

## Restful Java With Jax Rs Ebook

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.

Learn the fundamentals of Java EE 8 APIs to build effective web services Key Features Design modern and stylish web services with Java EE APIs Secure your web services with JSON Web Tokens Explore the advanced concepts of RESTful web services and the JAX-RS API Book Description Java Enterprise Edition is one of the leading application programming platforms for enterprise Java development. With Java EE 8 finally released and the first application servers now available, it is time to take a closer look at how to develop modern and lightweight web services with the latest API additions and improvements. Building RESTful Web Services with Java EE 8 is a comprehensive guide that will show you how to develop state-of-the-art RESTful web services with the latest Java EE 8 APIs. You will begin with an overview of Java EE 8 and the latest API additions and improvements. You will then delve into the details of implementing synchronous RESTful web services and clients with JAX-RS. Next up, you will learn about the specifics of data binding and content marshalling using the JSON-B 1.0 and JSON-P 1.1 APIs. This book also guides you in leveraging the power of asynchronous APIs on the server and client side, and you will learn to use server-sent events (SSEs) for push communication. The final section covers advanced web service topics such as validation, JWT security, and diagnosability. By the end of this book, you will have implemented several working web services and have a thorough understanding of the Java EE 8 APIs required for lightweight web service development. What you will learn Dive into the latest Java EE 8 APIs relevant for developing web services Use the new JSON-B APIs for easy data binding Understand how JSON-P API can be used for flexible processing Implement synchronous and asynchronous JAX-RS clients Use server-sent events to implement server-side code Secure Java EE 8 web services with JSON Web Tokens Who this book is for If you're a Java developer who wants to learn how to implement web services using the latest Java EE 8 APIs, this book is for you. Though no prior knowledge of Java EE 8 is required, experience with a previous Java EE version will be beneficial.

Learn how to code, package, deploy, and test functional Enterprise JavaBeans with the latest edition of this bestselling guide. Written by the developers of JBoss EJB 3.1, this book not only brings you up to speed on each component type and container service in this implementation, it also provides a workbook with several hands-on examples to help you gain immediate experience with these components. With version 3.1, EJB's server-side component model for building distributed business applications is simpler than ever. But it's still a complex technology that requires study and lots of practice to master. Enterprise JavaBeans 3.1 is the most complete reference on this specification. You'll find a straightforward, no-nonsense explanation of the underlying technology, including Java classes and interfaces, the component model, and the runtime behavior of EJB. Develop your first EJBs with a hands-on walkthrough of EJB 3.1 concepts Learn how to encapsulate business logic with Session Beans and Message-Driven Beans Discover how to handle persistence through Entity Beans, the EntityManager, and the Java Persistence API Understand EJB's container services such as dependency injection, concurrency, and interceptors Integrate EJB with other technologies in the Java Enterprise Edition platform Use examples with either the JBossAS, OpenEJB, or GlassFish v3 EJB Containers

Summary Making Java Groovy is a practical handbook for developers who want to blend Groovy into their day-to-day work with Java. It starts by introducing the key differences between Java and Groovy—and how you can use them to your advantage. Then, it guides you step-by-step through realistic development challenges, from web applications to web services to desktop applications, and shows how Groovy makes them easier to put into production. About this Book You don't need the full force of Java when you're writing a build script, a simple system utility, or a lightweight web app—but that's where Groovy shines brightest. This elegant JVM-based dynamic language extends and simplifies Java so you can concentrate on the task at hand instead of managing minute details and unnecessary complexity. Making Java Groov is a practical guide for developers who want to benefit from Groovy in their work with Java. It starts by introducing the key differences between Java and Groovy and how to use them to your advantage. Then, you'll focus on the situations you face every day, like consuming and creating RESTful web services, working with databases, and using the Spring framework. You'll also explore the great Groovy tools for build processes, testing, and deployment and learn how to write Groovy-based domain-specific languages that simplify Java development. Written for developers familiar with Java. No Groovy experience required. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside Easier Java Closures, builders, and metaprogramming Gradle for builds, Spock for testing Groovy frameworks like Grails and Griffon About the Author Ken Kousen is an independent consultant and trainer specializing in Spring, Hibernate, Groovy, and Grails. Table of Contents PART 1: UP TO SPEED WITH GROOVY Why add Groovy to Java? Groovy by example Code-level integration Using Groovy features in Java PART 2: GROOVY TOOLS Build processes Testing Groovy and Java projects PART 3: GROOVY IN THE REAL WORLD The Spring framework Database access RESTful web services Building and testing web applications

