design and architectural challenges Choose the right patterns to improve the efficiency of your programs Book Description Patterns are essential design tools for Java developers. Java EE Design Patterns and Best Practices helps developers attain better code quality and progress to higher levels of architectural creativity by examining the purpose of each available pattern and demonstrating its implementation with various code examples. This book will take you through a number of patterns and their Java EE-

specific implementations. In the beginning, you will learn the foundation for, and importance of, design patterns in Java EE, and then will move on to implement various patterns on the presentation tier, business tier, and integration tier. Further, you will explore the patterns involved in Aspect-Oriented Programming (AOP) and take a closer look at reactive patterns. Moving on, you will be introduced to modern architectural patterns involved in composing microservices and cloud-native applications. You will get acquainted with security patterns and operational patterns involved in scaling and monitoring, along with some patterns involved in deployment. By the end of the book, you will be able to efficiently address common problems faced when developing applications and will be comfortable working on scalable and maintainable projects of any size. What you will learn Implement presentation layers, such as the front controller pattern Understand the business tier and implement the business delegate pattern Master the implementation of AOP Get involved with asynchronous EJB methods and REST services Involve key patterns in the adoption of microservices architecture Manage performance and scalability for enterprise-level applications Who this book is for Java developers who are comfortable with programming in Java and now want to learn how to implement design patterns to create robust, reusable

and easily maintainable apps.

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.

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

Summary Enterprise OSGI in Action is a hands-on guide for developers using OSGi to build the next generation of enterprise Java applications. By presenting relevant examples and case studies, this book guides the reader through the maze of new standards and projects. About This Book Enterprise OSGi is a set of standards for building modular Java applications which integrate seamlessly with existing Java EE technologies. It extends the OSGi component framework to distributed systems. Enterprise OSGi in Action is a hands-on guide for developers using OSGi to build enterprise Java applications. Many examples and case studies show you how to build, test, and deploy modular web applications. The book explains how to take advantage of dynamism, distribution, and automatic dependency provisioning, while still integrating with existing Java EE applications. The book is written for Java EE developers. No prior experience with OSGi is required. What's Inside Build modular applications using servlets, JSPs, WARs, and JPA Better component reuse and robustness Expert tips for Apache Aries Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Authors Holly Cummins and Tim Ward are lead engineers who regularlyspeak at developerWorks, Devoxx, JavaZone, and EclipseCon. Tim has written

standards in both the OSGi Core and Enterprise Specifications and both authors are active Apache Aries committers. Table of Contents PART 1 PROGRAMMING BEYOND HELLO WORLD OSGi and the enterprise—why now? Developing a simple OSGi-based web application Persistence pays off Packaging your enterprise OSGi applications PART 2 BUILDING BETTER ENTERPRISE OSGI APPLICATIONS Best practices for enterprise applications Building dynamic applications with OSGi services Provisioning and resolution Tools for building and testing IDE development tools PART 3 INTEGRATING ENTERPRISE OSGI WITH EVERYTHING ELSE Hooking up remote systems with distributed OSGi Migration and integration Coping with the non-OSGi world Choosing a stack 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 Servlet and JavaServer Pages (JSP) are the underlying technologies for developing web applications in Java. They are essential for any programmer to master in order to effectively use frameworks such as JavaServer Faces, Struts 2 or Spring MVC. Covering Servlet 3.1 and JSP 2.3, this book

explains the important programming concepts and design models in Java web development as well as related technologies and new features in the latest versions of Servlet and JSP. With comprehensive coverage and a lot of examples, this book is a guide to building real-world applications.

