Spring 4 For Developing Enterprise Applications An End To End Approach

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

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

The Spring framework is a widely adopted enterprise and general Java framework. The release of Spring Framework 3.0 has added many improvements and new features for Spring development. Written by Gary Mak, author of the bestseller Spring Recipes, and Josh Long, an expert Spring user and developer, Spring Enterprise Recipes is one of the first books on Spring 3.0. This key book focuses on Spring Framework 3.0, the latest version available, and a framework-related suite of tools, extensions, plug-ins, modules, and more—all of which you may want and need for building three-tier Java EE applications. Build Spring enterprise and Java EE applications from the ground up using recipes from this book as templates to get you started, fast. Employ Spring Integration, Spring Batch and jBPM with Spring to bring your application's architecture to the next level. Use Spring's remoting, and messaging support to distribute your application, or bring your application to the cloud with GridGain and Terracotta.

Leverage the power of Spring MVC, Spring Boot, Spring Cloud, and additional popular web frameworks. About This Book Discover key Spring Framework-related technology standards such as Spring core, Spring-AOP, Spring data access frameworks, and Spring testing to develop robust Java applications easily This course is packed with tips and tricks that demonstrate Industry best practices on developing a Spring-MVC-based application Learn how to efficiently build and implement microservices in Spring, and how to use Docker and Mesos to push the boundaries and explore new possibilities Who This Book Is For This course is intended for Java developers interested in building enterprise-level applications with Spring Framework. Prior knowledge of Java programming and web development concepts (and a basic knowledge of XML) is expected. What You Will Learn Understand the architecture of Spring Framework and how to set up the key components of the Spring Application Development Environment Configure Spring Container and manage Spring beans using XML and Annotation Practice Spring AOP concepts such as Aspect, Advice, Pointcut, and Introduction Integrate bean validation and custom validation Use error handling and exception resolving Get to grips with REST-based web service development and Ajax Use Spring Boot to develop microservices Find out how to avoid common pitfalls when developing microservices Get familiar with end-to-end microservices written in Spring Framework and Spring Boot In Detail This carefully designed course aims to get you started with Spring, the most widely adopted Java framework, and then goes on to more advanced topics such as building microservices using Spring Boot within Spring. With additional coverage of popular web frameworks such as Struts, WebWork, Java Server Faces, Tapestry, Docker, and Mesos, you'll have all the skills and expertise you need to build great applications. Starting with the Spring Framework architecture and setting up the key components of the Spring Application Development Environment, you will learn how to configure Spring Container and manage Spring beans using XML and Annotation. Next, you will delve into Spring MVC, which will help you build flexible and loosely coupled web applications. You'll also get to grips with testing applications for reliability. Moving on, this course will help you implement the microservice architecture in Spring