Looking for Best Practices for RESTful APIs? This book is for you! Why? Because this book is packed with practical experience on what works best for RESTful API Design. You want to design APIs like a Pro? Use API description languages to both design APIs and develop APIs efficiently. The book introduces the two most common API description languages RAML, OpenAPI, and Swagger. Your company cares about its customers? Learn API product management with a customer-centric design and development approach for APIs. Learn how to manage APIs as a product and how to follow an API-first approach. Build APIs your customers love! You want to manage the complete API lifecycle? An API development methodology is proposed to guide you through the lifecycle: API inception, API design, API development, API publication, API evolution, and maintenance. You want to build APIs right? This book shows best practices for REST design, such as the correct use of resources, URIs, representations, content types, data formats, parameters, HTTP status codes, and HTTP methods. Your APIs connect to legacy systems? The book shows best practices for connecting APIs to existing backend systems. Your APIs connect to a mesh of microservices? The book shows the principles for designing APIs

for scalable, autonomous microservices. You expect lots of traffic on your API? The book shows you how to achieve high performance, availability and maintainability. You want to build APIs that last for decades? We study API versioning, API evolution, backward- and forward-compatibility and show API design patterns for versioning. The API-University Series is a modular series of books on API-related topics. Each book focuses on a particular API topic, so you can select the topics within APIs, which are relevant for you.

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

The Java EE 6 Tutorial: Advanced Topics, Fourth Edition, is a task-oriented, example-driven guide to developing enterprise applications for the Java Platform, Enterprise Edition 6 (Java EE 6). Written by members of the Java EE 6 documentation team at Oracle, this book provides new and intermediate Java programmers with a deep understanding of the platform. This guide—which builds on the concepts introduced in The Java EE 6 Tutorial: Basic Concepts, Fourth Edition—contains advanced material, including detailed introductions to more complex platform features and instructions for using the latest version of the NetBeans IDE and the GlassFish Server, Open Source Edition. This book introduces the Java Message Service (JMS) API and Java EE Interceptors. It also describes advanced features of JavaServer Faces, Servlets, JAX-RS, Enterprise JavaBeans components, the Java Persistence API, Contexts and Dependency Injection for the Java EE Platform, web and enterprise application security, and Bean Validation. The book culminates with three new case studies that illustrate the use of multiple Java EE 6 APIs. The approach we take is ideal for software developers with some, or extensive, programming experience: we design a RESTful API, which serves as our software specification, and implement it with every framework discussed in the book—there are no hypothetical examples; only practical working applications. This book is for Java developers who want to code RESTful web services using any of the open source RESTful frameworks available to date, for example, JAX-RS implementations such as Jersey and RESTEasy, the Restlet lightweight framework, or Struts 2 with the REST plug-in. You don't need to know REST, as we cover the theory of REST and web services; however, you should be familiar with the Java language and have some understanding of Java web applications. For each framework, we develop the same web service outlined in Chapter 4, so there is lots of working code available. This is a practical guide and the majority of the book is about coding RESTful web services, and not just about the theory of REST.

Optimized for Kubernetes, Quarkus is designed to help you create Java applications that are cloud first, container native, and serverless capable. With this cookbook, authors Alex Soto Bueno and Jason Porter from Red Hat provide detailed solutions for installing, interacting with, and using Quarkus in the development and production of microservices. The recipes in this book show midlevel to senior developers familiar with Java enterprise application development how to get started with Quarkus quickly. You'll become familiar with how Quarkus works within the wider Java ecosystem and discover ways to adapt this framework to your particular needs. You'll learn how to: Shorten the development cycle by enabling live reloading in dev mode Connect to and communicate with Kafka Develop with the reactive programming model Easily add fault tolerance to your services Build your application as a Kubernetes-ready container Ease development with OpenAPI and test a native Quarkus application Learn how to design and develop distributed web services in Java using RESTful architectural principals and the JAX-RS specification in Java EE 6. With this hands-on reference, you'll focus on implementation rather than theory, and discover why the RESTful method is far better than technologies like CORBA and SOAP. It's easy to get started with services based on the REST architecture. RESTful Java with JAX-RS includes a technical guide that explains REST and JAX-RS, how they work, and when to use them. With the RESTEasy workbook that follows, you get step-by-step instructions for installing, configuring, and running several working JAX-RS examples using the JBoss RESTEasy implementation of JAX-RS. Work on the design of a distributed RESTful interface, and develop it in Java as a JAX-RS service Dispatch HTTP requests in JAX-RS, and learn how to extract information from them Deploy your web services within Java Enterprise Edition using the Application class, Default Component Model, EJB Integration, Spring Integration, and JPA Discover several options for securing your web services Learn how to implement RESTful design patterns using JAX-RS Write RESTful clients in Java using libraries and frameworks such as java.net.URL, Apache HTTP Client, and RESTEasy Proxy