Create various design patterns to master the art of solving problems using Java Key Features This book demonstrates the shift from OOP to functional programming and covers reactive and functional patterns in a clear and step-by-step manner All the design patterns come with a practical use case as part of the explanation, which will improve your productivity Tackle all kinds of performance-related issues and streamline your development Book Description Having a knowledge of design patterns enables you, as a developer, to improve your code base, promote code reuse, and make the architecture more robust. As languages evolve, new features take time to fully understand before they are adopted en masse. The mission of this book is to ease the adoption of the latest trends and provide good practices for programmers. We focus on showing you the practical aspects of smarter coding in Java. We'll start off by going over object-oriented (OOP) and functional programming (FP) paradigms, moving on to describe the most frequently used design patterns in their classical format and explain how Java's functional programming features are changing them. You will learn to enhance implementations by mixing OOP and FP, and finally get to know about the reactive programming model, where FP and OOP are used in conjunction with a view to writing better code. Gradually, the book will show you the latest trends in architecture, moving from MVC to microservices and serverless architecture. We will finish off by highlighting the new Java features and best practices. By the end of the book, you will be able to efficiently address common problems

faced while developing applications and be comfortable working on scalable and maintainable projects of any size. What you will learn Understand the OOP and FP paradigms Explore the traditional Java design patterns Get to know the new functional features of Java See how design patterns are changed and affected by the new features Discover what reactive programming is and why is it the natural augmentation of FP Work with reactive design patterns and find the best ways to solve common problems using them See the latest trends in architecture and the shift from MVC to serverless applications Use best practices when working with the new features Who this book is for This book is for those who are familiar with Java development and want to be in the driver's seat when it comes to modern development techniques. Basic OOP Java programming experience and elementary familiarity with Java is expected.
Explore the latest Java-based software development techniques and methodologies through the project-based approach in this practical guide. Unlike books that use abstract examples and lots of theory, Real-World Software Development shows you how to develop several relevant projects while learning best practices along the way. With this engaging approach, junior developers capable of writing basic Java code will learn about state-of-the-art software development practices for building modern, robust and maintainable Java software. You'll work with many different software development topics that are often excluded from software develop how-to references. Featuring real-world examples, this book teaches you techniques and methodologies for functional programming, automated testing, security, architecture, and distributed systems. 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 Larman covers how to investigate requirements, create solutions and then translate designs into code, showing developers how to make practical use of the most significant recent developments. A summary of UML notation is included A how-to guide for Java programmers who want to use design patternswhen developing real-world enterprise applications This practical book explores the subject of design patterns, orpatterns that occur in the design phase of a project's life cycle.With an emphasis on Java for the enterprise, Mark Grand guides Javaprogrammers on how to apply traditional and new patterns whendesigning a large enterprise application. The author clearlyexplains how existing patterns work with the new enterprise designpatterns and demonstrates through case studies how to use designpatterns in the real world. Features include over 50 designpatterns, each mapped out by UML, plus an overview of UML 1.4 andhow it fits in with the different phases of a project's life cycle.
Explains how to leverage Java's architecture and mechanisms to design enterprise applications and considers code modularity, nonduplication, network efficiency, maintainability, and reusability.
Using research in neurobiology, cognitive science and learning theory, this text loads patterns into your brain in a way that lets you put them to work immediately, makes you better at solving software design problems, and improves your ability to speak the language of patterns with others on your team.
Become an ADF expert with essential tips n' tricks and case

studies for leveraging your ADF applications.

Describes ways to incorporate domain modeling into software development.

Java EE and .NET Interoperability addresses issues encountered during the integration process, such as a diverse technology set, incompatible APIs, and disparate environment maintenance. The experienced authors outline strategies, approaches, and best practices, including messaging, Web services, and integration-related frameworks and patterns. The book also introduces readers to Service Oriented Architecture (SOA), the building block for scalable and reliable enterprise integration solutions. This indispensable book provides the Java EE and .NET developer community with multiple strategies to integrate between Java EE and .NET platforms that save developers time and effort. Applying proven interoperability solutions significantly reduces the application development cycle. Coverage includes · Effective Java EE—.NET integration strategies and best practices · Detailed enterprise coverage, as well as standalone Java EE component integration with .NET · SOA as a building block for Java EE—.NET interoperability · Interoperability security issues and risk mitigation · Managing reliability, availability, and scalability for Web services built on Java EE and .NET · The latest interoperability standards and specifications, including Web SSO MEX and WS-Management · Current interoperability technologies, such as Windows Communication Foundation, WSE 3.0, JAX-WS, and Enterprise Service Bus Develop and deploy fully functional applications and microservices utilising Tomcat, Glassfish servers, Cloud and docker in Java EE 8 Key Features Explore the complete workflow of developing enterprise Java applications Develop microservices with Docker Container and deploy it in cloud Simplify Java EE application development Book Description