Framework, Spring Boot, and Spring Cloud. Written to the latest specifications of Spring, this book will help you build modern, Internet-scale Java applications in no time. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: Learning Spring Application Development by Ravi Kant Soni Spring MVC Beginner's Guide - Second Edition by Amuthan Ganeshan Spring Microservices by Rajesh RV Style and approach This is a step-by-step guide for building a complete application and developing scalable microservices using Spring Framework, Spring Boot, and a set of Spring Cloud components Summary Spring Batch in Action is an in-depth guide to writing batch applications using Spring Batch. Written for developers who have basic knowledge of Java and the Spring lightweight container, the book provides both a best-practices approach to writing batch jobs and comprehensive coverage of the Spring Batch framework. About the Technology Even though running batch jobs is a common task, there's no standard way to write them. Spring Batch is a framework for writing batch applications in Java. It includes reusable components and a solid runtime environment, so you don't have to start a new project from scratch. And it uses Spring's familiar programming model to simplify configuration and implementation, so it'll be comfortably familiar to most Java developers. About the Book Spring Batch in Action is a thorough, in-depth guide to writing efficient batch applications. Starting with the basics, it discusses the best practices of batch jobs along with details of the Spring Batch framework. You'll learn by working through dozens of practical, reusable examples in key areas like monitoring, tuning, enterprise integration, and automated testing. No prior batch programming experience is required. Basic knowledge of Java and Spring is assumed. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book. What's Inside Batch programming from the ground up Implementing data components Handling errors during batch processing Automating tedious tasks Table of Contents PART 1 BACKGROUND Introducing Spring Batch Spring Batch concepts PART 2 CORE SPRING BATCH Batch configuration Running batch jobs Reading data Writing data Processing data Implementing bulletproof jobs Transaction management PART 3 ADVANCED SPRING BATCH Controlling execution Enterprise integration Monitoring jobs Scaling and parallel processing Testing batch applications
Understand the key challenges and solutions around building microservices in the enterprise application environment. This book provides a comprehensive understanding of microservices architectural principles and how to use microservices in real-world scenarios. Architectural challenges using microservices with service integration and API management are presented and you learn how to eliminate the use of centralized integration products such as the enterprise service bus (ESB) through the use of composite/integration microservices. Concepts in the book are supported with use cases, and emphasis is put on the reality that most of you are implementing in a “brownfield” environment in which you must implement microservices alongside legacy applications with minimal disruption to your business. Microservices for the Enterprise covers state-of-the-art techniques around microservices messaging, service development and description, service discovery, governance, and data management technologies and guides you through the microservices design process. Also included is the importance of organizing services as core versus atomic, composite versus integration, and API versus edge, and how such organization helps to eliminate the use of a central ESB and expose services through an API gateway. What You'll Learn Design and develop microservices architectures with confidence Put into practice the most modern techniques around messaging technologies Apply the Service Mesh pattern to overcome inter-service communication challenges Apply battle-tested microservices security patterns to address real-world scenarios Handle API management, decentralized data management, and observability Who This Book Is For Developers and DevOps engineers responsible for implementing applications around a microservices architecture, and architects and analysts who are designing such systems
Practical Spring LDAP is your guide to developing Java-based enterprise applications using the Spring LDAP Framework. This book explains the purpose and fundamental concepts of LDAP before giving a comprehensive tour of the latest version, Spring LDAP 1.3.2. It provides a detailed treatment of LDAP controls and the new features of Spring LDAP 1.3.2 such as Object Directory Mapping and LDIF parsing. LDAP has become the de-facto standard for storing and accessing information in enterprises. Despite its widespread adoption, developers often struggle when it comes to using this technology effectively. The traditional JNDI approach has proven to be painful and has resulted in complex, less modular applications. The Spring LDAP Framework provides an ideal alternative. What you’ll learnA simpler approach to developing enterprise applications with Spring LDAPClear, working code samples with unit/integration testsAdvanced features such as transactions and connection poolingA deeper look at LDAP search and out of the box filters supplied by the frameworkNew features such as Object Directory Mapping and LDIF parsingDetailed treatment of search controls and paged result implementationHelpful tips that can save time and frustrationWho this book is for This book is ideal for anyone with Java and Spring development experience who wants to master the intricacies of Spring LDAP. Table of Contents1. Introduction to LDAP 2. Java Support for LDAP 3. Introducing Spring LDAP 4. Testing LDAP Code 5. Advanced Spring LDAP 6. Searching LDAP 7. Sorting and Paging Results 8. Object-Directory Mapping 9. LDAP Transactions 10. Odds and Ends
Developing Enterprise Applications With SpringAn End-to-end ApproachCreatespace Independent Pub
Quickly master the massive Spring ecosystem with this focused, hands-on guide that teaches you exactly what you need to know. In Spring Start Here, you will learn how to: Build web applications with Spring Manage application objects with Spring context Implement data persistence using data sources and transactions Implement data exchange between applications using REST services Utilize Spring Boot's convention-over-configuration approach Write unit and integration tests for apps implemented with Spring Minimize work when building any kind of app Persisting data in a Spring application using the latest approach Spring Start Here introduces you to Java development with Spring by concentrating on the core concepts you'll use in every application you build. You'll learn how to refactor an existing application to