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

This example-driven book offers a thorough introduction to Java's APIs for XML Web Services (JAX-WS) and RESTful Web Services (JAX-RS). Java Web Services: Up and Running takes a clear, pragmatic approach to these technologies by providing a mix of architectural overview, complete working code examples, and short yet precise instructions for compiling, deploying, and executing an application. You'll learn how to write web services from scratch and integrate existing services into your Java applications. With Java Web Services: Up and Running, you will: Understand the distinction between SOAP-based and REST-style services Write, deploy, and consume SOAP-based services in core Java Understand the Web Service Definition Language (WSDL) service contract Recognize the structure of a SOAP message Learn how to deliver Java-based RESTful web services and consume commercial RESTful services Know security requirements for SOAP- and REST-based web services Learn how to implement

JAX-WS in various application servers Ideal for students as well as experienced programmers, Java Web Services: Up and Running is the concise guide you need to start working with these technologies right away.

Annotation Over the past 10 years, distributed systems have become more fine-grained. From the large multi-million line long monolithic applications, we are now seeing the benefits of smaller self-contained services. Rather than heavy-weight, hard to change Service Oriented Architectures, we are now seeing systems consisting of collaborating microservices. Easier to change, deploy, and if required retire, organizations which are in the right position to take advantage of them are yielding significant benefits. This book takes an holistic view of the things you need to be cognizant of in order to pull this off. It covers just enough understanding of technology, architecture, operations and organization to show you how to move towards finer-grained systems.

Learn how to design and develop distributed web services in Java, using RESTful architectural principles and the JAX-RS 2.0 specification in Java EE 7. By focusing on implementation rather than theory, this hands-on reference demonstrates how easy it is to get started with services based on the REST architecture. With the book's technical guide, you'll learn how REST and JAX-RS work and when to use them. The RESTEasy workbook that follows provides step-by-step instructions for installing, configuring, and running several working JAX-RS examples, using the JBoss RESTEasy implementation of JAX-RS 2.0. Learn JAX-RS 2.0 features, including a client API, server-side asynchronous HTTP, and filters and interceptors Examine the design of a distributed RESTful interface for an e-commerce order entry system Use the JAX-RS Response object to return complex responses to your client (ResponseBuilder) Increase the performance of your services by leveraging HTTP caching protocols Deploy and integrate web services within Java EE7, servlet containers, EJB, Spring, and JPA Learn popular mechanisms to perform authentication on the Web, including client-side SSL and OAuth 2.0.

Believe it or not, building an API is the easy part. What is far more challenging is to put together a design that will stand the test of time, while also meeting your developers' needs. After all, no matter how well written your code may be, without a strong foundation, you will find your API quickly failing. Undisturbed REST works to tackle this issue through the use of modern design techniques and technology, showing how to carefully design your API with your users and longevity in-mind, taking advantage of a design-first approach- while incorporating best practices and hard lessons learned. After reading Undisturbed REST, you'll have a strong understanding of APIs, best practices, and available tooling for designing, prototyping, sharing, documenting, and generating tooling (such as SDKs) around your API. More importantly, you'll be equipped to design and build an API not just for today, but one that can stand the test of time and lead your application into tomorrow.

Quickly find solutions to dozens of common programming problems with the Java Enterprise Edition Platform for small business web applications, enterprise database applications, and microservices solutions. Content is presented in the popular problem-solution format. Look up the programming problem that you want to solve. Read the solution. Apply the solution directly in your own code. Problem solved! Java EE 8 Recipes provides you with effective and proven solutions that can be used to accomplish just about any task that you may encounter. You can feel confident using the reliable solutions that are demonstrated in this book in your personal or corporate environment. Java is a mature programming language that has been refined over the years into a productive and lucrative language for those with the skills to wield it. One result of this years-long refining process is that that the language carries forward many older feature sets that no longer represent the best way of getting work accomplished. You can rest assured that Java EE 8 Recipes provides solutions using the most current approaches implemented in the most current Java Enterprise technologies, including JSON-P 1.1, JSF 2.3, and JAX-RS 2.1. Build a streamlined and reliable application that uses the latest in Java technologies, and develop it much faster than you did with the older technologies. Rejuvenate your Java expertise to use the freshest capabilities, or perhaps learn Java Enterprise development for the first time and discover one of the most widely used and most powerful technologies available for application development today. Develop productively. Develop with proven technology. Develop with Java Enterprise Edition. The book: Teaches how to develop RESTful enterprise applications quickly using the most current Java EE technologies Explores different solutions for developing sophisticated web user interfaces Walks you through a myriad of different concepts to apply while working with databases using Java technologies What You'll Learn Develop Java Enterprise applications using the latest in Java EE technologies Build great-looking user interfaces using Java Server Faces Employ Java Servlet technology and standard frameworks in developing professional web applications Create enterprise-level database applications using Enterprise Java Beans and JAX-RS RESTful web services Make use of Arquillian to build a cohesive test suite for Java EE applications Manage Java EE application security through Java EE's container feature set Who This Book Is For Java developers who want to develop effective and proven solutions without reading a lengthy manual and scrubbing for techniques. A beginning Java programmer will find the book handy for learning a variety of different solutions for the platform, while advanced developers will enjoy the ease of the problem-solution approach to quickly broaden their knowledge of the platform's latest technologies.

