

## Spring Security

A comprehensive guide to building full stack applications covering frontend and server-side programming, data management, and web security Key Features Unleash the power of React Hooks to build interactive and complex user interfaces Build scalable full stack applications designed to meet demands of modern users Understand how the Axios library simplifies CRUD operations Book Description React Hooks have changed the way React components are coded. They enable you to write components in a more intuitive way without using classes, which makes your code easier to read and maintain. Building on from the previous edition, this book is updated with React Hooks and the latest changes introduced in create-react-app and Spring Boot 2.1. This book starts with a brief introduction to Spring Boot. You'll understand how to use dependency injection and work with the data access layer of Spring using Hibernate as the ORM tool. You'll then learn how to build your own RESTful API endpoints for web applications. As you advance, the book introduces you to other Spring components, such as Spring Security to help you secure the backend. Moving on, you'll explore React and its application development environment for building your frontend. Finally, you'll create a Docker container for your application by implementing the best practices that underpin professional full stack web development. By the end of this book, you'll be equipped with all the knowledge you need to build modern full stack applications with Spring Boot for the backend and React for the frontend. What you will learn Create a RESTful web service with Spring Boot Grasp the fundamentals of dependency injection and how to use it for backend development Discover techniques for securing the backend using Spring Security Understand how to use React for frontend programming Benefit from the Heroku cloud server by deploying your application to it Delve into the techniques for creating unit tests using JUnit Explore the Material UI component library to make more user-friendly user interfaces Who this book is for If you are a Java developer familiar with Spring, but are new to building full stack applications, this is the book for you.

Build mission-critical enterprise applications using Spring Framework and Aspect Oriented Programming About This Book Step into more advanced features of aspect-oriented programming and API components to build enterprise grade systems Build lightning-fast web applications and REST APIs using Spring MVC and its asynchronous processing capabilities with the view technologies of your choice Explore simplified but powerful data access techniques including JPA (Java Persistence Architecture) repositories and NoSQL data access Who This Book Is For If you are a Java developer who is looking to master Enterprise Java Development using Spring Framework, then this book is ideal for you. Prior understanding of core Java programming and a high-level understanding of Spring Framework is recommended. Having sound knowledge of servlet-based web development in Java and basic Database concepts would be an advantage but not a requirement. What You Will Learn Set up and build standalone and web-based projects using Spring Framework with Maven or Gradle Get familiar with JSP Form processing using Spring and Form Tag Library Develop RESTful API applications for XML and JSON data transfers with non-blocking asynchronous capabilities Explore Spring's comprehensive transaction support for declarative Transaction Management and its integration with Spring's data access abstractions Investigate Spring Data access mechanisms with Spring Data Repositories, a simple and modern SPA using EmberJS at the front end and Spring MVC at the back end In Detail Spring JS is an open source Java application development framework to build and deploy systems and applications that run on the JVM. It is the industry standard and the most popular framework among Java developers with over two-thirds of developers using it. Spring Essentials makes learning Spring so much quicker and easier with the help of illustrations and practical examples. Starting from the core concepts of features such as inversion of Control Container and BeanFactory, we move on to a detailed look at aspect-oriented programming. We cover the breadth and depth of Spring MVC, the WebService technology, Spring Data, and Spring Security with various authentication and authorization mechanisms. Packed with real-world examples, you'll get an insight into utilizing the power of Spring Expression Language in your applications for higher maintainability. You'll also develop full-duplex real-time communication channels using WebSocket and integrate Spring with web technologies such as JSF, Struts 2, and Tapestry. At the tall end, you will build a modern SPA using EmberJS at the front end and a Spring MVC-based API at the back end. By the end of the book, you will be able to develop your own full-fledged applications with Spring. Style and approach This book is a practical guide based on logical modules of the whole Spring Framework family, with a start-small approach, increasing in complexity as it progresses. Every chapter is an amalgamation of theory and practical examples, with further discussion on additional features and approaches.

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. Learn the power of 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 Spring 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.

Recipes to build, test, and run Spring applications efficiently

Building Web Apps with Spring 5 and Angular

Spring Essentials

Spring in Action

Hands-On Full Stack Development with Spring Boot 2 and React

*Solve all your Spring 5 problems using complete and real-world code examples. When you start a new project, you'll be able to copy the code and configuration files from this book, and then modify them for your needs. This can save you a great deal of work over creating a project from scratch. The recipes in Spring 5 Recipes cover Spring fundamentals such as Spring IoC container, Spring AOP Aspect, 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 The reusable 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. This book is for you if you have some experience with Java and web development (not necessarily in Java) and want to become proficient quickly with Spring.*

*Spring 5.0 brings major advancements in the rich APIs provided by the Spring framework and thus creates a need for developers to master its tools and techniques to achieve high-performing applications. This book will help you improve the speed of your code and optimize the performance of your apps.*