Spring, how to use Spring tools to make SQL database requests and REST calls, and how to secure your projects with Spring Security. There's always more to learn, and this book will make your next steps much easier. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology For Java developers, Spring is the must-learn framework. This incredible development tool powers everything from small business ecommerce applications to enterprise-scale microservices. Mastering Spring is a long journey. Taking your first step is easy! Start here. About the book Spring Start Here teaches Java developers how to build applications using Spring framework. Informative graphics, relevant examples, and author Laurentiu Spilca's clear and lively writing make it easy to pick up the skills you need. You'll discover how to plan, write, and test applications. And by concentrating on the most important features, this no-nonsense book gives you a firm foundation for exploring Spring's rich ecosystem. What's inside Build web applications with Spring Minimize repetition and manual work Persisting data in a Spring application HTTP and REST-based web services Testing your Spring implementations About the reader For readers with beginning to intermediate Java skills. About the author Lauren?iu Spilca is a skilled Java and Spring developer and an experienced technology instructor. Table of Contents PART 1 FUNDAMENTALS 1 Spring in the real world 2 The Spring context: Defining beans 3 The Spring context: Wiring beans 4 The Spring context: Using abstractions 5 The Spring context: Bean scopes and life cycle 6 Using aspects with Spring AOP PART 2 IMPLEMENTATION 7 Understanding Spring Boot and Spring MVC 8 Implementing web apps with Spring Boot and Spring MVC 9 Using the Spring web scopes 10 Implementing REST services 11 Consuming REST endpoints 12 Using data sources in Spring apps 13 Using transactions in Spring apps 14 Implementing data persistence with Spring Data 15 Testing your Spring app

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

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

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

Spring Framework. About the Author Craig Walls is a software developer, author of the popular book Spring in Action, Fourth Edition, and a frequent speaker at conferences. Table of Contents Bootstarting Spring Developing your first Spring Boot application Customizing configuration Testing with Spring Boot Getting Groovy with the Spring Boot CLI Applying Grails in Spring Boot Taking a peek inside with the Actuator Deploying Spring Boot applications APPENDIXES Spring Boot developer tools Spring Boot starters Configuration properties Spring Boot dependencies

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

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

The standard platform for enterprise application development has been EJB but the difficulties of working with it caused it to become unpopular. They also gave rise to lightweight technologies such as Hibernate, Spring, JDO, iBATIS and others, all of which allow the developer to work directly with the simpler POJOs. Now EJB version 3 solves the problems that gave EJB 2 a black eye-it too works with POJOs. POJOs in Action describes the new, easier ways to develop enterprise Java applications. It describes how to make key design decisions when developing business logic using POJOs, including how to organize and encapsulate the business logic, access the database, manage transactions, and handle database concurrency. This book is a new-generation Java applications guide: it enables readers to successfully build lightweight applications that are easier to develop, test, and maintain.

Explains the concepts of aspect-oriented programming and the basics of the AspectJ language.

Exam topics covered include tasks and scheduling, remoting, the Spring Web Services framework, RESTful services with Spring MVC, the Spring JMS module, JMS and JTA transactions with Spring, batch processing with Spring Batch and the Spring Integration framework. Prepare with confidence for the Pivotal Enterprise Integration with Spring Exam. One of the important aspects of this book is a focus on new and modern abstractions provided by Spring. Therefore most of the features are shown with Java annotations alongside established XML configurations. Most of the examples in the book are also based on the Spring Boot framework. Spring Boot adoption is exponential because of its capability to significantly simplify Spring configuration using sensible opinionated defaults. But Spring Boot is not the target of the exam, therefore all the features are also covered with plain Spring configuration examples. How to use Spring to create concurrent applications and schedule tasks How to do remoting to implement client-server applications How to work with Spring Web services to create loosely coupled Web services and clients How to use Spring MVC to create RESTful web services and clients How to integrate JMS for asynchronous messaging-based communication How to use local JMS transactions with Spring How to configure global JTA transactions with Spring How to use Spring Integration to create event-driven pipes-and-filters architectures and integrate with external applications How to use Spring Batch for managed, scalable batch processing that is based on both custom and built-in processing components

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

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

This bibliography lists the most important works published in economics in 1991. Renowned for its international coverage and rigorous selection procedures, IBSS provides researchers and librarians with the most comprehensive and scholarly bibliographic service available in the social sciences. IBSS is compiled by the British Library of Political and Economic Science at the London School of Economics, one of the world's leading social science institutions. Published annually, IBSS is available in four subject areas: anthropology, economics, political science and sociology.