Java EE is one of the most popular tools for enterprise application design and development. With recent changes to Java EE 8 specifications, Java EE application development has become a lot simpler with the new specifications, some of which compete with the existing specifications. This guide provides a complete overview of developing highly performant, robust and secure enterprise applications with Java EE with Eclipse. The book begins by exploring different Java EE technologies and how to use them (JSP, JSF, JPA, JDBC, EJB, and more), along with suitable technologies for different scenarios. You will learn how to set up the development environment for Java EE applications and understand Java EE specifications in detail, with an emphasis on examples. The book takes you through deployment of an application in Tomcat, GlassFish Servers, and also in the cloud. It goes beyond the basics and covers topics like debugging, testing, deployment, and securing your Java EE applications. You'll also get to know techniques to develop cloud-ready microservices in Java EE. What you will learn Set up Eclipse, Tomcat, and Glassfish servers for Java EE application development Use JSP, Servlet, JSF, and EJBs to create a user interface and write business logic Create Java EE database applications using JDBC and JPA Handle asynchronous messages using MDBs for better scalability Deploy and debug Java EE applications and create SOAP and REST web services Write unit tests and calculate code coverage Use Eclipse MAT (Memory Analysis Tool) to debug memory issues Create and deploy microservices Who this book is for If you are a Java developer with little or no experience in Java EE application development, or if you have experience in Java EE technology but are looking for tips to simplify and accelerate your development process, then this book is for you.
A definitive guide to mastering and implementing concurrency

patterns in your applications Key Features Build scalable apps with patterns in multithreading, synchronization, and functional programming Explore the parallel programming and multithreading techniques to make the code run faster Efficiently use the techniques outlined to build reliable applications Book Description Selecting the correct concurrency architecture has a significant impact on the design and performance of your applications. This book explains how to leverage the different characteristics of parallel architecture to make your code faster and more efficient. To start with, you'll understand the basic concurrency concepts and explore patterns around explicit locking, lock free programming, futures & actors. Then, you'll get insights into different concurrency models and parallel algorithms and put them to practice in different scenarios to realize your application's true potential. We'll take you through multithreading design patterns, such as master, slave, leader, follower, map-reduce, and monitor, also helping you to learn hands-on coding using these patterns. Once you've grasped all of this, you'll move on to solving problems using synchronizer patterns. You'll discover the rationale for these patterns in distributed & parallel applications, followed by studying how future composition, immutability and the monadic flow help create more robust code. Toward the end of the book, you'll learn about the actor paradigm and actor patterns - the message passing concurrency paradigm. What you will learn Explore parallel architecture Get acquainted with concurrency models Internalize design themes by implementing multithreading patterns Get insights into concurrent design patterns Discover design principles behind many java threading abstractions Work with functional concurrency patterns Who this book is for This is a must-have guide for developers who want to learn patterns to build scalable and high-performing apps. It's assumed that you

already have a decent level of programming knowledge. 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

What people are saying about Search Patterns "Search Patterns is a delight to read -- very thoughtful and thought provoking. It's the most comprehensive survey of designing effective search experiences I've seen." --Irene Au, Director of User Experience, Google "I love this book! Thanks to Peter and Jeffery, I now know that search (yes, boring old yucky who cares search) is one of the coolest ways around of looking at the world." --Dan Roam, author, The Back of the Napkin (Portfolio Hardcover) "Search Patterns is a playful guide to the practical concerns of search interface design. It contains a bonanza of screenshots and illustrations that capture the best of today's design practices and presents a fresh perspective on the broader role of search and discovery." --Marti Hearst, Professor, UC Berkeley and author, Search User Interfaces (Cambridge University Press) "It's not often I come across a book that asks profound questions about a fundamental human activity, and then proceeds to answer those questions with practical observations and suggestions. Search Patterns is an expedition into the heart of the web and human cognition, and for me it was a delightful journey that delivered scores of insights." --Dave Gray, Founder and Chairman, XPLANE "Search is swiftly transforming everything we know, yet people don't understand how mavens design search: by stacking breadcrumbs, scenting widgets, and keeping eyeballs on the engine. I urge you to put your eyeballs on this unique and important book." --Bruce Sterling, Writer, Futurist, and Co-Founder, The Electronic Frontier Foundation "As one