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

*Applications and Microservices with the Spring Framework*

*Designing Applications with Spring Boot 2.2 and React JS*

*Pivotal Certified Spring Web Application Developer Exam*

*A quick refresher for Java and Spring Cloud Developers*

*Spring Security 3.1*

*Getting started with Spring Framework: covers Spring 5 (4th Edition)*

**This practical step-by-step tutorial has plenty of example code coupled with the necessary screenshots and clear narration so that grasping content is made easier and quicker. This book is intended for Java web developers and assumes a basic understanding of creating Java web applications, XML, and the Spring Framework. You are not assumed to have any previous experience with Spring Security.**

**A complete guide to build robust and scalable web applications with Spring and Angular. About This Book This hands on guide will teach you how to build an end-to-end modern web application using Spring and Angular. It is easy to read and will benefit Java developers who have been used to develop the back-end part of web application while front-end (UI) has been left for UI developers. Learn the core aspects involved in developing the backend and the UI, right from designing to integrating and deploying. Who This Book Is For This book is targeted towards Java Web Developers with a basic knowledge of Spring who want to build complete web applications in a fast and effective way. They will want to gain a stronghold on both frontend and backend development to advance in their careers. What You Will Learn Set up development environment for Spring Web App and Angular app. Process web request and response and build REST API endpoints. Create data access components using Spring Web MVC framework and Hibernate Use JUnit 5 to test your application Learn the fundamental concepts around building Angular Configure and use Routes and Components. Protect Angular app content from common web vulnerabilities and attacks. Integrate Angular apps with Spring Boot Web API endpoints Deploy the web application based on CI and CD using Jenkins and Docker containers In Detail Spring is the most popular application development framework being adopted by millions of developers around the world to create high performing, easily testable, reusable code. Its lightweight nature and extensibility helps you write robust and highly-scalable server-side web applications. Coupled with the power and efficiency of Angular, creating web applications has never been easier. If you want build end-to-end modern web application using Spring and Angular, then this book is for you. The book directly heads to show you how to create the backend with Spring, showing you how to configure the Spring MVC and handle Web requests. It will take you through the key aspects such as building REST API endpoints, using Hibernate, working with JUnit 5 etc. Once you have secured and tested the backend, we will go ahead and start working on the front end with Angular. You will learn about fundamentals of Angular and Typescript and create an SPA using components, routing etc. Finally, you will see how to integrate both the applications with REST protocol and deploy the application using tools such as Jenkins and Docker. Style and approach This is a straightforward guide that shows how to build a complete web application in Angular and Spring.**

**The Spring framework is growing. It has always been about choice. Java EE focused on a few technologies, largely to the detriment of alternative, better solutions. When the Spring framework debuted, few would have agreed that Java EE represented the best-in-breed architectures of the day. Spring debuted to great fanfare, because it sought to simplify Java EE. Each release since marks the introduction of new features designed to both simplify and enable solutions. With version 2.0 and later, the Spring framework started targeting multiple platforms. The framework provided services on top of existing platforms, as always, but was decoupled from the underlying platform wherever possible. Java EE is still a major reference point, but it's not the only target. OSGi (a promising technology for modular architectures) has been a big part of the SpringSource strategy here. Additionally, the Spring framework runs on Google App Engine. With the introduction of annotation-centric frameworks and XML schemas, SpringSource has built frameworks that effectively model the domain of a specific problem, in effect creating domain-specific languages (DSLs). Frameworks built on top of the Spring framework have emerged supporting application integration, batch processing, Flex and Flash integration, GWT, OSGi, and much more.**