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.

Pro Spring updates the perennial bestseller with the latest that the Spring Framework 4 has to offer. Now in its fourth edition, this popular book is by far the most comprehensive and definitive treatment of Spring available. With Pro Spring, you'll learn Spring basics and core topics, and share the authors' insights and real–world experiences with remoting, Hibernate, and EJB. Beyond the basics, you'll learn how to leverage the Spring Framework to build the various tiers or parts of an enterprise Java application: transactions, web and presentation tiers, deployment, and much more. A full sample application allows you to apply many of the technologies and techniques covered in this book and see how they work together. The agile, lightweight, open-source Spring Framework continues to be the de facto leading enterprise Java application development framework for today's Java programmers and developers. It works with other leading open-source, agile, and lightweight Java technologies such as Hibernate, Groovy, MyBatis, and more. Spring now works with Java EE and JPA 2 as well. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom.

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

MVC. Each chapter starts with a high-level wireframe design of the software followed by how to set up and configure different libraries and tools.

This is a brilliantly practical work that lets the reader experience a real-world scalable agile enterprise Java-based application being built from the ground up using the latest Spring 2.x kit available. The open source agile lightweight Spring (meta) Framework 2.x is by far the leading innovative force and "lightning rod" that’s driving today’s Java industry. Spring has time and time again proven itself in real-world highly scalable enterprise settings such as banks and other financial institutions. This book is the only authoritative Spring 2 authored book, as it has been written by team members of Interface21, the group that lead the Spring Foundation and its growing community.

Spring in Action, Fourth Edition is a hands-on guide to the Spring Framework, updated for version 4. It covers the latest features, tools, and practices including Spring MVC, REST, Security, Web Flow, and more. You'll move between short snippets and an ongoing example as you learn to build simple and efficient J2EE applications. Author Craig Walls has a special knack for crisp and entertaining examples that zoom in on the features and techniques you really need. About the Technology Designed in 2003 as a lighter approach to J2EE development, Spring Framework has since become a standard choice for building enterprise applications and required knowledge for Java developers. Spring 4, the latest major version, provides full Java 8 integration along with key upgrades like new annotations for the IoC container, improvements to Spring Expression Language, and much-needed support for REST. Whether you're just discovering Spring or you want to absorb the new features, there's no better way to master Spring than with this book. About the Book Spring in Action, Fourth Edition is a hands-on guide to the Spring Framework. It covers Spring core, along with the latest updates to Spring MVC, Security, Web Flow, and more. You'll move between short snippets and an ongoing example as you learn to build simple and efficient JEE applications. Author Craig Walls has a special knack for crisp and entertaining examples that zoom in on the features and techniques you really need. Nearly 100,000 developers have used this book to learn Spring! It requires a working knowledge of Java. What's Inside Updated for Spring 4 Spring Data for NoSQL Simplifying configuration with annotations and definition profiles Working with RESTful resources About the Author Craig Walls is a software developer at Pivotal. He's a popular author and a frequent speaker at user groups and conferences. Craig lives in Cross Roads, Texas.

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

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

An easy-to-follow tutorial, that breaks down the enterprise application development journey into easy to understand phases documented by clear examples and concise explanations.If you are an intermediate developer with a good

understanding of Java, JavaScript and web development concepts, this book is ideal for you. Basic ExtJS development experience, including an understanding of the framework APIs is needed by those of you who are interested in this book. Regardless of your experience and background, the practical examples provided in this book are written in a way that thoroughly covers each concept before moving on to the next chapter.