While the REST design philosophy has captured the imagination of web and enterprise developers alike, using this approach to develop real web services is no picnic. This cookbook includes more than 100 recipes to help you take advantage of REST, HTTP, and the infrastructure of the Web. You'll learn ways to design RESTful web services for client and server applications that meet performance, scalability, reliability, and security goals, no matter what programming language and development framework you use. Each recipe includes one or two problem statements, with easy-to-follow, step-by-step instructions for solving them, as well as examples using HTTP requests and responses, and XML, JSON, and Atom snippets. You'll also get implementation guidelines, and a discussion of the pros, cons, and trade-offs that come with each solution. Learn how to design resources to meet various application scenarios Successfully design representations and URIs Implement the hypertext constraint using links and link headers Understand when and how to use Atom and AtomPub Know what and what not to do to support caching Learn how to implement concurrency control Deal with advanced use cases involving copying, merging, transactions, batch processing, and partial updates Secure web services and support OAuth

If you want to learn how to build efficient user interfaces with React, this is your book. Authors Alex Banks and Eve Porcello show you how to create UIs with this small JavaScript library that can deftly display data changes on large-scale, data-driven websites without page reloads. Along the way, you'll learn how to work with functional programming and the latest ECMAScript features. Developed by Facebook, and used by companies including Netflix, Walmart, and The New York Times for large parts of their web interfaces, React is quickly growing in use. By learning how to build React components with this hands-on guide, you'll fully understand how useful React can be in your organization. Learn key functional programming concepts with JavaScript Peek under the hood to understand how React runs in the browser Create application presentation layers by mounting and composing React components Use component trees to manage data and reduce the time you spend debugging applications Explore React's component lifecycle and use it to load data and improve UI performance Use a routing solution for browser history, bookmarks, and other features of single-page applications Learn how to structure React applications with servers in mind

Master Java EE design pattern implementation to improve your design skills and your application's architecture Professional Java EE Design Patterns is the perfect companion for anyone who

wants to work more effectively with JavaEE, and the only resource that covers both the theory and application of design patterns in solving real-world problems. The authors guide readers through both the fundamental and advanced features of Java EE 7, presenting patterns throughout, and demonstrating how they are used in day-to-day problem solving. As the most popular programming language in community-driven enterprise software, Java EE provides an API and runtime environment that is a superset of Java SE. Written for the junior and experienced Java EE developer seeking to improve design quality and effectiveness, the book covers areas including: Implementation and problem-solving with design patterns Connection between existing Java SE design patterns and new Java 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 the field to solve real-life problems Unlike most Java EE books that simply offer descriptions or recipes, this book drives home the implementation of the pattern to real problems to ensure that the reader learns how the patterns should be used and to be aware of their pitfalls. For the programmer looking for a comprehensive guide that is actually useful in the everyday workflow, Professional Java EE Design 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

Design scalable and robust RESTful web services with JAX-RS and Jersey extension APIs About This Book Get to grips with the portable Java APIs used for JSON processing Design solutions to produce, consume, and visualize RESTful web services using WADL, RAML, and Swagger A step-by-step guide packed with many real-life use-cases to help you build efficient and secure RESTful web APIs in Java Who This Book Is For If you are a web developer with a basic understanding of the REST concepts but are new to the idea of designing and developing RESTful web services, this is the book for you. As all the code samples for the book are written in Java, proficiency in Java is a must. What You Will Learn Introduce yourself to the RESTful software architectural style and the REST API design principles Make use of the JSR 353 APIs and Jackson API for JSON processing Build portable RESTful web APIs, making use of the JAX-RS 2.0 API Simplify API development using the Jersey extension APIs Secure your RESTful web services with various authentication and authorization mechanisms Get to grips with the various metadata solutions to describe, produce, and consume RESTful web services Understand the design and coding guidelines to build well-performing RESTful APIs See how the role of RESTful web services changes with emerging technologies and trends In Detail REST (REpresentational State Transfer) is a simple yet powerful software architecture style to create scalable web services and allow them to be simple, lightweight, and fast. The REST API uses HTTP and JSON, so that it can be used with many programming languages such as Ruby, Java, Python, and Scala. Its use in Java seems to be the most popular though, because of the API's reusability. This book is a guide to developing RESTful web services in Java using the popular RESTful framework APIs available today. You will begin with gaining an in-depth knowledge of the RESTful software architectural style and its relevance in modern applications. Further, you will understand the APIs to parse, generate, transform, and query JSON effectively. Then, you will see how to build a simple RESTful service using the popular JAX-RS 2.0 API along with some real-world examples. This book will introduce you to the Jersey framework API, which is used to simplify your web services. You will also see how to secure your services with various authentication mechanisms. You will get to grips with various solutions to describe, produce, consume, and visualize RESTful web services. Finally, you will see how to design your web services to equip them for the future technological advances, be it Cloud or mobile computing. By the end of this book, you will be able to efficiently build robust, scalable, and secure RESTful web services, making use of the JAX-RS and Jersey framework extensions. Style and approach This book is written as a step-by-step guide to designing and developing robust RESTful web services. Each topic is explained in a simple and easy-to-understand manner with lots of real-life use-cases and their solutions.

