

Spring Boot How To Get Started And Build A Microservice

This volume set contains 184 papers from the 4th Computational Methods in Systems and Software 2020 (CoMeSySo 2020) proceedings. Software engineering, computer science and artificial intelligence are crucial topics for the research within an intelligent systems problem domain. The CoMeSySo 2020 conference is breaking the barriers, being held online. CoMeSySo 2020 intends to provide an international forum for the discussion of the latest high-quality research results.

Master Spring Boot fundamentals, mastering spring data Java Persistence API, SPRING MVC, REST clients, profiles, logging and more. About This Video Learn how Spring Boot simplifies Java application development Create and run several Spring Boot applications from scratch Become well-versed with Spring Boot while using various Spring modules In Detail Spring is one of the most widely used frameworks in the industry. Whether you're an experienced developer or a complete beginner, this course will get you up to speed with the basics of Spring Boot in an easy and systematic way. You'll start this course by exploring the problems with traditional Spring application development. You will then understand how easy it is to create and deploy an application using Spring Boot. In the next few sections, you'll discover how Spring Boot can help you auto-configure a Spring project. Later, the course will take you through everything from enabling health metrics for applications to customizing health metrics endpoints with your own information. Finally, you'll delve into Spring Security and database caching. By the end of this course, you'll be well-versed with the fundamentals of Spring Boot and have gained hands-on experience of creating Spring Boot applications from scratch.

Learn Spring Boot and how to build Java-based enterprise, web, and microservice applications with it. In this book, you'll see how to work with relational and NoSQL databases, build your first microservice, enterprise, or web application, and enhance that application with REST APIs. You'll also learn how to build reactive web applications using Spring Boot along with Spring Web Reactive. Then you'll secure your Spring Boot-created application or service before testing and deploying it. After reading and learning with Beginning Spring Boot 2, you'll have the skills and techniques to start building your first Spring Boot applications and microservices with confidence to take the next steps in your career journey. What You'll Learn Use Spring Boot autoconfiguration Work with relational and NoSQL databases Build web applications with Spring Boot Apply REST APIs using Spring Boot Create reactive web applications using Spring Web Reactive Secure your Spring Boot applications or web services Test and deploy your Spring Boot applications Who This Book Is For Experienced Java and Spring Framework developers who are new to the new Spring Boot micro-framework.

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

Develop diverse real-life projects including most aspects of Spring Boot Key Features Run production-grade based applications using the Spring WebFlux framework Learn to develop high performance, asynchronous applications with Spring Boot Create robust microservice-based applications with Kotlin using Spring Boot Book Description Spring is one of the best tools available on the market for developing web, enterprise, and cloud-ready software. The goal of Spring Boot is to provide a set of tools for quickly building Spring applications that are easy to configure, and that make it easy to create and run production-grade Spring-based applications. Spring Boot 2.0 Projects will get you acquainted with important features of the latest version of this application-building tool and will cover basic, as well as advanced topics. The book starts off by teaching you how to create a web application using Spring Boot, followed by creating a Spring Boot-based simple blog management system that uses Elasticsearch as the data store. As you make your way through the chapters, you'll build a RESTful web services application using Kotlin and the Spring WebFlux framework. Spring WebFlux is a new framework that helps in creating a reactive application in a functional way. Toward the end of the book, you will build a taxi-hailing API with reactive microservices using Spring Boot and a Twitter clone with a Spring Boot backend. Finally, you'll learn how to build an asynchronous email formatter. What you will learn Learn the fundamental features of Spring Boot 2.0 Customize Spring Boot 2.0 applications Build a basic web application Use Redis to build a taxi-hailing API Create a simple blog management system and a Twitter clone Develop a reactive RESTful web service with Kotlin using Spring Boot Who this book is for This book is for competent Spring developers who wish to understand how to develop complex yet scalable applications with Spring Boot. You must have a good knowledge of Java programming and be familiar with the basics of Spring.

If you are a Java developer with experience in developing applications with Spring, then this book is perfect for you. A good working knowledge of Spring programming conventions and applying dependency injections is recommended to make the most of this book.