**Over 40 recipes for creating cloud-ready Java web applications with Spring MVC About This Book Configure Spring MVC to build logic-less controllers that transparently support the most advanced web techniques Build an amazing social and financial application that applies microservices patterns on deployment, self-testability, interoperability, cloud architectures, and scalability Fast-paced, practical guide to learn how to set up Spring MVC to produce REST resources and templates as required by the latest front-end best practices Who This Book Is For If you are an experienced Java developer, with prior experience in web technologies, and want to step up your career and stay up-to-date or learn more about Spring Web scalability, this book is for you. What You Will Learn Structure your project with Maven and create self-tested, domain-specific deployable web archives Generate templates for a responsive and powerful frontend with AngularJS and bootstrap Build high performance RESTful and hypermedia application to support your multiple customer experiences Authenticate over REST with a BASIC authentication scheme and OAuth2; handle roles and permissions Document and publish your REST API using Swagger UI Integrate Spring application communication through WebSocket and STOMP messages Provide support to your application and efficiently maintain its business features with a relevant test stack In Detail Spring MVC is a lightweight application framework that comes with a great configuration by default. Being part of the Spring Framework, it naturally extended and supported it with an amazing set of recognizable annotations. External libraries can be plugged in and plugged out. It also possesses a request flow. Complete support of REST web services makes the Spring architecture an extremely consistent choice to support your front-end needs and Internet transformations. From the design of your Maven modules, you will achieve an Enterprise-standard for a stateless REST application based on Spring and Spring MVC with this book. This guide is unique in its style as it features a massive overview of practical development techniques brought together from the Spring ecosystem, the new JEE standards, the JavaScript revolution and Internet of Things. You will begin with the very first steps of Spring MVC's product design. Focused on deployment, viability, and maintainability, you will learn the use of Eclipse, Maven, and Git. You will walk through the separation of concerns driven by the microservices principles. Using Bootstrap and AngularJS, you will develop a responsive front-end, capable of interacting autonomously with a REST API. Later in the book, you will setup the Java Persistence API (JPA) within Spring; learn how to configure your Entities to reflect your domain needs, and discover Spring Data repositories. You will analyze how Spring MVC responds to complex HTTP requests. You will implement Hypermedia and HATEOAS to guide your customer's stateless conversation with the product and see how a messaging-service based on WebSocket can be configured. Finally you will learn how to set up and organize different levels of automated-tests, including logging and monitoring. Style and approach A comprehensive, recipe-based guide to creating stunning Java apps with Spring MVC as a result of learning and implementing pro-level practices, techniques, and solutions.**

**Cracking Spring Microservices Interviews**

**From Novice to Professional**

**A Study Guide Using Spring Framework 5**

**Spring Boot: Up and Running**

**Hacking with Spring Boot 2.3**

**Build modern and scalable full stack applications using Spring Framework 5 and React with Hooks, 2nd Edition**

*Get started with Spring Framework 5 and its ecosystem, with a guide to the working practices in modern development. This book will teach you how to use the Spring Framework to build Java-based applications, web applications, and microservices. You'll see how Spring has drastically and positively affected the way we program and design applications in Java. Beginning Spring 5 discusses how you can build apps with the Spring mindset and what the benefits of that mindset are. Along the way you will learn many aspects of the Spring ecosystem with easy-to-understand applications designed to teach you not only the technology, but also the practices that benefit the most from Spring. What You Will Learn Discover the most common use cases encountered in the real world Create reliable, tested, modular software, building skills that will translate well across all languages and environments. Integrate and use data access and persistence frameworks such as Hibernate, JPA, and MongoDB Program functional or reactive Java with the latest Spring 5 features including WebFlux Who This Book Is For Those who are new to Spring or for those who have experience with Spring but want to learn what's new in Spring 5. This book assumes you have some prior coding experience in Java at least.*

*Spring is the de facto framework for Java SE development and it has been widely used for building web and enterprise grade applications. Last year, Pivotal provided complete support for Kotlin as a language that Spring can compile to, making it an even stronger framework in terms of android development. To make things simpler, Pivotal has*

