Spring Security Third Edition: Secure Your Web Applications, RESTful Services, And Microservice Architectures

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 a 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.

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/ AspectJ, and more. Other recipes include Spring enterprise solutions for topics such as Spring Java EE integration, Spring Integration, Spring Batch, Spring Remoting, messaging, transactions, and working with big data and the cloud using Hadoop and MongoDB. Finally, Spring web recipes cover Spring MVC, other dynamic scripting, integration with the popular Grails Framework (and Groovy),

REST/web services, and more. You'll also see recipes on new topics such as Spring Framework 5, reactive Spring, Spring 5 microservices, the functional web framework and much more. This book builds upon the best-selling success of the previous editions and focuses on the latest Spring Framework features for building enterprise Java applications. What You'll Learn Get re-usable code recipes and snippets for core Spring, annotations and other development tools Access Spring MVC for web development Work with Spring REST and microservices for web services development and integration into your enterprise Java applications Use Spring Batch, NoSQL and big data for building and integrating various cloud computing services and resources Integrate Java Enterprise Edition and other Java APIs for use in Spring Use Grails code and much more Who This Book Is For Experienced Java and Spring programmers.

Spring Security in Action shows you how to prevent cross-site scripting and request forgery attacks before they do damage. You'll start with the basics, simulating password upgrades and adding multiple types of authorization. As your skills grow, you'll adapt Spring Security to new architectures and create advanced OAuth2 configurations. By the time you're done, you'll have a customized Spring Security configuration that protects against threats both common and extraordinary. Summary While creating secure applications is critically important, it can also be tedious and time-consuming to stitch together the required collection of tools. For Java developers, the powerful Spring Security framework makes it easy for you to bake security into your software from the very beginning. Filled with code samples and practical examples, Spring Security in Action teaches you how to secure your apps from the most common threats, ranging from injection attacks to lackluster monitoring. In it, you'll learn how to manage system users, configure secure endpoints, and use OAuth2 and OpenID Connect for authentication and authorization. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Security is non-negotiable. You rely on Spring applications to transmit data, verify credentials, and prevent attacks. Adopting "secure by design" principles will protect your network from data theft and unauthorized intrusions. About the book Spring Security in Action shows you how to prevent cross-site

scripting and request forgery attacks before they do damage. You'll start with the basics, simulating password upgrades and adding multiple types of authorization. As your skills grow, you'll adapt Spring Security to new architectures and create advanced OAuth2 configurations. By the time you're done, you'll have a customized Spring Security configuration that protects against threats both common and extraordinary. What's inside Encoding passwords and authenticating users Securing endpoints Automating security testing Setting up a standalone authorization server About the reader For experienced Java and Spring developers. About the author Laurentiu Spilca is a dedicated development lead and trainer at Endava, with over ten years of Java experience. Table of Contents PART 1 - FIRST STEPS 1 Security Today 2 Hello Spring Security PART 2 - IMPLEMENTATION 3 Managing users 4 Dealing with passwords 5 Implementing authentication 6 Hands-on: A small secured web application 7 Configuring authorization: Restricting access 8 Configuring authorization: Applying restrictions 9 Implementing filters 10 Applying CSRF protection and CORS 11 Hands-on: A separation of responsibilities 12 How does OAuth 2 work? 13 OAuth 2: Implementing the authorization server 14 OAuth 2: Implementing the resource server 15 OAuth 2: Using JWT and cryptographic signatures 16 Global method security: Pre- and postauthorizations 17 Global method security: Pre- and postfiltering 18 Hands-on: An OAuth 2 application 19 Spring Security for reactive apps 20 Spring Security testing 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.

All the Light We Cannot See
Spring Boot in Action
Spring Security 3.1
Pivotal Certified Spring Web Application Developer Exam
Hands-On Spring Security 5 for Reactive Applications
Designing, Building, and Deploying Messaging Solutions

Spring Security - Third Edition

This book follows a cookbook style exploring various security solutions provided by Spring Security for various vulnerabilities and threat scenarios that web applications may be exposed to at the authentication and session level layers.This book is for all Spring-based application developers as well as Java web developers who wish to implement robust security mechanisms into web application development using Spring Security.Readers are assumed to have a working knowledge of Java web application development, a basic understanding of the Spring framework, and some knowledge of the fundamentals of the Spring Security framework architecture. Working knowledge of other web frameworks such as Grails and so on would be an added advantage to exploit the whole breadth of recipes provided in this book, but this is not mandatory.