Take your application development skills to the next level by implementing Spring Boot features effectively Key Features This collection of effective recipes serves as guidelines

for Spring Boot application development Get up to date with features of the latest version of Spring Boot 2.0 Tips and tricks to improve your efficiency through the stages of software development Book Description The Spring framework provides great flexibility for Java development, which also results in tedious configuration work. Spring Boot addresses the configuration difficulties of Spring and makes it easy to create standalone, production-grade Spring-based applications. This practical guide makes the existing development process more efficient. Spring Boot Cookbook 2.0 Second Edition smartly combines all the skills and expertise to efficiently develop, test, deploy, and monitor applications using Spring Boot on premise and in the cloud. We start with an overview of the important Spring Boot features you will learn to create a web application for a RESTful service. Learn to fine-tune the behavior of a web application by learning about custom routes and asset paths and how to modify routing patterns. Address the requirements of a complex enterprise application and cover the creation of custom Spring Boot starters. This book also includes examples of the new and improved facilities available to create various kinds of tests introduced in Spring Boot 1.4 and 2.0, and gain insights into Spring Boot DevTools. Explore the basics of Spring Boot Cloud modules and various Cloud starters to make applications in "Cloud Native" and take advantage of Service Discovery and Circuit Breakers. What you will learn Get to know Spring Boot Starters and create custom auto-configurations Work with custom annotations that enable bean activation Use DevTools to easily develop and debug applications Learn the effective testing techniques by integrating Cucumber and Spock Observe an eternal application configuration using Consul Move your existing Spring Boot applications to the cloud Use Hashicorp Consul and Netflix Eureka for dynamic Service Discovery Understand the various mechanisms that Spring Boot provides to examine an application's health Who this book is for This book is for Java Developers who have good knowledge and understanding of Spring and Java application development.

Develop diverse real-life projects including most aspects of Spring Boot Key Features Run production-grade based applications using the Spring WebFlux framework Learn to develop high performance, asynchronous applications with Spring Boot Create robust microservice-based applications with Kotlin using Spring Boot Book Description Spring is one of the best tools available on the market for developing web, enterprise, and cloud-ready software. The goal of Spring Boot is to provide a set of tools for quickly building Spring applications that are easy to configure, and that make it easy to create and run production-grade Spring-based applications. Spring Boot 2.0 Projects will get you acquainted with important features of the latest version of this application-building tool and will cover basic, as well as advanced topics. The book starts off by teaching you how to create a web application using Spring Boot, followed by creating a Spring Boot-based simple blog management system that uses Elasticsearch as the data store. As you make your way through the chapters, you'll build a RESTful web services application using Kotlin and the Spring WebFlux framework. Spring WebFlux is a new framework that helps in creating a reactive application in a functional way. Toward the end of the book, you will build a taxi-hailing API with reactive microservices using Spring Boot and a Twitter clone with a Spring Boot backend. Finally, you'll learn how to build an asynchronous email formatter. What you will learn Learn the fundamental features of Spring Boot 2.0 Customize Spring Boot 2.0 applications Build a basic web application Use Redis to build a taxi-hailing API Create a simple blog management system and a Twitter clone Develop a reactive RESTful web service with Kotlin using Spring Boot Who this book is for This book is for competent Spring developers who wish to understand how to develop complex yet scalable applications with Spring Boot. You must have a good knowledge of Java programming and be familiar with the basics of Spring.