*Let us full stack development with Spring Boot and React JS. Key features This book has a very specific goal to make developing REST applications easier and focusing on common challenges of the design of the application with best practices. This book is providing practical code examples from real-world experiences. This book is not only about Spring Boot 2.2 and React JS overview but also has an in-depth discussion about adopted REST Architectural pattern and its constraints to create the REST APIs. The book can act as a tool for learning Spring Boot 2.2 and React JS for the first time as well as a guide and reference for those wanting to dig deeper into specific features. This book is also providing deeper information about the Spring Security and JWT token-based authentication for your REST applications. This does not only provide information about to design an application using Spring Boot and React JS but also providing how to deploy your application to the cloud platform (Paas). Containerization using Docker is another key feature of this book, how to create a Docker image and how to run it. Description Designing Application with Spring Boot 2 & React JS is divided into three parts. The first part introduces you to the essentials of the Spring Boot 2.2 Framework and you will learn how to create REST APIs and how to secure REST APIs. Part 2 steps behind the front end application development with React JS and discuss React features and its advantages toward the front end application development. Part 3 expands on that by showing how to deploy backend and frontend application the Paas platform and also will discuss how to deploy application container technologies such as Docker. What will you learn Exploring Spring Boot 2.2 new features and essential key components such as Starters, Autoconfiguration, CLI, Actuator. Develop a REST application using Spring Boot 2.2 and DevTools. Exploring Spring Boot Auto Configuration and Customization. Creating application profiles based on the environments. Learn to configure backend data using JDBC and Spring Data JPA. Learn to configure a DataSource for H2 DB, and also for Maria DB. Learn best practices for designing a REST architecture based application. Creating a REST application using HATEOAS. Consuming REST APIs endpoints with RestTemplate, Traverson, and WebClient using JWT token for the RESTful APIs and explores how to secure REST APIs using OAuth2 and Spring security. Creating TESTING module of the Spring Boot application and Unit & Integration testing. Discuss React JS and its components and also discuss React JS features and its advantages and disadvantage. Exploring how to create ReactJS components and how to manage ReactJS component lifecycle. Taking a quick overview of consuming the REST API using the React application. Deploying the application to the Cloud platform (Paas). Containerization and Deploy using Docker containers Who this book is for Designing Application with Spring Boot 2.2 & React JS is for all Java developers who want to learn Spring Boot 2.2 and React JS as in the enterprise application. Therefore, enterprise Java developers will find it particularly useful in the understanding of Spring Boot 2.2 and React JS and how to develop a backend RESTful application using the Spring Boot 2.2 and frontend application using React JS framework. They will most fully appreciate the examples presented in this book. Before reading this book, readers should have basic knowledge of core java, spring, servlet, filter, XML, and JavaScript. Table of contents1. Getting Started with Spring Boot 2.2 2. Customizing Auto-Configuration 3. Configuring Data and CRUD operations 4. Creating REST APIs with Spring Boot 2.2 5. Springing REST APIs 6. Testing Spring Boot Application 7. Getting Started with React8. Creating and Styling React Components9. Consuming the REST API with React JS10. Deploying and Containerizing Application about the authorDinesh Rajput is a founder of <https://www.dineshonjava.com>, a blog for Spring and Java techies. He is a Spring enthusiast and a Pivotal Certified Spring Professional. He has written many software design & development books, some of the bestselling books on Amazon. Dinesh's title Spring 5 Design Patterns and Mastering Spring Boot 2.0 are the Amazon #1 best-selling books on Java. He has more than 10 years of experience with various aspects of Spring and cloud-native development, such as REST APIs and microservice architecture. He is currently working as an architect at a leading company. He has worked as a tech lead at Bennett, Coleman & Co. Ltd, and Paytm. He has a master's degree in computer engineering from JSS Academy of Technical Education, Noida, and Lives in Noida with his family. His Website: <https://www.dineshonjava.com> His Blog: <https://www.dineshonjava.com> & <https://www.dineshrajput.com> His LinkedIn Profile: <https://www.linkedin.com/in/rajpud/dinesh/> Who This Book Is For Java developers who build web projects and applications. The book assumes basic familiarity with Java, XML and the Spring Framework. Newcomers to Spring Security will still be able to utilize all aspects of this book.*

**A Study Guide**

**Spring Security**

**Pivotal Certified Spring Web Application Developer Exam**

**Spring: Developing Java Applications for the Enterprise**

**Pro Spring 3**

**Securing Spring Framework 5 and Boot 2-based Java Applications**

The agile, lightweight, open-source Spring Framework continues to be the de facto leading enterprise Java application development framework for today's Java programmers and developers. It works with other leading open-source, agile and lightweight Java technologies like Hibernate, Groovy, MyBatis, and more. Spring now also works with Java EE and JPA 2 as well. Pro Spring 3 updates the bestselling Pro Spring with the latest in the Spring version 3.1. At 1000 pages, this is by far the most comprehensive Spring book available, thoroughly exploring the power of Spring. With Pro Spring 3, you'll learn Spring basics and core topics, and gain access to the authors' insights and real-world experiences with removing, Hibernate, and EJB. Beyond the basics, you'll learn how to leverage the Spring Framework to build various tiers or parts of an enterprise Java application like transactions, the web and 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. After reading this definitive book, you'll be armed with the power of Spring to build complex Spring applications, top to bottom. This ebook discusses 100 plus real problems and their solutions for microservices architecture based on Spring Boot, Spring Cloud, Cloud Native Applications. It covers core concepts of microservices architecture, various design patterns, interview questions & answers, security in microservices, testing strategies and best practices in distributed system design. Table of Contents: 1. Core concepts related Spring powered microservices architecture 2. Introduction to Spring Boot, Spring Cloud, Cloud Native Applications, Netflix OSS 3. Design Patterns in microservices architecture - API Gateway, Hystrix, etc. 4. 100 plus Interview Questions 5. Security - OAuth2 and JWT 6. Testing Strategies in microservices architecture 7. Best Practices and common pitfalls

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 prevent and learn from security threats, ranging from injection attacks to insider 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 Laurentia Spiccia 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 for reactive apps 20 Spring Security for reactive apps 20 Spring Security for reactive apps

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.

Pivotal Certified Professional Core Spring 5 Developer Exam

Secure your web applications, RESTful services, and microservice architectures

Spring Boot in Action

Spring Recipes

Techniques for scaling and optimizing Spring and Spring Boot applications

Learn effective ways to secure your applications with Spring and Spring WebFlux

With over 75 million downloads per month, Spring Boot is the most widely used Java framework available. Its ease and power have revolutionized application development from monoliths to microservices. Yet Spring Boot's simplicity can also be confounding. How do developers learn enough to be productive immediately? This practical book shows you how to use this framework to write successful mission-critical applications.