Quickly and productively develop complex Spring applications and microservices out of the box, with minimal concern over things like configurations. This revised book, Pro Spring Boot 2, will show you how to fully leverage the Spring Boot 2 micro-framework and how to apply it through the use of case studies. It will also cover what's been added to Spring Boot 2 including WebFlux and more. This book is your authoritative hands-on practical guide for increasing your enterprise Java and cloud application productivity while decreasing development time. It's a no-nonsense guide with case studies of increasing complexity throughout the book. The author, a senior consultant with the Spring team, shares his experience, insights, and first-hand knowledge in showing case studies and best practices that are found throughout this book. Similar to the best-selling Pro Spring, Pro Spring Boot 2 is an essential book for your Spring learning and reference library. What You Will Learn Configure Spring Boot Use the Spring Boot Actuator Carry out web development with Spring Boot Build enterprise applications with Spring Boot Test and deploy with Spring Boot Extend Spring Boot and its available plug-ins Who This Book Is For Experienced Spring and Java developers seeking increased productivity gains and decreased complexity and development time in their applications and software services.

Unleash the power of Spring MVC and build enterprise-grade, lightning-fast web applications About This Book Configure Spring MVC to build logic-less controllers that transparently support the most advanced web techniques Secure your developments with easy-to-write, reliable unit and end-to-end tests Get this fast-paced, practical guide to produce REST resources and templates as required by the latest front-end best practices Who This Book Is For This Learning Path is for Java developers who want to exploit Spring MVC and its features to build web applications. It will help you step up in your career and stay up to date or learn more about Spring's web scalability. What You Will Learn Set up and build standalone and web-based projects using Spring Framework with Maven or Gradle Develop RESTful API applications for XML and JSON data transfers Investigate Spring data access mechanisms with Spring Data Repositories Generate templates for a responsive and powerful front end with AngularJS and Bootstrap Authenticate over REST with a BASIC authentication scheme and OAuth2; handle roles and permissions Communicate through WebSocket and STOMP messages Design complex advanced-level forms and validate the model Create maintainable unit and acceptance tests to secure the apps Deploy the web application to the cloud in a snap In Detail Spring MVC helps you build flexible and loosely coupled web applications. The Spring MVC Framework is designed in such a way that every piece of logic and functionality is highly configurable. This Learning Path aims to make you an expert in designing web applications with Spring MVC 4. In our first module, we'll begin with an introduction to the Spring framework. You'll then learn aspect-oriented programming. Packed with real-world examples, you'll get an insight into how you can use Spring Expression Language in your applications to make them easier to manage and maintain. In the second module, you'll learn everything you need to build modern Spring-based enterprise web applications. From practical development techniques and useful tools from the wider Spring ecosystem, to the new JEE standards, the impact of JavaScript, and even the Internet of Things, you'll feel confident that you can deploy Spring for an impressive range of creative purposes. In the final module, you'll find out how to take advantage of Spring MVC's advanced features - essential if you are to properly master the framework. To do this you'll investigate the inner mechanics of Spring MVC, and how they tie into to the broader principles that inform many modern web architectures. With further guidance on how to test, secure, and optimize your application, as well as designing RESTful services, you'll very quickly be ready to use Spring in your next web project. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: Spring Essentials by Shameer Kunjumohamed, Hamidreza Sattari Spring MVC Cookbook by Alex Bretet Mastering Spring MVC 4 by Geoffroy Warin Style and approach This is a hands-on, practical guide based on logical modules of the whole Spring framework family, employing a combination of theory and examples with pro-level practices, techniques, and solutions.

Quickly and productively develop complex Spring applications and microservices out of the box, with minimal concern over things like configurations. This revised book will show you how to fully leverage the Spring Boot 2 technology and how to apply it to create enterprise ready applications that just work. It will also cover what's been added to the new Spring Boot 2 release, including Spring Framework 5 features like WebFlux, Security, Actuator and the new way to expose Metrics through Micrometer framework, and more. This book is your authoritative hands-on practical guide for increasing your enterprise Java and cloud application productivity while decreasing development time. It's a no nonsense guide with case studies of increasing complexity throughout the book. The author, a senior solutions architect and Principal Technical instructor with Pivotal, the company behind the Spring Framework, shares his experience, insights and first-hand knowledge about how Spring Boot technology works and best practices. Pro Spring Boot 2 is an essential book for your Spring learning and reference library. What You Will Learn Configure and use Spring Boot Use non-functional requirements with Spring Boot Actuator Carry out web development with Spring Boot Persistence with JDBC, JPA and NoSQL Databases Messaging with JMS, RabbitMQ and WebSockets Test and deploy with Spring Boot A quick look at the Spring Cloud projects Microservices and deployment to the Cloud Extend Spring Boot by creating your own Spring Boot Starter and @Enable feature Who This Book Is For Experienced Spring and Java developers seeking increased productivity gains and decreased complexity and development time in their applications and software services.