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

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.
The JHipster Mini-Book
Microservices Security in Action
Enterprise Integration Patterns
Spring REST
Spring Start Here
A Novel

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 Work 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 ForExperienced Spring and Java developers with prior experience in building Spring Framework or Boot-based applications.

The latest version of a bestseller upgraded for Spring 5.3 and Spring Boot 2.4, Spring in Action, Sixth Edition also covers the RSocket specification for reactive networking between applications and delves deep into essential features of Spring Security. Spring in Action, Sixth 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. The latest version of a bestseller upgraded for Spring 5.3 and Spring Boot 2.4, Spring in Action, Sixth Edition also covers the RSocket specification for reactive networking between applications and delves deep into essential features of Spring Security. Whether you're just discovering Spring or leveling up to Spring 5.3, this Manning classic is your ticket! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

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.

Efficiently integrate OAuth 2.0 to protect your mobile, desktop, Cloud applications and APIs using Spring Security technologies. About This Book Interact with public OAuth 2.0 protected

APIs such as Facebook, LinkedIn and Google. Use Spring Security and Spring Security OAuth2 to implement your own OAuth 2.0 provider Learn how to implement OAuth 2.0 native mobile clients for Android applications Who This Book Is For This book targets software engineers and security experts who are looking to develop their skills in API security and OAuth 2.0. Prior programming knowledge and a basic understanding of developing web applications are necessary. As this book's recipes mostly use Spring Security and Spring Security OAuth2, some prior experience with Spring Framework will be helpful. What You Will Learn Use Redis and relational databases to store issued access tokens and refresh tokens Access resources protected by the OAuth2 Provider using Spring Security Implement a web application that dynamically registers itself to the Authorization Server Improve the safety of your mobile client using dynamic client registration Protect your Android client with Proof Key for Code Exchange Protect the Authorization Server from COMPUTERS / Cloud Computing redirection In Detail OAuth 2.0 is a standard protocol for authorization and focuses on client development simplicity while providing specific authorization flows for web applications, desktop applications, mobile phones, and so on. This book also provides useful recipes for solving real-life problems using Spring Security and creating Android applications. The book starts by presenting you how to interact with some public OAuth 2.0 protected APIs such as Facebook, LinkedIn and Google. You will also be able to implement your own OAuth 2.0 provider with Spring Security OAuth2. Next, the book will cover practical scenarios regarding some important OAuth 2.0 profiles such as Dynamic Client Registration, Token Introspection and how to revoke issued access tokens. You will then be introduced to the usage of JWT, OpenID Connect, and how to safely implement native mobile OAuth 2.0 Clients. By the end of this book, you will be able to ensure that both the server and client are protected against common vulnerabilities. Style and approach With the help of real-world examples, this book provides step by step recipes for troubleshooting and extending your API security. The book also helps you with accessing and securing data on mobile, desktop, and cloud apps with OAuth 2.0.

Spring Recipes
Spring in Action
Spring Microservices in Action
Secure your web applications, RESTful services, and microservice architectures
Pivotal Certified Professional Core Spring 5 Developer Exam

SPRING IN ACTION:COVERS SPRING 3.0, 3RD EDITION

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 of 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 Debug, test, and secure cloud-based applications painlessly