who searches a lot (and often ends up frustrated), Search Patterns is a revelation." --Nigel Holmes, Designer, Theorist, and Principal, Explanation Graphics "Search Patterns is a fabulous must-have book! Inside, you'll learn the whys and wheres of practically every modern search design trick and technique." --Jared Spool, CEO and Founder, User Interface Engineering Search is among the most disruptive innovations of our time. It influences what we buy and where we go. It shapes how we learn and what we believe. In this provocative and inspiring book, you'll explore design patterns that apply across the categories of web, ecommerce, enterprise, desktop, mobile, social, and real-time search and discovery. Filled with colorful illustrations and examples, Search Patterns brings modern information retrieval to life, covering such diverse topics as relevance, faceted navigation, multi-touch, personalization, visualization, multi-sensory search, and augmented reality. By drawing on their own experience-as well as best practices and evidence-based research-the authors not only offer a practical guide to help you build effective search applications, they also challenge you to imagine the future of discovery. You'll find Search Patterns intriguing and invaluable, whether you're a web practitioner, mobile designer, search entrepreneur, or just interested in the topic. Discover a pattern language for search that embraces user psychology and behavior, information architecture, interaction design, and emerging technology Boost enterprise efficiency and e-commerce sales Enable mobile users to achieve goals, complete tasks, and find what they need Drive design innovation for search interfaces and applications JBoss in Action is the first book to focus on teaching readers in detail how to use the JBoss application server. Unlike other titles about JBoss, the authors of JBoss in Action go deeper into the advanced features and configuration of the server. In particular, it focuses on enterprise-class topics, such as high

availability, security, and performance. This book walks readers through the JBoss 5 Application Server from installation to configuration to production development. It shows how to configure the server's various component containers such as the JBoss Web Server, the EJB 3 server, and JBoss Messaging. It also provides detailed insight into configuring the various component services such as security, performance, and clustering. Beyond coverage of the core application server, the book also teaches how to use some of the "hot" technologies that run on top of the application server, such as Jboss Seam and JBoss Portal. 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. The authors, both seasoned professional experts at developing and administering JBoss, provide meaningful explanations and background on many topics which they tie in with their own practical, real-world advice from their collective experience. These uniquely comprehensive explanations and the wide coverage provided in this book surpass any other content currently available in any other book, article, or documentation on the subject.
Real World Java Ee Patterns-Rethinking Best PracticesLulu.com
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: -).

Praise for Core Security Patterns Java provides the application developer with essential security mechanisms and support in avoiding critical security bugs common in other languages. A language, however, can only go so far. The developer must understand the security requirements of the application and how to use the features Java provides in order to meet those requirements. Core Security Patterns addresses both aspects of security and will be a guide to developers everywhere in creating more secure applications. --Whitfield Diffie, inventor of Public-Key Cryptography A comprehensive book on Security Patterns, which are critical for secure programming. --Li Gong, former Chief Java Security Architect, Sun Microsystems, and coauthor of Inside Java 2 Platform Security As developers of existing applications, or future innovators that will drive the next generation of highly distributed applications, the patterns and best practices outlined in this book will be an important asset to your development efforts. --Joe Uniejewski, Chief Technology Officer and Senior Vice President, RSA Security, Inc. This book makes an important case for taking a proactive approach to security rather than relying on the reactive security