An end-to-end software development guide for the Java eco-system using the most advanced frameworks: Spring and Spring Boot. Learn the complete workflow by building projects and solving problems.About This Book* Learn reactive programming by implementing a reactive application with Spring WebFlux* Create a robust and scalable messaging application with Spring messaging support* Get up-to-date with the defining characteristics of Spring Boot 2.0 in Spring Framework 5* Learn about developer tools, AMQP messaging, WebSockets, security, MongoDB data access, REST, and more* This collection of effective recipes serves as guidelines for Spring Boot application developmentWho This Book Is ForJava developers wanting to build production-grade applications using the newest popular Spring tools for a rich end-to-end application development experience.What You Will Learn* Get to know the Spring Boot and understand how it makes creating robust applications extremely simple* Understand how Spring Data helps us add persistence in MongoDB and SQL databases* Implement a websocket to add interactive behaviors in your applications* Create powerful, production-grade applications and services with minimal fuss* Use custom metrics to track the number of messages published and consumed* Build anything from lightweight unit tests to fully running embedded web container integration tests* Learn effective testing techniques by integrating Cucumber and Spock* Use Hashicorp Consul and Netflix Eureka for dynamic Service DiscoveryIn DetailSpring Framework has become the most popular framework for Java development. It not only simplifies software development but also improves developer productivity. This book covers effective ways to develop robust applications in Java using Spring.The course is up made of three modules, each one having a take-away relating to building end-to-end java applications. The first module takes the approach of learning Spring frameworks by building applications.You will learn to build APIs and integrate them with popular fraemworks suh as AngularJS, Spring WebFlux, and Spring Data. You will also learn to build microservices using Spring's support for Kotlin. You will learn about the Reactive paradigm in the Spring architecture using Project Reactor. In the second module, after getting hands-on with Spring, you will learn about the most popular tool in the Spring ecosystem-Spring Boot. You will learn to build applications with Spring Boot, bundle them, and deploy them on the cloud. After learning to build applications with Spring Boot, you will be able to use various tests that are an important part of application development. We also cover the important developer tools such as AMQP messaging, websockets, security, and more. This will give you a good functional understanding of scalable development in the Spring ecosystem with Spring Boot. In the third and final module, you will tackle the most important challenges in Java application development with Spring Boot using practical recipes. Including recipes for testing,

deployment, monitoring, and securing your applications. This module will also address the functional and technical requirements for building enterprise applications. By the end of the course you will be comfortable with using Spring and Spring Boot to develop Java applications and will have mastered the intricacies of production-grade applications. Style and approach A simple step-by-step guide with practical examples to help you develop and deploy Spring and Spring Boot applications in the real-world.

Build Your First Spring Boot Application.

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 APPENDICES Spring Boot developer tools Spring Boot starters Configuration properties Spring Boot dependencies

Learning Spring Boot - Second Edition Packt Publishing

Get started with Spring Boot 2.x?the popular Spring microframework?and learn how to build Java-based web applications quickly, using less code.

With an actionable and hands-on approach, this custom tailored resource gives you a head start in learning how to build microservices with Spring Boot by leading you, step-by-step, through the process. --

Build an in-depth understanding of the Istio service mesh and see why a service mesh is required for a distributed application. This book covers the Istio architecture and its features using a hands-on approach with language-neutral examples. To get your Istio environment up and running, you will go through its setup and learn the concepts of control plane and data plane. You will become skilled with the new concepts and apply them with best practices to continuously deliver applications. What You Will Learn Discover the Istio architecture components and the Envoy proxy Master traffic management for service routing and application deployment Build application resiliency using timeout, circuit breakers, and connection pools Monitor using Prometheus and Grafana Configure application security Who This Book Is For Developers and project managers who are trying to run their application using Kubernetes. The book is not specific for any programming language even though all examples will be in Java or Python.