Would you like to use a consistent visual notation for drawing integration solutions? "Look inside the front cover." Do you want to harness the power of asynchronous systems without getting caught in the pitfalls? "See "Thinking Asynchronously" in the Introduction." Do you want to know which style of application integration is best for your purposes? "See Chapter 2, Integration Styles." Do you want to learn techniques for processing messages concurrently? "See Chapter 10, Competing Consumers and Message Dispatcher." Do you want to learn how you can track asynchronous messages as they flow across distributed systems? "See Chapter 11, Message History and Message Store." Do you want to understand how a system designed using integration patterns can be implemented using Java Web services, .NET message queuing, and a TIBCO-based publish-subscribe architecture? "See Chapter 9, Interlude: Composed Messaging." Utilizing years of practical experience, seasoned experts Gregor Hohpe and Bobby Woolf show how asynchronous messaging has proven to be the best strategy for enterprise integration success. However, building and deploying messaging solutions presents a number of problems for developers. " Enterprise Integration Patterns " provides an invaluable catalog of sixty-five patterns, with real-world solutions that demonstrate the formidable of messaging and help you to design effective messaging solutions for your enterprise. The authors also include examples covering a variety of different integration technologies, such as JMS, MSMQ, TIBCO ActiveEnterprise, Microsoft BizTalk, SOAP, and XSL. A case study describing a bond trading system illustrates the patterns in practice, and the book offers a look at emerging standards, as well as insights into what the future of enterprise integration might hold. This book provides a consistent vocabulary and visual notation framework to describe large-scale integration solutions across many technologies. It also explores in detail the advantages and limitations of asynchronous messaging architectures. The authors present practical advice on designing code that connects an application to a messaging system, and provide extensive information to help you determine when to send a message, how to route it to the proper destination, and how to monitor the health of a messaging system. If you want to know how to manage, monitor, and maintain a messaging system once it is in use, get this book. 0321200683B09122003

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 (JWS), 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, JSF, Vaaden, 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 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. 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.

The things you need to do to set up a new software project can be daunting. First, you have to select the back-end framework to create your API, choose your database, set up security, and choose your build tool. Then you have to choose the tools to create your front end: select a UI framework, configure a build tool, set up Sass processing, configure your browser to auto-refresh when you make changes, and configure the client and server so they work in unison. If you're building a new application using Spring Boot and Angular, you can save days by using JHipster. JHipster generates a complete and modern web app, unifying: - A high-performance and robust Java stack on the server side with Spring Boot - A sleek, modern, mobile-first front-end with Angular and Bootstrap - A robust microservice architecture with the JHipster Registry, Netflix OSS, the ELK stack, and Docker - A powerful workflow to build your application with Yeoman, Webpack, and Maven/Gradle

Learn what You Need and Learn it Well

Pivotal Certified Professional Spring Developer Exam

Spring Boot: Up and Running

Beginning Spring 5

A Study Guide Using Spring Framework 5

OAuth 2.0 Cookbook

Build scalable microservices with Spring, Docker, and Mesos About This Book Learn how to efficiently build and implement microservices in Spring, and how to use Docker and Mesos to push the boundaries of

what you thought possible Examine a number of real-world use cases and hands-on code examples. Distribute your microservices in a completely new way Who This Book Is For If you are a Spring developers and want to build cloud-ready, internet-scale applications to meet modern business demands, then this book is for you Developers will understand how to build simple Restful services and organically grow them to truly enterprise grade microservices ecosystems. What You Will Learn Get to know the microservices development lifecycle process See how to implement microservices governance Familiarize yourself with the microservices architecture and its benefits Use Spring Boot to develop microservices Find out how to avoid common pitfalls when developing microservices Be introduced to end-to-end microservices written in Spring Framework and Spring Boot In Detail The Spring Framework is an application framework and inversion of the control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions to build web applications on top of the Java EE platform. This book will help you implement the microservice architecture in Spring Framework, Spring Boot, and Spring Cloud. Written to the latest specifications of Spring, you'll be able to build modern, Internet-scale Java applications in no time. We would start off with the guidelines to implement responsive microservices at scale. We will then deep dive into Spring Boot, Spring Cloud, Docker, Mesos, and Marathon. Next you will understand how Spring Boot is used to deploy autonomous services, server-less by removing the need to have a heavy-weight application server. Later you will learn how to go further by deploying your microservices to Docker and manage it with Mesos. By the end of the book, you'll will gain more clarity on how to implement microservices using Spring Framework and use them in Internet-scale deployments through real-world examples. Style and approach The book follows a step by step approach on how to develop microservices using Spring Framework, Spring Boot, and a set of Spring Cloud components that will help you scale your applications.
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 and authorization, and move on to the next exciting steps of your Spring journey. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.
You can choose several data access frameworks when building Java enterprise applications that work with