Brings readers up to speed with Spring 3.1 and then highlights some of the new Spring 3.2 features such as asynchronous Spring MVC Controllers, also covering testing support for Spring MVC controllers and RestTemplate-based clients. Original.

What is this book about? The results of using J2EE in practice are often disappointing: applications are often slow, unduly complex, and take too long to develop. Rod Johnson believes that the problem lies not in J2EE itself, but in that it is often used badly. Many J2EE publications advocate approaches that, while fine in theory, often fail in reality, or deliver no real business value. Expert One-on-One: J2EE Design and Development aims to demystify J2EE development. Using a practical focus, it shows how to use J2EE technologies to reduce, rather than increase, complexity. Rod draws on his experience of designing successful high-volume J2EE applications and salvaging failing projects, as well as intimate knowledge of the J2EE specifications, to offer a real-world, how-to guide on how you too can make J2EE work in practice. It will help you to solve common problems with J2EE and avoid the expensive mistakes often made in J2EE projects. It will guide you through the complexity of the J2EE services and APIs to enable you to build the simplest possible solution, on time and on budget. Rod takes a practical, pragmatic approach, questioning J2EE orthodoxy where it has failed to deliver results in practice and instead suggesting effective, proven approaches. What does this book cover? In this book, you will learn When to use a distributed architecture When and how to use EJB How to develop an efficient data access strategy How to design a clean and maintainable web interface How to design J2EE applications for performance Who is this book for? This book would be of value to most enterprise developers. Although some of the discussion (for example, on performance and scalability) would be most relevant to architects and lead developers, the practical focus would make it useful to anyone with some familiarity with J2EE. Because of the complete design-deployment coverage, a less advanced developer could work through the book along with a more introductory text, and successfully build and understand the sample application. This comprehensive coverage would also be useful to developers in smaller organisations, who might be called upon to fill several normally distinct roles. What is special about this book? Wondering what differentiates this book from others like it in the market? Take a look: It does not just discuss technology, but stress its practical application. The book is driven from the need to solve common tasks, rather than by the elements of J2EE. It discuss risks in J2EE development It takes the reader through the entire design, development and build process of a non-trivial application. This wouldn't be compressed into one or two chapters, like the Java Pet Store, but would be a realistic example comparable to the complexity of applications readers would need to build. At each point in the design, alternative choices would be discussed. This would be important both where there's a real problem with the obvious alternative, and where the obvious alternatives are perhaps equally valid. It emphasizes the use of OO design and design patterns in J2EE, without becoming a theoretical book

Build messaging applications using the power of Spring Boot; use Spring application events over the Web; use WebSocket, SockJS, and STOMP messaging with Spring MVC; and use Spring JMS, Redis Pub/Sub and Spring AMQP for reliable messaging solutions. This book covers all the Spring Messaging APIs using Spring Boot. Written by a Pivotal engineer, Spring Boot Messaging is an authoritative guide to the many messaging APIs and how to use these for creating enterprise and integration solutions. You will learn and integrate these messaging APIs with more complex enterprise and cloud applications: for example, you will see how to use Spring Cloud Stream for creating message-driven and cloud native microservices. In addition, you’ll discover the new Spring Integration DSL and use it with Spring Cloud Stream to build integration solutions using every enterprise integration pattern. Finally, you’ll see Spring Reactor and Spring Cloud to take your application to the next level. “/p> After reading this book, you will come away with a case study application walk-through and will be able to use it as a template for building your own Spring messaging applications or messaging features within your enterprise or cloud application. What You'll Learn Use the main Spring messaging APIs with Spring Framework 5 Build messaging applications over the Web Use WebSocket, SockJS, and STOMP messaging Integrate Spring JMS and Spring AMQP into your applications Work with Spring Cloud Stream and microservices Who This Book Is For Enterprise Java developers who have at least some previous experience with the Spring Framework and/or the Spring platform.