Develop cloud native applications with microservices using Spring Boot, Spring Cloud, and Spring Cloud Data Flow About This Book Explore the new features and components in Spring Evolve towards micro services and cloud native applications Gain powerful insights into advanced concepts of Spring and Spring Boot to develop applications more effectively Understand the basics of Kotlin and use it to develop a quick service with Spring Boot Who This Book Is For This book is for an experienced Java developer who knows the basics of Spring, and wants to learn how to use Spring Boot to build applications and deploy them to the cloud. What You Will Learn Explore the new features in Spring Framework 5.0 Build microservices with Spring Boot Get to know the advanced features of Spring Boot in order to effectively develop and monitor applications Use Spring Cloud to deploy and manage applications on the Cloud Understand Spring Data and Spring Cloud Data Flow Understand the basics of reactive programming Get to know the best practices when developing applications with the Spring Framework Create a new project using Kotlin and implement a couple of basic services with unit and integration testing In Detail Spring 5.0 is due to arrive with a myriad of new and exciting features that will change the way we've used the framework so far. This book will show you this evolution—from solving the problems of testable applications to building distributed applications on the cloud. The book begins with an insight into the new features in Spring 5.0 and shows you how to build an application using Spring MVC. You will realize how application architectures have evolved from monoliths to those built around microservices. You will then get a thorough understanding of how to build and extend microservices using Spring Boot. You will also understand how to build and deploy Cloud-Native microservices with Spring Cloud. The advanced features of Spring Boot will be illustrated through powerful examples. We will be introduced to a JVM language that's quickly gaining popularity - Kotlin. Also, we will discuss how to set up a Kotlin project in Eclipse. By the end of the book, you will be equipped with the knowledge and best practices required to develop microservices with the Spring Framework. Style and approach This book follows an end-to-end tutorial approach with lots of examples and sample applications, covering the major building blocks of the Spring framework.

Logging used to be purely a troubleshooting tool. Now, it's a source of fascinating data that your group can turn into a competitive advantage. It's basically application

archaeology. This book has enough information to get you started logging in a wide variety of tech stacks. You'll learn the absolute basics in all of those tech stacks, as well as a bit of deeper theory. And this knowledge will start you down the path learning about application archaeology.

Sale - Reg. Price \$19.99 From Zero Spring Experience to Building Your First Microservice with Spring Boot 2 Learn to build your first microservice with Spring Boot. Together we will write a production-ready microservice with a REST API in just a few hours. All starting from having zero experience with Spring at all. Revised and extended 3rd edition Update: Using Spring Boot 2.1.8.RELEASE version. Our guides give you brief lessons on a single topic to get you started in no time. We leave the fluff out so you can focus and learn better and faster. Stop wasting hours of your life watching video courses or reading boring compendiums. Use our guide and save your precious time and be way ahead of your competitors on that next big project. We build a real application (less than 850 lines of code though) using a standard Maven project structure together, and I will explain you the steps and libraries involved on the go. You must know Java. You learn best by coding. The way I love learning too. And not by reading fluffy compendiums or watching 10 hours and more of videos. Sure, you can do that, but any developer following my guide will be way ahead of you before you are even halfway through that video course. What you will build: We build a Microservice for storing comments and providing a REST Interface for interacting with the data. The sample application is modeled after a real production application to guide you through building your first Spring Boot application. What you will learn: What problem the Spring Framework actually solves The basics of the Spring Framework aka Core How to build a microservice with Spring Boot 2 How to work with a relational database using the Spring Data JPA Framework How to write the REST API using Spring MVC How to create a service layer and integrate a legacy library using its own Spring ApplicationContext in an XML file How to test the application A simple way to secure your application How to use monitoring and health check out of the box with Spring Boot How to deploy your application How to navigate in the project with Maven You must have experience with Java as we are not covering Java basics. Everything else we use is covered in the guide. If you have questions, do not hesitate to contact me using the email address at the end of the book. I'll answer your questions and improve the book with your feedback. Promised!