Mark Heckler from VMware, the company behind Spring, guides you through Spring Boot's architecture and approach, covering topics such as debugging, testing, and deployment. If you want to develop cloud native Java or Kotlin applications with Spring Boot rapidly and effectively—using reactive programming, building APIs, and creating database access to all kinds—this book is for you. Learn how Spring Boot simplifies cloud native application development and deployment Build reactive applications and extend communication across the network boundary to create distributed systems Understand how Spring Boot's architecture and approach increase developer productivity and application portability Deploy Spring Boot applications for production workloads rapidly and reliably Monitor application and system health for optimal performance and reliability

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

Spring is 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 bootstrap your 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 Books 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 Bootstrapping 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 developer tools Spring Boot starters Configuration properties Spring Boot dependencies

Spring Recipes: A Problem-Solution Approach. Third Edition builds upon the best-selling success of the previous editions and focuses on the latest Spring Framework features for building enterprise Java applications. This book provides code recipes for the following, found in the latest Spring: Spring fundamentals: Spring IoC container, Spring AOP/AspectJ, and more. Spring enterprise: Spring Java EE integration, Spring IoC container, Spring Batch, messaging, web, and cloud using Hadoop and MongoDB. Spring web: Spring MVC, other dynamic scripting, integration with the popular Grails Framework (and Groovy), REST/web services, and more. This book guides you step-by-step through topics using complete and real-world code examples. When you start a new project, you can consider copying the code and configuration files from this book, and then modifying them for your needs. This can save you a great deal of work over creating a project from scratch.

Pro Spring Security

A Problem-Solution Approach

Spring Cookbook

Reactive Edition

Hands-On Spring Security 5 for Reactive Applications

Spring MVC Cookbook

**Learn how to secure your Java applications from hackers using Spring Security 4.2 About This Book Architect solutions that leverage the full power of Spring Security while remaining loosely coupled. Implement various scenarios such as supporting existing user stores, user sign up, authentication, and supporting AJAX requests. Integrate with popular Microservice and Cloud services such as Zookeeper, Eureka, and Consul, along with advanced techniques, including OAuth, JSON Web Token's (JWTs), Hashing, and encryption algorithms Who This Book Is For This book is intended for Java Web and/or RESTful web service developers and assumes a basic understanding of creating Java 8, Java Web and/or RESTful web service applications, XML, and the Spring Framework. You are not expected to have any previous experience with Spring Security. What You Will Learn Understand common security vulnerabilities and how to resolve them Learn to perform initial penetration testing to uncover common security vulnerabilities Implement authentication and authorization Learn to utilize existing corporate infrastructure such as LDAP, Active Directory, Kerberos, CAS, OpenID, and OAuth Integrate with popular frameworks such as Spring, Spring-Boot, Spring-Data, JSF, Vaadin, JQuery, and AngularJS. Gain deep understanding of the security challenges with RESTful web services and microservice architectures Integrate Spring with other security infrastructure components like LDAP, Apache Directory server and SAML In Detail Knowing that experienced hackers are itching to test your skills makes security one of the most difficult and high-pressure concerns of creating an application. The complexity of properly securing an application is compounded when you must also integrate this factor with existing code, new technologies, and other frameworks. Use this book to easily secure your Java application with the tried and trusted Spring Security framework, a powerful and highly customizable authentication and access-control framework. The book starts by integrating a variety of authentication mechanisms. It then demonstrates how to properly restrict access to your application. Learn Spring tips on integrating with some of the most popular web frameworks. An example of how Spring Security defends against session fixation, moves into concurrency control, and how you can utilize session management for administrative functions is also included. It concludes with advanced security scenarios for RESTful web services and microservices, detailing the issues surrounding stateless authentication, and demonstrates a concise, step-by-step approach to solving those issues. And, by the end of the book, readers can rest assured that integrating version 4.2 of Spring Security will be a seamless endeavor from start to finish. Style and approach This practical step-by-step tutorial has plenty of example code coupled with the necessary screenshots and clear narration so that grasping content is made easier and quicker.**