approach common in the software industry. --Judy Lin, Executive Vice President, VeriSign, Inc. Core Security Patterns provides a comprehensive patterns-driven approach and methodology for effectively incorporating security into your applications. I recommend that every application developer keep a copy of this indispensable security reference by their side. --Bill Hamilton, author of ADO.NET Cookbook, ADO.NET in a Nutshell, and NUnit Pocket Reference As a trusted advisor, this book will serve as a Java developer s security handbook, providing applied patterns and design strategies for securing Java applications. --Shaheen Nasirudheen, CISSP,Senior Technology Officer, JPMorgan Chase Like Core J2EE Patterns, this book delivers a proactive and patterns-driven approach for designing end-to-end security in your applications. Leveraging the authors strong security experience, they created a must-have book for any designer/developer looking to create secure applications. --John Crupi, Distinguished Engineer, Sun Microsystems, coauthor of Core J2EE Patterns Core Security Patterns is the hands-on practitioner s guide to building robust end-to-end security into J2EE™ enterprise applications, Web services, identity management, service provisioning, and personal identification solutions. Written by three leading Java security architects, the patterns-driven approach fully reflects today s best practices for security in large-scale, industrial-strength applications. The authors explain the fundamentals of Java application security from the ground up, then introduce a powerful, structured security methodology; a vendor-independent security framework;

a detailed assessment checklist; and twenty-three proven security architectural patterns. They walk through several realistic scenarios, covering architecture and implementation and presenting detailed sample code. They demonstrate how to apply cryptographic techniques; obfuscate code; establish secure communication; secure J2ME™ applications; authenticate and authorize users; and fortify Web services, enabling single sign-on, effective identity management, and personal identification using Smart Cards and Biometrics. Core Security Patterns covers all of the following, and more: What works and what doesn t: J2EE application-security best practices, and common pitfalls to avoid Implementing key Java platform security features in real-world applications Establishing Web Services security using XML Signature, XML Encryption, WS-Security, XKMS, and WS-I Basic security profile Designing identity management and service provisioning systems using SAML, Liberty, XACML, and SPML Designing secure personal identification solutions using Smart Cards and Biometrics Security design methodology, patterns, best practices, reality checks, defensive strategies, and evaluation checklists End-to-end security architecture case study: architecting, designing, and implementing an end-to-end security solution for large-scale applications

This book is a thorough introduction to Java Message Service (JMS), the standard Java application program interface (API) from Sun Microsystems that supports the formal communication known as "messaging" between computers in a network. JMS provides a common

interface to standard messaging protocols and to special messaging services in support of Java programs. The messages exchange crucial data between computers, rather than between users--information such as event notification and service requests. Messaging is often used to coordinate programs in dissimilar systems or written in different programming languages.Using the JMS interface, a programmer can invoke the messaging services of IBM's MQSeries, Progress Software's SonicMQ, and other popular messaging product vendors. In addition, JMS supports messages that contain serialized Java objects and messages that contain Extensible Markup Language (XML) pages.Messaging is a powerful new paradigm that makes it easier to uncouple different parts of an enterprise application. Messaging clients work by sending messages to a message server, which is responsible for delivering the messages to their destination. Message delivery is asynchronous, meaning that the client can continue working without waiting for the message to be delivered. The contents of the message can be anything from a simple text string to a serialized Java object or an XML document.Java Message Service shows how to build applications using the point-to-point and publish-and-subscribe models; how to use features like transactions and durable subscriptions to make an application reliable; and how to use messaging within Enterprise JavaBeans. It also introduces a new EJB type, the MessageDrivenBean, that is part of EJB 2.0, and discusses integration of messaging into J2EE.

The Java EE 7 Tutorial: Volume 2, Fifth Edition, is a task-oriented, example-driven guide to developing enterprise applications for the Java Platform, Enterprise Edition 7 (Java EE 7). Written by members of the Java EE documentation team at Oracle, this book provides new and intermediate Java programmers with a deep understanding of the platform. This guide includes descriptions of platform features and provides instructions for using the latest versions of NetBeans IDE and GlassFish Server Open Source Edition. The book introduces Enterprise JavaBeans components, the Java Persistence API, the Java Message Service (JMS) API, Java EE security, transactions, resource adapters, Java EE Interceptors, Batch Applications for the Java Platform, and Concurrency Utilities for Java EE. The book culminates with three case studies that illustrate the use of multiple Java EE 7 APIs.