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

Although industry has been leveraging the advancements of component-oriented development and assembly (CODA) technology for some time, there has long been a need for a book that provides a complete overview of the multiple technologies that support CODA. Filling this need, Component-Oriented Development and Assembly supplies comprehensive coverage of the principles, practice, and paradigm of component-oriented development and assembly. The first part of the book provides the conceptual foundation for component-oriented software. Part II focuses on the various standard Java component models and describes how to develop a component-oriented system using these

component models. Part III covers the various aspects of the component-oriented development paradigm. Based on the authors' research and teaching experience, the text focuses on the principles of component-oriented software development from a technical concepts perspective, designer's perspective, programmer's perspective, and manager's perspective. Covering popular component development frameworks based on Java, it is suitable as a textbook for component-oriented software for undergraduate and postgraduate courses. It is also an ideal reference for anyone looking to adopt the component-oriented development paradigm. The book provides readers with access to all the source code used in the book on a companion site (http://www.codabook.com). The source code for the CODA implementation of the case study presented in Chapter 11 is also hosted on the website. The website will also serve as a technical forum for further discussions on the topic and for any updates to the book.

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.

If you want to use Adobe Flex to build production-quality Rich Internet Applications for the enterprise, this groundbreaking book shows you exactly what's required. You'll learn efficient techniques and best practices, and compare several frameworks and tools available for RIA development -- well beyond anything you'll find in Flex tutorials and product documentation. Through many practical examples, the authors impart their considerable experience to help you overcome challenges during your project's life cycle. Enterprise Development with Flex also suggests proper tools and methodologies, guidelines for determining the skill sets required for the project, and much more. Choose among several frameworks to build Flex applications, including Cairngorm, PureMVC, Mate, and Clear Toolkit Apply selected design patterns with Flex Learn how to extend the Flex framework and build your own component library Develop a sample AIR application that automatically synchronizes local and remote databases to support your sales force Get solutions for leveraging AMF protocol and synchronizing Flex client data modifications with BlazeDS-based servers Determine the actual performance of your application and improve its efficiency

"This book presents methods of reengineering business curricula in order to use ES solutions. It also helps ES vendors understand the higher education environment so they can support college and university programs"--Provided by publisher.

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

Discover the latest features of Spring framework by building robust, fast, and reactive web applications Key Features Take advantage of all the features of Spring 5.0 with third party tools to build a robust back end Secure Spring based web application using Spring Security framework with LDAP and OAuth protocol Develop robust and scalable microservice based applications on Spring Cloud, using Spring Boot Book Description Spring makes it easy to create RESTful applications, merge with social services, communicate with modern databases, secure your system, and make your code modular and easy to test. With the arrival of Spring Boot, developers can really focus on the code and deliver great value, with minimal contour. This book will show you how to build various projects in Spring 5.0, using its features and third party tools. We'll start by creating a web application using Spring MVC, Spring Data, the World Bank API for some statistics on different countries, and MySQL database. Moving ahead, you'll build a RESTful web services application using Spring WebFlux framework. You'll be then taken through creating a Spring Boot-based simple blog management system, which uses Elasticsearch as the data store. Then, you'll use Spring Security with the LDAP libraries for authenticating users and create a central authentication and authorization server using OAuth 2 protocol. Further, you'll understand how to create Spring Boot-based monolithic application using JHipster. Toward the end, we'll create an online book store with microservice architecture using Spring Cloud and Netflix OSS components, and a task management system using Spring and Kotlin. By the end of the book, you'll be able to create coherent and flexible real-

time web applications using Spring Framework. What you will learn Build Spring based application using Bootstrap template and JQuery Understand the Spring WebFlux framework and how it uses Reactor library Interact with Elasticsearch for indexing, querying, and aggregating data Create a simple monolithic application using JHipster Use Spring Security and Spring Security LDAP and OAuth libraries for Authentication Develop a microservice-based application with Spring Cloud and Netflix Work on Spring Framework with Kotlin Who this book is for This book is for competent Spring developers who wish to understand how to develop complex yet flexible applications with Spring. You must have a good knowledge of Java programming and be familiar with the basics of Spring.