Learn the Python skills and culture you need to become a productive member of any Python project. About This Book Taking a practical approach to studying Python A clear appreciation of the sequence-oriented parts of Python Emphasis on the way in which Python code is structured Learn how to produce bug-free code by using testing tools Who This Book Is For The Python Apprentice is for anyone who wants to start building, creating and contributing towards a Python project. No previous knowledge of Python is required, although at least some familiarity with programming in another language is helpful. What You Will Learn Learn the language of Python itself Get a start on the Python standard library Learn how to integrate 3rd party libraries Develop libraries on your own Become familiar with the basics of Python testing In Detail Experienced programmers want to know how to enhance their craft and we want to help them start as apprentices with Python. We know that before mastering Python you need to learn the culture and the tools to become a productive member of any Python project. Our goal with this book is to give you a practical and thorough introduction to Python programming, providing you with the insight and technical craftsmanship you need to be a productive member of any Python project. Python is a big language, and it's not our intention with this book to cover everything there is to know. We just want to make sure that you, as the developer, know the tools, basic idioms and of course the ins and outs of the language, the standard library and other modules to be able to jump into most projects. Style and approach We introduce topics gently and then revisit them

on multiple occasions to add the depth required to support your progression as a Python developer. We've worked hard to structure the syllabus to avoid forward references. On only a few occasions do we require you to accept techniques on trust, before explaining them later; where we do, it's to deliberately establish good habits.

A hands-on focused step-by-step tutorial to help you create Web Service applications using Dropwizard. If you are a software engineer or a web developer and want to learn more about building your own Web Service application, then this is the book for you. Basic knowledge of Java and RESTful Web Service concepts is assumed and familiarity with SQL/MySQL and command-line scripting would be helpful.

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

Summary Spring in Action, 5th Edition is the fully updated revision of Manning's bestselling Spring in Action. This new edition includes all Spring 5.0 updates, along with new examples on reactive programming, Spring WebFlux, and microservices. You'll also find the latest Spring best practices, including Spring Boot for application setup and configuration. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Spring Framework makes life easier for Java developers. New features in Spring 5 bring its productivity-focused approach to microservices, reactive development, and other modern application designs. With Spring Boot now fully integrated, you can start even complex projects with minimal configuration code. And the upgraded WebFlux framework supports reactive apps right out of the box! About the Book Spring in Action, 5th Edition guides you through Spring's core features, explained in Craig Walls' famously clear style. You'll roll up your sleeves and build a secure database-backed web app step by step. Along the way, you'll explore reactive programming, microservices, service discovery, RESTful APIs, deployment, and expert best practices. Whether you're just discovering Spring or leveling up to Spring 5.0, this Manning classic is your ticket! What's inside Building reactive applications Spring MVC for web apps and RESTful web services Securing applications with Spring Security Covers Spring 5.0 Over 100,000 copies sold! About the Reader For intermediate Java developers. About the Author Craig Walls is a principal software engineer at Pivotal, a popular author, an enthusiastic supporter of Spring Framework, and a frequent conference speaker. Table of Contents PART 1 - FOUNDATIONAL SPRING Getting started with Spring Developing web applications Working with data Securing Spring Working with configuration properties PART 2 - INTEGRATED SPRING Creating REST services Consuming REST services Sending messages asynchronously Integrating Spring PART 3 - REACTIVE SPRING Introducing Reactor Developing reactive APIs Persisting data reactively PART 4 CLOUD-NATIVE SPRING Discovering services Managing configuration Handling failure and latency PART 5 - DEPLOYED SPRING Working with Spring Boot Actuator Administering Spring Monitoring Spring with JMX Deploying Spring The book will follow a standard tutorial approach and will teach readers how to use the Jersey API for creating RESTful web services. This book is intended for Java EE developers who are building applications on the REST architecture. This is a quick, hands-on guide for learning JAX-RS 2.0. Developers should have some knowledge about RESTful web services but it's not essential to know JAX-RS 1.0.