Build microservices-based enterprise applications with the latest version of Java EE Key Features Create microservices in Spring and deploy them with Docker and Mesos Examine a number of real-world use cases and hands-on code examples Develop distributed applications based on microservices architecture Book Description Cloud-based applications have been increasingly in demand, and this has caused a shift from monolithic to microservice applications. With the help of Java EE 8 Microservices, you'll get to grips with the components of Java EE 8 and understand how they are used to implement microservices. This book explains how a monolithic application is transformed into a microservice application, then helps you connect it in a

traditional way and use advanced approaches for asynchronous communication. Once you have learned the basics, you'll explore advanced topics to make your microservices robust, scalable, and secure. Microservices form distributed applications, and by the end of this book you'll have discovered how to develop, pack, ship, and support distributed applications using Java EE. What you will learn Build microservices from the ground up with Java EE 8 Implement and deploy microservices with Spring Boot Develop reactive pipelines for asynchronous communication Use caching mechanisms and JSON Web Token (JWT) to create scalable and secure microservices Empower microservices with the Micro Profile effort and implement health checks, fault tolerance, and monitoring mechanisms Use containers to build and deploy microservices Create contract-first documentation with Swagger and API Blueprint Who this book is for Java EE 8 Microservices is for Java EE developers keen to build microservice-based enterprise applications.
Get up to speed quickly with this comprehensive guide toSpring Beginning Spring is the complete beginner's guide toJava's most popular framework. Written with an eye towardreal-world enterprises, the book covers all aspects of applicationdevelopment within the Spring Framework. Extensive samples withineach chapter allow developers to get up to speed quickly byproviding concrete references for experimentation, building askillset that drives successful application development byexploiting the full capabilities of Java's latest advances. Spring provides the exact toolset required to

build anenterprise application, and has become the standard within thefield. This book covers Spring 4.0, which contains support for Java8 and Java EE 7. Readers begin with the basics of the framework,then go on to master the most commonly used tools and fundamentalconcepts inherent in any Spring project. The book emphasizespracticality and real-world application by addressing needs such asmeeting customer demand and boosting productivity, and by providingactionable information that helps developers get the most out ofthe framework. Topics include: Dependency Injection and Inversion of Control Unit testing Spring enabled Web Applications Data Access using Spring JDBC and ORM support along withTransaction Management Building Web Applications and RESTful Web Services with SpringMVC Securing Web Applications using Spring Security Spring Expression Language with its Extensive Features Aspect Oriented Programming Facilities Provided by SpringAOP Caching with 3rd Party Cache Providers' Support The Best of the Breed: Spring 4.0 The information is organized and structured an ideal way forstudents and corporate training programs, and explanations aboutinner workings of the framework make it a handy desk reference evenfor experienced developers. For novices, Beginning Spring isinvaluable as a comprehensive guide to the real-world functionalityof Spring. "The flip-side of Patterns, AntiPatterns provide developers with formal descriptions of common development gaffes that can derail a project along with practical guidelines on how to avoid them. In this book,

the authors present dozens of Java AntiPatterns that tackle many of Java's biggest trouble spots for programming with EJB, JSP, Servlets, and more. Each AntiPattern is documented with real-world examples, code, and refactored (or escape-route) solutions, and the book uses UML (where appropriate) to diagram improved solutions. All code examples from the book are available to the reader on the book's companion Web site."
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