**Secure your Java applications by integrating the Spring Security framework in your code Key Features Provide authentication, authorization and other security features for Java applications. Learn how to secure microservices, cloud, and serverless applications easily Understand the code behind the implementation of various security features Book Description Security is one of the most vital concerns for any organization. The complexity of an application is compounded when you need to integrate security with existing code, new technology, and other frameworks. This book will show you how to effectively write Java code that is robust and easy to maintain. Hands-On Spring Security 5 for Reactive Applications starts with the essential concepts of reactive programming, Spring Framework, and Spring Security. You will then learn about a variety of authentication mechanisms and how to integrate them easily with the Spring MVC application. You will also understand how to achieve authorization in a Spring WebFlux application using Spring Security. You will be able to explore the security configurations required to achieve OAuth2 for securing REST APIs and integrate security in microservices and serverless applications. This book will guide you in integrating add-ons that will add value to any Spring Security module. By the end of the book, you will be proficient at integrating Spring Security in your Java applications What you will learn Understand how Spring Framework and Reactive application programming are connected Implement easy security configurations with Spring Security expressions Discover the relationship between OAuth2 and OpenID Connect Secure microservices and serverless applications with Spring Integrate add-ons, such as HDIV, Crypto Module, and CORS support Apply Spring Security 5 features to enhance your Java reactive applications Who this book is for If you are a Java developer who wants to improve application security, then this book is for you. A basic understanding of Spring, Spring Security framework, and reactive applications is required to make the most of the book.**

**Discover the latest features of Spring framework by being 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 and scalable microservice based application using Spring Cloud Book Description Spring makes it easy to create RESTful applications, merge with social services, communicate with modern data stores, 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.**

**Get up to speed quickly with this comprehensive guide to Spring Beginning Spring is the complete beginner's guide to Java's most popular framework. Written with an eye toward real-world enterprises, the book covers all aspects of application development within the Spring Framework. Extensive samples within each chapter allow developers to get up to speed quickly by providing concrete references for experimentation, building skillset that drives successful application development by exploiting the full capabilities of Java's latest advances. Spring provides the exact toolset required to build an enterprise application, and has become the standard within the field. This book covers Spring 4.0, which contains support for Java8 and Java EE 7. Readers begin with the basics of the framework, then go on to master the most commonly used tools and fundamental concepts inherent in any Spring project. The book emphasizes practicality and real-world application by addressing needs such as meeting customer demand and boosting productivity, and by providing actionable information that helps developers get the most out of their frameworks. Topics include: Dependency Injection and Inversion of Control, Unit testing, Spring enabled Web Applications, Data Access using Spring JDBC and ORM support along with Transaction Management Building Web Applications and RESTful Web Services with Spring/MVC Securing Web Applications using Spring Security Spring Expression Language with Its Extended Features Aspect Oriented Programming Facilities Provided by Spring/AOP Caching with 3rd Party Cache Providers' Support The Best of the Breed: Spring 4.0 The information is organized and structured an ideal way for students and corporate training programs, and explanations outline workings of the framework.**

**Spring Security - 3rd Edition**

**Build seven web development projects with Spring MVC, Angular 6, JHipster, WebFlux, and Spring Boot 2**

**Pro Spring 2.5**

**An In-Depth Guide to the Spring Framework and Its Tools**

**Pro Spring 5**

**Spring 5.0 Projects**

Chapter 1 of this book is now available on [bit.ly/2Z8EiGq](https://bit.ly/2Z8EiGq) 4th Edition reflects changes to Spring 5, and it divides new chapters on Functional and Reactive application development, Reactive application development chapters cover Reactive Streams specification, RxJava 2, Reactor, Spring WebFlux, and reactive support in Spring Data and Spring Security. The examples (consisting of 88 sample projects) that accompany this book are based on Spring 5.0.1 and Java 9. You can download the examples described in this book from the following GitHub project: [github.com/getting-started-with-spring/4thEdition](https://github.com/getting-started-with-spring/4thEdition) This book covers: - Spring framework basics - Aspect-oriented programming - Database interaction using Spring and Hibernate/JPA - Spring Data, JPA - Spring Data MongoDB - Messaging, emailing and caching support - Spring Web MVC -

Developing RESTful web services using Spring Web MVC - Functional programming using lambdas and method references - Stream API - Reactive programming using RxJava 2 and Reactor - Spring WebFlux - Reactive support in Spring Data MongoDB and Spring Security - Developing reactive RESTful web services using Spring WebFlux, Spring Security and Spring Data MongoDB

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.

Over 100 hands-on recipes to build web applications easily and efficiently IN Spring 5.0 About This Book Solve real-world problems using the latest features of the Spring framework like Reactive Streams and the Functional Web Framework. Learn how to use dependency injection and aspect-oriented programming to write compartmentalized and testable code. Understand when to choose between Spring MVC and Spring Web Reactive for your projects Who This Book Is For Java developers who would like to gain in-depth knowledge of how to overcome problems that they face while developing great Spring applications. It will also cater to Spring enthusiasts, users and experts who need an arena for comparative analysis, new ideas and inquiries on some details regarding Spring 5.0 and its previous releases. A basic knowledge of Spring development is essential What You Will Learn Understand how functional programming and concurrency in JDK 1.9 works, and how it will affect Spring 5.0 Learn the importance and application of reactive programming in creating services, and also the process of creating asynchronous MVC applications Implement different Spring Data modules Integrate Spring Security to the container Create applications and deploy using Spring Boot