Learn to develop, test, and deploy your Spring Boot distributed application and explore various best practices. Key Features Build and deploy your microservices architecture in the cloud Build event-driven resilient systems using Hystrix and Turbine Explore API management tools such as KONG and API documentation tools such as Swagger Book Description Spring is one of the best frameworks on the market for developing web, enterprise, and cloud ready software. Spring Boot simplifies the building of complex software dramatically by reducing the amount of boilerplate code, and by providing production-ready features and a simple deployment model. This book will address the challenges related to power that come with Spring Boot's great configurability and flexibility. You will understand how Spring Boot configuration works under the hood, how to overwrite default configurations, and how to use advanced techniques to prepare Spring Boot applications to work in production. This book will also introduce readers to a relatively new topic in the Spring ecosystem – cloud native patterns, reactive programming, and applications. Get up to speed with microservices with Spring Boot and Spring Cloud. Each chapter aims to solve a specific problem or teach you a useful skillset. By the end of this book, you will be proficient in building and deploying your Spring Boot application. What you will learn Build logically structured and highly maintainable Spring Boot applications Configure RESTful microservices using Spring Boot Make the application production and operation-friendly with Spring Actuator Build modern, high-performance distributed applications using cloud patterns Manage and deploy your Spring Boot application to the cloud (AWS) Monitor distributed applications using log aggregation and ELK Who this book is for The book is targeted at experienced Spring and Java developers who have a basic knowledge of working with Spring Boot. The reader should be familiar with Spring Boot basics, and aware of its benefits over traditional Spring Framework-based applications. Introduction price of \$9.99 - Limited Time Learn to build your first Spring Boot application with an actionable and hands-on approach. It is NOT a compendium telling you everything about Spring Boot and still leaving you back with no clue. We build a real application together, and I will explain you the steps and libraries involved on the go. You learn best by coding. The way I love learning too. What you will build: We build a Microservice for storing comments and providing a REST Interface for interacting with the data. The sample application is modeled after a real production application to guide you through building your first Spring Boot application. What you will learn: How to build a microservice with Spring Boot 1.5.2 How to work with a relational database using the Spring Data JPA Framework How to write the REST API using Spring MVC How to create a service layer and integrate a legacy library using its own Spring ApplicationContext in an XML file How to test the application A simple way to secure you application How to use monitoring and health check out of the box with Spring Boot How to deploy your application This book is for you when you have a bit of experience with Java and want to learn Spring Boot you already work with the Spring Framework, but you are new to Spring Boot you love building applications and learning new technologies It is NOT for you if you like reading fluffy compendiums you don't know the Java language at all And if you have questions, do not hesitate and contact me using the email address at the end of the book. I'll answer your questions and improve the book with your feedback.

Spring Start Here teaches you how to build professional-quality applications using Spring and Spring Boot. Spring is a massive ecosystem and a must-learn tool for Java developers. 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. Spring Start Here teaches you how to build professional-quality applications using Spring and Spring Boot. You'll start with the core components of the framework and then learn how features like Spring Boot simplify the tedious repetitive tasks you face in every project. When you're done, you'll be able to create Spring apps, secure them with authentication

application * Unit and integration testing for all aspects * Writing documentation for your REST endpoints * Support file upload from your REST API

Over 35 recipes to help you build, test, and run Spring applications using Spring Boot About This Book Learn to create different types of Spring Boot applications, configure behavior, and add custom components Become more efficient in testing, deploying, and monitoring Spring Boot based applications This is a practical guide that will help Spring developers to develop and deploy applications using Spring Boot Who This Book Is For If you are a Spring Developer who has good knowledge level and understanding of Spring Boot and application development and now want to learn efficient Spring Boot development techniques in order to make the existing development process more efficient, then this book is for you. What You Will Learn Create Spring Boot applications from scratch Configure and tune web applications and containers Create custom Spring Boot auto-configurations and starters Use Spring Boot Test framework with JUnit, Cucumber, and Spock Configure and tune web applications and containers Deploy Spring Boot as self-starting executables and Docker containers Monitor data using DropWizard, Graphite, and Dashing In Detail Spring Boot is Spring's convention-over-configuration solution. This feature makes it easy to create Spring applications and services with absolute minimum fuss. Spring Boot has the great ability to be customized and enhanced, and is specifically designed to simplify development of a new Spring application. This book will provide many detailed insights about the inner workings of Spring Boot, as well as tips and recipes to integrate the third-party frameworks and components needed to build complex enterprise-scale applications. The book starts with an overview of the important and useful Spring Boot starters that are included in the framework, and teaches you to create and add custom Servlet Filters, Interceptors, Converters, Formatters, and PropertyEditors to a Spring Boot web application. Next it will cover configuring custom routing rules and patterns, adding additional static asset paths, and adding and modifying servlet container connectors and other properties such as enabling SSL. Moving on, the book will teach you how to create custom Spring Boot Starters, and explore different techniques to test Spring Boot applications. Next, the book will show you examples of configuring your build to produce Docker images and self-executing binary files for Linux/OSX environments. Finally, the book will teach you how to create custom health indicators, and access monitoring data via HTTP and JMX. Style and approach This book is a cohesive collection of recipes that provide developers with a set of connected guidelines on how to build, configure, and customize their application, starting from the design and development stages, all the way through testing, deployment, and production monitoring.