Find out how to craft effective, business-oriented Java EE 8 applications that target customer's demands in the age of Cloud platforms and container technology. About This Book Understand the principles of modern Java EE and how to realize effective architectures Gain knowledge of how to design enterprise software in the age of automation, Continuous Delivery and Cloud platforms Learn about the reasoning and motivations behind state-of-the-art enterprise Java technology, that focuses on business Who This Book Is For This book is for experienced Java EE developers who are aspiring to become the architects of enterprise-grade applications,

or software architects who would like to leverage Java EE to create effective blueprints of applications. What You Will Learn What enterprise software engineers should focus on Implement applications, packages, and components in a modern way Design and structure application architectures Discover how to realize technical and cross-cutting aspects Get to grips with containers and container orchestration technology Realize zero-dependency, 12-factor, and Cloud-native applications Implement automated, fast, reliable, and maintainable software tests Discover distributed system architectures and their requirements In Detail Java EE 8 brings with it a load of features, mainly targeting newer architectures such as microservices, modernized security APIs, and cloud deployments. This book will teach you to design and develop modern, business-oriented applications using Java EE 8. It shows how to structure systems and applications, and how design patterns and Domain Driven Design aspects are realized in the age of Java EE 8. You will learn about the concepts and principles behind Java EE applications, and how to effect communication, persistence, technical and cross-cutting concerns, and asynchronous behavior. This book covers Continuous Delivery, DevOps, infrastructure-as-code, containers, container orchestration technologies, such as Docker and Kubernetes, and why and especially how Java EE fits into this world. It also covers the requirements behind containerized, zero-dependency applications and how modern Java EE application servers support these approaches. You will also learn about automated, fast,

and reliable software tests, in different test levels, scopes, and test technologies. This book covers the prerequisites and challenges of distributed systems that lead to microservice, shared-nothing architectures. The challenges and solutions of consistency versus scalability will further lead us to event sourcing, event-driven architectures, and the CQRS principle. This book also includes the nuts and bolts of application performance as well as how to realize resilience, logging, monitoring and tracing in a modern enterprise world. Last but not least the demands of securing enterprise systems are covered. By the end, you will understand the ins and outs of Java EE so that you can make critical design decisions that not only live up to, but also surpass your clients' expectations. Style and approach This book focuses on solving business problems and meeting customer demands in the enterprise world. It covers how to create enterprise applications with reasonable technology choices, free of cargo-cult and over-engineering. The aspects shown in this book not only demonstrate how to realize a certain solution, but also explain its motivations and reasoning.

Direct from the Source! The authoritative step-by-step guide to developing enterprise applications for Java EE. 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. Would you like to use a consistent visual notation for drawing integration solutions? "Look inside the front cover." Do you want to harness the power of asynchronous systems without getting caught in the pitfalls? "See "Thinking Asynchronously" in the Introduction." Do you want to know which style of application integration is best for your purposes? "See Chapter 2, Integration Styles." Do you want to learn techniques for processing messages concurrently? "See Chapter 10, Competing Consumers and Message Dispatcher." Do you want to learn how you can track asynchronous messages as they flow across distributed systems? "See Chapter 11, Message History and Message Store." Do you want to understand how a system designed using integration patterns can be

implemented using Java Web services, .NET message queuing, and a TIBCO-based publish-subscribe architecture? "See Chapter 9, Interlude: Composed Messaging." Utilizing years of practical experience, seasoned experts Gregor Hohpe and Bobby Woolf show how asynchronous messaging has proven to be the best strategy for enterprise integration success. However, building and deploying messaging solutions presents a number of problems for developers. " 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. 0321200683B09122003 "A quick reference for simplified Enterprise Java development"--Cover.

A Complete Study System for OCM Exams 1Z0-807, 1Z0-865, and 1Z0-866 Prepare for the Oracle Certified Master Java EE 6 Enterprise Architect exams with this exclusive Oracle Press guide. The multiple-choice exam, the assignment, and the essay exam are covered. Chapters feature challenging exercises, a certification summary, a two-minute drill, and a self-test to reinforce the topics presented. This authoritative resource helps you pass these exams and also serves as an essential, on-the-job reference. Get complete coverage of all exam objectives, including: Application design concepts and principles Common architectures Integration and messaging Business-tier technologies Web-tier technologies Design patterns Security Electronic content includes: 120 multiple-choice practice exam questions Test engine that provides practice exams and customized quizzes by chapter

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