Summary Restlet in Action gets you started with the Restlet Framework and the REST architecture style. You'll create and deploy applications in record time while learning to use popular RESTful Web APIs effectively. This book looks at the many aspects of web development, on both the server and client side, along with cloud computing, mobile Android devices, and Semantic Web applications. About the Technology In a RESTful architecture any component can act, if needed, as both client and server—this is flexible and powerful, but tricky to implement. The Restlet project is a reference implementation with a Java-based API and everything you need to build servers and web clients that integrate with most web and enterprise technologies. About the Book Restlet in Action introduces the Restlet Framework and RESTful web APIs. You'll see how to easily create and deploy your own web API while learning to consume other web APIs effectively. You'll learn about designing, securing, versioning, documentation, optimizing, and more on both the server and client side, as well as about cloud computing, mobile Android devices, and Semantic Web applications. The book requires a basic knowledge of Java and the web, but no prior exposure to REST or Restlet. 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 Written by the creators of Restlet! How to create your own web API How to deploy on cloud and mobile platforms Focus on Android, Google App Engine, Google Web Toolkit, and OSGi technologies Table of Contents PART 1 GETTING STARTED Introducing the Restlet Framework Beginning a Restlet application Deploying a Restlet application PART 2 GETTING READY TO ROLL OUT Producing and consuming Restlet representations Securing a Restlet application Documenting and versioning a Restlet application Enhancing a Restlet application with recipes and best practices PART 3 FURTHER USE POSSIBILITIES Using Restlet with cloud platforms Using Restlet in browsers and mobile devices Embracing hypermedia and the Semantic Web The future of Restlet

Cloud Native Spring in Action teaches you effective Spring and Kubernetes cloud development techniques that you can immediately apply to enterprise-grade applications. To really benefit from the reliability and scalability you get with cloud platforms, your applications need to be designed for that environment. Cloud Native Spring in Action is a practical guide for planning, designing, and building your first cloud native apps using the powerful, industry-standard Spring framework. Cloud Native Spring in Action teaches you effective Spring and Kubernetes cloud development techniques that you can immediately apply to enterprise-grade applications. As you develop an online bookshop, you'll learn how to build and test a cloud native app with Spring, containerize it with Docker, and deploy it to the public cloud with Kubernetes. Including coverage of security, continuous delivery, and configuration, this hands-on guide is the perfect primer.

for navigating the increasingly complex cloud landscape. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

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: -).

Discover the RESTful technologies, including REST, JSON, XML, JAX-RS web services, SOAP and more, for building today's microservices, big data applications, and web service applications. This book is based on a course the Oracle-based author is teaching for UC Santa Cruz Silicon Valley which covers architecture, design best practices and coding labs. Pro RESTful APIs: Design gives you all the fundamentals from the top down: from the top (architecture) through the middle (design) to the bottom (coding). This book is a must have for any microservices or web services developer building applications and services. What You'll Learn Discover the key RESTful APIs, including REST, JSON, XML, JAX, SOAP and more Use these for web services and data exchange, especially in today's big data context Harness XML, JSON, REST, and JAX-RS in examples and case studies Apply best practices to your solutions' architecture Who This Book Is For Experienced web programmers and developers.

Explore the power of distributed computing to write concurrent, scalable applications in Java About This Book Make the best of Java 9 features to write succinct code Handle large amounts of data using HPC Make use of AWS and Google App Engine along with Java to establish a powerful remote computation system Who This Book Is For This book is for basic to intermediate level Java developers who is aware of object-oriented programming and Java basic concepts. What You Will Learn Understand the basic concepts of parallel and distributed computing/programming Achieve performance improvement using parallel processing, multithreading, concurrency, memory sharing, and hpc cluster computing Get an in-depth understanding of Enterprise Messaging concepts with Java Messaging Service and Web Services in the context of Enterprise Integration Patterns Work with Distributed Database technologies Understand how to develop and deploy a distributed application on different cloud platforms including Amazon Web Service and Docker CaaS Concepts Explore big data technologies Effectively test and debug distributed systems Gain thorough knowledge of security standards for distributed applications including two-way Secure Socket Layer In Detail Distributed computing is the concept with which a bigger computation process is accomplished by splitting it into multiple smaller logical activities and performed by diverse systems, resulting in maximized performance in lower infrastructure investment. This book will teach you how to improve the performance of traditional applications through the usage of parallelism and optimized resource utilization in Java 9. After a brief introduction to the fundamentals of distributed and parallel computing, the book moves on to explain different ways of communicating with remote systems/objects in a distributed architecture. You will learn about asynchronous messaging with enterprise integration and related patterns, and how to handle large amount of data using HPC and implement distributed computing for databases. Moving on, it explains how to deploy distributed applications on different cloud platforms and self-contained application development. You will also learn about big data technologies and understand how they contribute to distributed computing. The book concludes with the detailed coverage of testing, debugging, troubleshooting, and security aspects of distributed applications so the programs you build are robust, efficient, and secure. Style and approach This is a step-by-step practical guide with real-world examples.