Prepare for the Pivotal Certified Spring Web Application Developer exam and learn about Spring MVC DispatcherServlet configuration, Spring MVC programming model essentials, Spring MVC views and form processing, Spring Web Flow essentials, and Spring Web Flow actions and configuration. The Pivotal Certified Spring Web Application Developer Exam: A Study Guide is the ideal preparation for the exam and after reading and using it, you'll be able to pass and become a certified Spring Web Developer. When you become a Pivotal Certified Spring Web Application Developer, you'll receive one of the most valuable credentials available in enterprise Java. Achieving this certification demonstrates your ability to apply Spring's web projects to develop real-world Java web applications and validates your familiarity with Spring Web.

Work with all aspects of batch processing in a modern Java environment using a selection of Spring frameworks. This book provides up-to-date examples using the latest configuration techniques based on Java configuration and Spring Boot. The Definitive Guide to Spring Batch takes you from the "Hello, World!" of batch processing to complex scenarios demonstrating cloud native techniques for developing batch applications to be run on modern platforms. Finally this book demonstrates how you can use areas of the Spring portfolio beyond just Spring Batch 4 to collaboratively develop mission-critical batch processes. You'll see how a new class of use cases and platforms has evolved to have an impact on batch-processing. Data science and big data have become prominent in modern IT and the use of batch processing to orchestrate workloads has become commonplace. The Definitive Guide to Spring Batch covers how running finite tasks on cloud infrastructure in a standardized way has changed where batch applications are run. Additionally, you'll discover how Spring Batch 4 takes advantage of Java 9, Spring Framework 5, and the new Spring Boot 2 micro-framework. After reading this book, you'll be able to use Spring Boot to simplify the development of your own Spring projects, as well as take advantage of Spring Cloud Task and Spring Cloud Data Flow for added cloud native functionality. Includes a foreword by Dave Syer, Spring Batch project founder. What You'll Learn Discover what is new in Spring Batch 4 Carry out finite batch processing in the cloud using the Spring Batch project Understand the newest configuration techniques based on Java configuration and Spring Boot using practical examples Master batch processing in complex scenarios including in the cloud Develop batch applications to be run on modern platforms Use areas of the Spring portfolio beyond Spring Batch to develop mission-critical batch processes Who This Book Is For Experienced Java and Spring coders new to the Spring Batch platform. This definitive book will be useful in allowing even experienced Spring Batch users and developers to maximize the Spring Batch tool.

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.