Conceptualize the architecture behind Microservices and learn the details of its implementation Create different test cases for the components of Spring 5.0 components In Detail The Spring framework has been the go-to framework for Java developers for quite some time. It enhances modularity, provides more readable code, and enables the developer to focus on developing the application while the underlying framework takes care of transaction APIs, remote APIs, JMX APIs, and JMS APIs. The upcoming version of the Spring Framework has a lot to offer, above and beyond the platform upgrade to Java 9, and this book will show you all you need to know to overcome common to advanced problems you might face. Each recipe will showcase some old and new issues and solutions, right from configuring Spring 5.0 container to testing its components. Most importantly, the book will highlight concurrent processes, asynchronous MVC and reactive programming using Reactor Core APIs. Aside from the core components, this book will also include integration of third-party technologies that are mostly needed in building enterprise applications. By the end of the book, the reader will not only be well versed with the essential concepts of Spring, but will also have mastered its latest features in a solution-oriented manner. Style and Approach This book follows a cookbook style approach, presenting a problem and showing you how to overcome it with useful recipes. The examples provided will help you code along as you learn.

Summary Spring in Action, 5th Edition is the fully updated revision of Manning's bestselling Spring in Action. This new edition includes all Spring 5.0 updates, along with new examples on reactive programming, Spring WebFlux, and microservices. You'll also find the latest Spring best practices, including Spring Boot for application setup and configuration. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Spring Framework makes life easier for Java developers. New features in Spring 5 bring its productivity-focused approach to microservices, reactive development, and other modern application designs. With Spring Boot now fully integrated, you can start even complex projects with minimal configuration code. And the upgraded WebFlux framework supports reactive apps right out of the box. About the Book Spring in Action, 5th Edition guides you through Spring's core features, explained in Craig Walls' famously clear style. You'll roll up your sleeves and build a secure database-backed web app step by step. Along the way, you'll explore reactive programming, microservices, service discovery, RESTful APIs, deployment, and expert best practices. Whether you're just discovering Spring or leveling up to Spring 5.0, this Manning classic is your ticket! What's inside Building reactive applications Spring MVC for web apps and RESTful web services Securing applications with Spring Security Covers Spring 5.0 Over 100,000 copies sold! About the Reader For intermediate Java developers. About the Author Craig Walls is a principal software engineer at Pivotal, a popular author, an enthusiastic supporter of Spring Framework, and a frequent conference speaker. Table of Contents PART 1 - FOUNDATIONAL SPRING Getting started with Spring Developing web applications Working with data Securing Spring Working with configuration properties PART 2 - INTEGRATED SPRING Creating REST services Consuming REST services Sending messages asynchronously Integrating Spring PART 3 - REACTIVE SPRING Introducing Reactor Developing reactive APIs Persisting data reactively PART 4 CLOUD-NATIVE SPRING Discovering services Managing configuration Handling failure and latency PART 5 - DEPLOYED SPRING Working with Spring Boot Actuator Administering Spring Monitoring Spring with JMX Deploying Spring

Spring Security in Action  
Spring 5.0 Cookbook  
Spring REST  
Learn Spring for Android Application Development  
Beginning Spring  
Hands-On High Performance with Spring 5  
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.

Security is a key element in the development of any non-trivial application. The Spring Security Framework provides a comprehensive set of functionalities to implement industry-standard authentication and authorization mechanisms for Java applications. Pro Spring Security will be a reference and advanced tutorial that will do the following: Guides you through the implementation of the security features for a Java web application by presenting consistent examples built from the ground-up. Demonstrates the different authentication and authorization methods to secure enterprise-level applications by using the Spring Security Framework. Provides you with a broader look into Spring security by including up-to-date use cases such as building a security layer for RESTful web services and Grails applications. Pass the Pivotal Certified Professional exam for Core Spring, based on the latest Spring Framework 5, using source code examples, study summaries, and mock exams. This book now includes WebFlux, reactive programming, and more found in Spring 5. You'll find a descriptive overview of certification-related Spring modules and a single example application demonstrating the use of all required Spring modules. Furthermore, in Pivotal Certified Professional Core Spring 5 Developer Exam, Second Edition, each chapter contains a brief study summary and question set, and the book's free downloadable source code package includes one mock exam (50 questions – like a real exam). After using this study guide, you will be ready to take and pass the Pivotal Certified Professional exam. When you become Pivotal Certified, you will have one of the most valuable credentials in Java. Pivotal certification helps you advance your skills and your career, and get the maximum benefit from Spring. Passing the exam demonstrates your understanding of Spring and validates your familiarity with: container-basics, aspect oriented programming (AOP), data access and transactions, Spring Security, Spring Boot, microservices, and Spring model-view-controller (MVC). Good luck! What You Will Learn Understand the core principles of Spring Framework 5 Use dependency injection Work with aspects in Spring and do AOP (aspect oriented programming) Control transactional behavior and work with SQL and NoSQL databases Create and secure web applications based on Spring MVC Get to know the format of the exam and the type of questions in it Create Spring microservices applications Who This Book Is For Spring developers who have taken the Pivotal Core Spring class are eligible to take the Pivotal Certified Professional exam.