Develop Enterprise Java applications compliant with the latest version of the Java EE specification About This Book This book covers all of the major Java EE 8 APIs and includes new additions such as enhanced Security, JSON-B Processing, and more Learn additional Java EE APIs, such as the Java API for WebSocket and the Java Message Service (JMS) Develop applications by taking advantage of the latest versions of CDI, Security, Servlets, and JSF and other Java EE specifications Who This Book Is For If you are a Java developer who wants to become proficient with Java EE 8, this book is ideal for you. You are expected to have some experience with Java and to have developed and deployed applications in the past, but you don't need any previous knowledge of Java EE. What You Will Learn Develop and deploy Java EE applications Embrace the latest additions to the Contexts and Dependency Injection (CDI) specification to develop Java EE applications Develop web-based applications by utilizing the latest version of JavaServer Faces, JSF 2.3. Understand the steps needed to process JSON data with JSON-P and the new JSON-B Java EE API Implement RESTful web services using the new JAX-RS 2.1 API, which also includes support for Server-Sent Events (SSE) and the new reactive client API In Detail Java EE is an Enterprise Java standard. Applications written to comply with the Java EE specification do not tie developers to a specific vendor; instead they can be deployed to any Java EE compliant application server. With this book, you'll get all the tools and techniques you need to build robust and scalable applications in Java EE 8. This book covers all the major Java EE 8 APIs including JSF 2.3, Enterprise JavaBeans (EJB) 3.2, Contexts and Dependency Injection (CDI) 2.0, the Java API for WebSockets, JAX-RS 2.1, Servlet 4.0, and more. The book begins by introducing you to Java EE 8 application development and goes on to cover all the major Java EE 8 APIs. It goes beyond the basics to develop Java EE applications that can be deployed to any Java EE 8 compliant application server. It also introduces advanced topics such as JSON-P and JSON-B, the Java APIs for JSON processing, and the Java API for JSON binding. These topics dive deep, explaining how the two APIs (the Model API and the Streaming API) are used to process JSON data. Moving on, we cover additional Java EE APIs, such as the Java API for WebSocket and the Java Message Service (JMS), which allows loosely coupled, asynchronous communication. Further on, you'll discover ways to secure Java EE applications by taking advantage of the new Java EE Security API. Finally, you'll learn more about the RESTful web service development using the latest JAX-RS 2.1 specification. You'll also get to know techniques to develop cloud-ready microservices in Java EE. Style and approach The book takes a pragmatic approach, showing you various techniques to utilize new features of Java EE 8 specification. It is packed with clear, step-by-step instructions, practical examples, and straightforward explanations.

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

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 Learn how to design and develop distributed web services in Java, using RESTful architectural principles and the JAX-RS 2.0 specification in Java EE 7. By focusing on implementation rather than theory, this hands-on reference demonstrates how easy it is to get started with services based on the REST architecture. With the book's technical guide, you'll learn how REST and JAX-RS work and when to use them. The RESTEasy workbook that follows provides step-by-step instructions for installing, configuring, and running several working JAX-RS examples, using the JBoss RESTEasy implementation of JAX-RS 2.0. Learn JAX-RS 2.0 features, including a client API, server-side asynchronous HTTP, and filters and interceptors Examine the design of a distributed RESTful interface for an e-commerce order entry system Use the JAX-RS Response object to return complex responses to your client (ResponseBuilder) Increase the performance of your services by leveraging HTTP caching protocols Deploy and integrate web services within Java EE7, servlet containers, EJB, Spring, and JPA Learn popular mechanisms to perform authentication on the Web, including client-side SSL and OAuth 2.0