A developer's guide to designing, testing, and securing production-ready modern APIs with the help of practical ideas to improve your application's functionality Key Features Build resilient software for your enterprises and customers by understanding the complete API development life cycle Overcome the challenges of traditional API design by adapting to a new and evolving culture of modern API development Use Spring and Spring Boot to develop future-proof scalable APIs Book Description The philosophy of API development has evolved over the years to serve the modern needs of enterprise architecture, and developers need to know how to adapt to these modern API design principles. Apps are now developed with APIs that enable ease of integration for the cloud environment and distributed systems. With this Spring book, you'll discover various kinds of production-ready API implementation using REST APIs and explore async using the reactive paradigm, gRPC, and GraphQL. You'll learn how to design evolving REST-based APIs supported by HATEOAS and ETAGs and develop reactive, async, non-blocking APIs. After that, you'll see how to secure REST APIs using Spring Security and find out how the APIs that you develop are consumed by the app's UI. The book then takes you through the process of testing, deploying, logging, and monitoring your APIs. You'll also explore API development using gRPC and GraphQL and design modern scalable architecture with microservices. The book helps you gain practical knowledge of modern API implementation using a sample e-commerce app. By the end of this Spring book, you'll be able to develop, test, and deploy highly scalable, maintainable, and developer-friendly APIs to help your customers to transform their business. What you will learn Understand RESTful API development, its design paradigm, and its best practices Become well versed in Spring's core components for implementing RESTful web services Implement reactive APIs and explore async API development Apply Spring Security for authentication using JWT and authorization of requests Develop a React-based UI to consume APIs Implement gRPC inter-service communication Design GraphQL-based APIs by understanding workflows and tooling Gain insights into how you can secure, test, monitor, and deploy your APIs Who this book is for This book is for inexperienced Java programmers, comp science, or coding boot camp graduates who have knowledge of basic programming constructs, data structures, and algorithms in Java but lack the practical web development skills necessary to start working as a developer. Professionals who've recently joined a startup or a company and are tasked with creating real-world web APIs and services will also find this book helpful. This book is also a good resource for Java developers who are looking for a career move into web development to get started with the basics of web service development.

Quickly and productively develop complex Spring applications and microservices - out of the box - with minimal fuss on things like configurations. This book will show you how to fully leverage the Spring Boot productivity suite of tools and how to apply them through the use of case studies. Pro Spring Boot is your authoritative hands-on practical guide for increasing your Spring Framework-based enterprise Java and cloud application productivity while decreasing development time using the Spring Boot productivity suite of tools. It's a no nonsense guide with case studies of increasing complexity throughout the book. This book is written by Felipe Gutierrez, a Spring expert consultant who works with Pivotal, the company behind the popular Spring Framework. What You Will Learn Write your first Spring Boot application Configure Spring Boot Use the Spring Boot Actuator Carry out web development with Spring Boot Build microservices with Spring Boot Handle databases and messaging 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.

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.

Spring Boot 2.3 is the hottest ticket in town... ..when it comes to Java development. Learn the latest features that can scale your apps including: * Web and Data access * Developer tools and test support * Operational features * Docker container baking * Bottleneck discovery with BlockHound * Messaging * Security * More! Written cover-to-cover using Project Reactor, your apps will scale like never before. Grab your copy today and learn to build top-notch, scalable solutions with modern tactics. Greg L. Turnquist works on the Spring team as a principal developer at VMware. He is a committer to Spring HATEOAS, Spring Data, Spring Boot, R2DBC, and Spring Session for MongoDB. He also wrote Packt's best-selling title, Learning Spring Boot 2.0 2nd Edition. He co-founded the Nashville Java User Group in 2010 and hasn't met a Java app (yet) that he doesn't like. Follow him on Twitter @gregturn and subscribe for all his Spring Boot videos at YouTube.com/GregTurnquist.

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.

Solve all your Spring Boot 2 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. Using a problem-solution approach, Spring Boot 2 Recipes quickly introduces you to Pivotal's Spring Boot 2 micro-framework, then dives into code snippets on how to apply and integrate Spring Boot 2 with the Spring MVC web framework, Spring Web Sockets, and microservices. You'll also get solutions to common problems with persistence, integrating Spring Boot with batch processing, algorithmic programming via Spring Batch, and much more. Other recipes cover topics such as using and integrating Boot with Spring's enterprise services, Spring Integration, testing, monitoring and more. What You'll Learn Get reusable code recipes and snippets for the Spring Boot 2 micro-framework Discover how Spring Boot 2 integrates with other Spring APIs, tools, and frameworks Access Spring MVC and the new Spring Web Sockets for simpler web development Work with microservices for web services development and integration with your Spring Boot applications Add persistence and a data tier seamlessly to make your Spring Boot web application do more Integrate enterprise services to create a more complex Java application using Spring Boot Who This Book Is For Experienced Java and Spring programmers.