Pass the Pivotal Certified Professional exam using source code examples, study summaries, and mock exams. In this book, you'll find a descriptive overview of certification-related Spring modules and a single example application demonstrating the use of all required Spring modules. Also, it is suitable as an introductory primer for Spring newcomers. Furthermore, in Pivotal Certified Professional Spring Developer Exam: A Study Guide each chapter contains a brief study summary and question set, and the book's free downloadable source code package includes one mock exam (50 questions – like a real exam). After using this study guide, you will be ready to take and pass the Pivotal Certified Professional exam. When you become Pivotal Certified, you will have one of the most valuable credentials in Java. The demand for Spring skills is skyrocketing. Pivotal certification helps you advance your skills and your career, and get the maximum benefit from Spring. Passing the exam demonstrates your understanding of Spring and validates your familiarity with: container-basics, aspect oriented programming (AOP), data access and transactions, Spring Security, Spring Boot, microservices and the Spring model-view-controller (MVC). Good luck! What You'll Learn Understand the core principles of the popular Spring Framework Use dependency injection Work with aspects in Spring and do AOP (aspect oriented programming) Control transactional behavior and work with SQL and NoSQL (MongoDB) databases Create and secure web applications based on Spring MVC Get to know the format of exam and type of questions in it Create Spring microservices applications Who This Book Is For Spring developers who have taken the Pivotal Core Spring class are eligible to take the Pivotal Certified Professional exam.

Spring Security 3  
Spring Boot 2 Recipes  
Build robust Android applications with Kotlin 1.3 and Spring 5  
Beginning Spring 5  
Spring 5 Recipes  
Pro Spring 2 is the perfect, simple answer for your lightweight, alternative Java EE development needs! Put simply, this book brings J2EE/Java EE "down to earth." Without the hassles of using the EJB 3 specification and similar, you can build lighter, better-performing agile enterprise Java-based applications using Spring Framework 2. The Spring framework can also integrate other noteworthy and hot open source tools like Apache Struts, Hibernate, OpenJPA, GlassFish, and many more. You'll work through a real, scalable enterprise application and build it from the ground up with Spring, using all the multiple web views and frameworks.

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

Learn how to secure your Java applications from hackers using Spring Security 4.2 About This Book\* Architect solutions that leverage the full power of Spring Security while remaining loosely coupled.\* Implement various scenarios such as supporting existing user stores, user sign up, authentication, and supporting AJAX requests.\* Integrate with popular Microservice and Cloud services such as Zookeeper, Eureka, and Consul, along with advanced techniques, including OAuth, JSON Web Token's (JWT), Hashing, and encryption algorithms Who This Book Is For This book is intended for Java Web and/or RESTful webservice developers and assumes a basic understanding of creating Java 8, Java Web and/or RESTful webservice applications, XML, and the Spring Framework. You are not expected to have any previous experience with Spring Security. What You Will Learn\* Understand common security vulnerabilities and how to resolve them\* Learn to perform initial penetration testing to uncover common security vulnerabilities\* Implement authentication and authorization\* Learn to utilize existing corporate infrastructure such as LDAP, Active Directory, Kerberos, CAS, OpenID, and OAuth\* Integrate with popular frameworks such as Spring, Spring-Boot, Spring-Data, JSP, Vaadin, jQuery, and AngularJS.\* Gain deep understanding of the security challenges with RESTful webservices and microservice architectures\* Integrate Spring with other security infrastructure components like LDAP, Apache Directory server and SAML In Detail Knowing that experienced hackers are itching to test your skills makes security one of the most difficult and high-pressured concerns of creating an application. The complexity of properly securing an application is compounded when you must also integrate this factor with existing code, new technologies, and other frameworks. Use this book to easily secure your Java application with the tried and tested Spring Security framework, a powerful and highly customizable authentication and access-control framework. The book starts by integrating a variety of authentication mechanisms. It then demonstrates how to properly restrict access to your application. It also covers tips on integrating with some of the more popular web frameworks. An example of how Spring Security defends against session fixation, moves into concurrency control, and how you can utilize session management for administrative functions is also included. It concludes with advanced security scenarios for RESTful webservices and microservices, detailing the issues surrounding stateless authentication, and demonstrates a concise, step-by-step approach to solving those issues. And, by the end of the book, readers can rest assured that integrating version 4.2 of Spring Security will be a seamless endeavor from start to finish. Style and approach This practical step-by-step tutorial has plenty of example code coupled with the necessary screenshots and clear narration so that grasping content is made easier and quicker.