Every enterprise application creates data, whether it's log messages, metrics, user activity, outgoing messages, or something else. And how to move all of this data becomes nearly as important as the data itself. If you're an application architect, developer, or production engineer new to Apache Kafka, this practical guide shows you how to use this open source streaming platform to handle real-time data feeds. Engineers from Confluent and LinkedIn who are responsible for developing Kafka explain how to deploy production Kafka clusters, write reliable event-driven microservices, and build scalable stream-processing applications with this platform. Through detailed examples, you'll learn Kafka's design principles, reliability guarantees, key APIs, and architecture details, including the replication protocol, the controller, and the storage layer. Understand publish-subscribe messaging and how it fits in the big data ecosystem. Explore Kafka producers and consumers for writing and reading messages Understand Kafka patterns and use-case requirements to ensure reliable data delivery Get best practices for building data pipelines and applications with Kafka Manage Kafka in production, and learn to perform monitoring, tuning, and maintenance tasks Learn the most critical metrics among Kafka's operational measurements Explore how Kafka's stream delivery capabilities make it a perfect source for stream processing systems

Master core REST concepts and create RESTful web services in Java About This Book Build efficient and secure RESTful web APIs in Java.. Design solutions to produce, consume and visualize RESTful web services using WADL, RAML, and Swagger Familiarize the role of RESTful APIs usage in emerging technology trends like Cloud, IoT, Social Media. Who This Book Is For If you are a web developer with a basic understanding of the REST concepts and envisage to get acquainted with the idea of designing and developing RESTful web services, this is the book for you. As all the code samples for the book are written in Java, proficiency in Java is a must. What You Will Learn Introduce yourself to the RESTful software architectural style and the REST API design principles Make use of the JSR 353 API, JSR 374 API, JSR 367 API and Jackson API for JSON processing Build portable RESTful web APIs, making use of the JAX-RS 2.1 API Simplify API development using the Jersey and RESTEasy extension APIs Secure your RESTful web services with various authentication and authorization mechanisms Get to grips with the various metadata solutions to describe, produce, and consume RESTful web services Understand the design and coding guidelines to build well-performing RESTful APIs See how the role of RESTful web services changes with emerging technologies and trends In Detail Representational State Transfer (REST) is a simple yet powerful software architecture style to create lightweight and scalable web services. The RESTful web services use HTTP as the transport protocol and can use any message formats, including XML, JSON(widely used), CSV, and many more, which makes it easily inter-operable across different languages and platforms. This successful book is currently in its 3rd edition and has been used by thousands of developers. It serves as an excellent guide for developing RESTful web services in Java. This book attempts to familiarize the reader with the concepts of REST. It is a pragmatic guide for designing and developing web services using Java APIs for real-life use cases following best practices and for learning to secure REST APIs using OAuth and JWT. Finally, you will learn the role of RESTful web services for future technological advances, be it cloud, IoT or social media. By the end of this book, you will be able to efficiently build robust, scalable, and secure RESTful web services using Java APIs. Style and approach Step-by-step guide to designing and developing robust RESTful web services. Each topic is explained in a simple and easy-to-understand manner with lots of real-life use-cases and their solutions.

Learn how to design and develop distributed web services in Java using RESTful architectural principals and the JAX-RS specification in Java EE 6. With this hands-on reference, you'll focus on implementation rather than theory, and discover why the RESTful method is far better than technologies like CORBA and SOAP.

"Every developer working with the Web needs to read this book." -- David Heinemeier Hansson, creator of the Rails framework "RESTful Web Services finally provides a practical roadmap for constructing services that embrace the Web, instead of trying to route around it." -- Adam Trachtenberg, PHP author and eBay Web Services Evangelist You've built web sites that can be used by humans. But can you also build web sites that are usable by machines? That's where the future lies, and that's what RESTful Web Services shows you how to do. The World Wide Web is the most popular distributed application in

history, and Web services and mashups have turned it into a powerful distributed computing platform. But today's web service technologies have lost sight of the simplicity that made the Web successful. They don't work like the Web, and they're missing out on its advantages. This book puts the "Web" back into web services. It shows how you can connect to the programmable web with the technologies you already use every day. The key is REST, the architectural style that drives the Web. This book: Emphasizes the power of basic Web technologies -- the HTTP application protocol, the URI naming standard, and the XML markup language Introduces the Resource-Oriented Architecture (ROA), a common-sense set of rules for designing RESTful web services Shows how a RESTful design is simpler, more versatile, and more scalable than a design based on Remote Procedure Calls (RPC) Includes real-world examples of RESTful web services, like Amazon's Simple Storage Service and the Atom Publishing Protocol Discusses web service clients for popular programming languages Shows how to implement RESTful services in three popular frameworks -- Ruby on Rails, Restlet (for Java), and Django (for Python) Focuses on practical issues: how to design and implement RESTful web services and clients This is the first book that applies the REST design philosophy to real web services. It sets down the best practices you need to make your design a success, and the techniques you need to turn your design into working code. You can harness the power of the Web for programmable applications: you just have to work with the Web instead of against it. This book shows you how.

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