Use Spring Boot to build lightning-fast apps About This Book Get up to date with the defining characteristics of Spring Boot 2.0 in Spring Framework 5 Learn to perform Reactive programming with SpringBoot Learn about developer tools, AMQP messaging, WebSockets, security, MongoDB data access, REST, and more Who This Book Is For This book is designed for both novices and experienced Spring developers. It will teach you how to override Spring Boot's opinions and frees you from the need to define complicated configurations. What You Will Learn Create powerful, production-grade applications and services with minimal fuss Support multiple environments with one artifact, and add production-grade support with features Find out how to tweak your apps through different properties Use custom metrics to track the number of messages published and consumed Enhance the security model of your apps Make use of reactive programming in Spring Boot Build anything from lightweight unit tests to fully running embedded web container integration tests In Detail Spring Boot provides a variety of features that address today's business needs along with today's scalable requirements. In this book, you will learn how to leverage powerful databases and Spring Boot's state-of-the-art WebFlux framework. This practical guide will help you get up and running with all the latest features of Spring Boot, especially the new Reactor-based toolkit. The book starts off by helping you build a simple app, then shows you how to bundle and deploy it to the cloud. From here, we take you through reactive programming, showing you how to interact with controllers and templates and handle data access. Once you're done, you can start writing unit tests, slice tests, embedded container tests, and even autoconfiguration tests. We go into detail about developer tools, AMQP messaging, WebSockets, security, and deployment. You will learn how to secure your application using both routes and method-based rules. By the end of the book, you'll have built a social media platform from which to apply the lessons you have learned to any problem. If you want a good understanding of building scalable applications using the core functionality of Spring Boot, this is the book for you. Style and approach This book takes a tutorial-based approach to teach you all you need to know to get up and running with the latest version of Spring Boot. Filled with examples, you will gain hands-on experience of every area that Spring tackles.

A pragmatic guide for Java developers to help build Microservices and Cloud Apps using Spring Boot. KEY FEATURES ? Develops microservices from start to finish using the Spring Boot Framework. ? Creates cloud-native applications using Spring Boot's production-ready features. ? Covers the API gateway, unit testing, cloud deployments, and managing high-traffic applications. DESCRIPTION Spring is an excellent framework for developing both web and cloud-native applications. This book on application development using Spring Boot simplifies the process of writing boilerplate code for complex software. It allows developers to concentrate on the application's concept rather than on the internal Java configuration. This book will guide you on how to make the best use of the strength that Spring Boot provides. You'll gain an understanding of how Spring Boot configuration works in conjunction with application development, including auto-configuration and overriding default configurations. You will learn to develop scalable, dependable microservices to accelerate the development lifecycle of a cloud-based application. Each chapter will walk you through the features of Spring Boot as a Software Development Framework, such as performing Create, Read, Update, and Delete (CRUD) operations on a database and securing web services with appropriate logging. By the end of this book, you will develop, test, and deploy applications ready for production and how to establish them as cloud-based applications. The readers will also gain the expertise of writing unit and integration test cases. WHAT YOU WILL LEARN ? Get to know Spring Boot and all its capabilities. ? Build start-to-end production-ready applications. ? Explore the API Gateway and practice how to run request routing. ? Learn API doc tools like Swagger and host your apps on Cloud. ? Practice how to balance the application's load when the system is under high traffic. ? Learn to write unit tests and integration tests for bug-free coding. WHO THIS BOOK IS FOR This book is for Java developers who want to quickly develop, test, and deploy production-ready applications. This book will also appeal to cloud-native application developers and cloud engineers. No prior Spring Boot knowledge is required as the basics are covered in the book. TABLE OF CONTENTS 1. Getting Started with Spring Boot 2. Developing Your First Spring Boot Application 3. Spring Boot Starter Dependencies and Auto-Configuration 4. Spring Boot Annotations 5. Working with Spring Data JPA and Caching 6. Building RESTful Microservices 7. Securing a Web Application 8. Building Resilient

System 9. Logging 10. Working with the Swagger API Management Tool 11. Testing a Spring Boot Application 12. Deploying a Spring Boot Application

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. 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.

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