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

Learn how to secure your Java applications from hackers using Spring Security 4.2About 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 (JWS), Hashing, and encryption algorithmsWho This Book Is ForThis 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, JSF, Vaaden, 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 SAMLIn DetailKnowing 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 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. 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 approachThis 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.
Spring Security 3
Spring 5 Recipes
A Problem-Solution Approach
Build seven web development projects with Spring MVC, Angular 6, JHipster, WebFlux, and Spring Boot 2
Mastering Microservices with Java
Spring Data

An intensive hands-on guide to perform professional penetration testing for highly-secured environments from start will learn to provide penetration testing services to clients with mature security infrastructure. Understand how to stage of the penetration test by gaining hands-on experience in performing attacks that mimic those seen in the wi take the challenge and perform a virtual penetration test against a fictional corporation. If you are looking for guida detailed instructions on how to perform a penetration test from start to finish, are looking to build out your own pe testing lab, or are looking to improve on your existing penetration testing skills, this book is for you. Although the b to accommodate those that are still new to the penetration testing field, experienced testers should be able to gai hands-on experience as well. The book does assume that you have some experience in web application testing and a chapter regarding this subject may require you to understand the basic concepts of web security. The reader shoul familiar with basic IT concepts, and commonly used protocols such as TCP/IP.

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

Security is a key element in the development of any non-trivial application. The Spring Security Framework provides comprehensive set of functionalities to implement industry-standard authentication and authorization mechanisms f applications. Pro Spring Security will be a reference and advanced tutorial that will do the following: Guides you thro

implementation of the security features for a Java web application by presenting consistent examples built from the Demonstrates the different authentication and authorization methods to secure enterprise-level applications by usir Security Framework. Provides you with a broader look into Spring security by including up-to-date use cases such a security layer for RESTful web services and Grails applications.

Summary A developer-focused guide to writing applications using Spring Boot. You'll learn how to bypass the tediou configuration steps so that you can concentrate on your application's behavior. Purchase of the print book includes 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 streamline a Spring application. You get automatic configuration and a model with established conventions for build-time and ru dependencies. You also get a handy command-line interface you can use to write scripts in Groovy. Developers who Boot often say that they can't imagine going back to hand configuring their applications. About the Book Spring Boot a developer-focused guide to writing applications using Spring Boot. In it, you'll learn how to bypass configuration s can focus on your application's behavior. Spring expert Craig Walls uses interesting and practical examples to teach how to use the default settings effectively and how to override and customize Spring Boot for your unique environ way, you'll pick up insights from Craig's years of Spring development experience. What's Inside Develop Spring apps efficiently Minimal to no configuration Runtime metrics with the Actuator Covers Spring Boot 1.3 About the Reader readers familiar with the Spring Framework. About the Author Craig Walls is a software developer, author of the po Spring in Action, Fourth Edition, and a frequent speaker at conferences. Table of Contents Bootstarting Spring Devel first Spring Boot application Customizing configuration Testing with Spring Boot Getting Groovy with the Spring Boc Applying Grails in Spring Boot Taking a peek inside with the Actuator Deploying Spring Boot applications APPENDIXES Boot developer tools Spring Boot starters Configuration properties Spring Boot dependencies

Building Java Microservices and Cloud Applications
A Study Guide
Build enterprise microservices with Spring Boot 2.0, Spring Cloud, and Angular, 3rd Edition
Reactive Spring
Spring Boot 2.0 Projects
Spring Security - Third Edition

Microservices and big-data increasingly confront us with the limitations of traditional input/output. In traditional IO, work that is IO-bound dominates threads. This wouldn't be such a big deal if we could add more threads cheaply, but threads are expensive on the

JVM, and most other platforms. Even if threads were cheap and infinitely scalable, we'd still be confronted with the faulty nature of networks. Things break, and they often do so in subtle, but non-exceptional ways. Traditional approaches to integration bury the faulty nature of networks behind overly simplifying abstractions. We need something better.Join Spring Developer Advocate Josh Long for an introduction to reactive programming in the Spring ecosystem, leveraging the reactive streams specification, Reactor, Spring Boot, Spring Cloud and so much more.This book will cover important concepts in reactive programming including project Reactor and the reactive streams specification, data access, web programming, RPC with protocols like RSocket, testing, and integration and composition, and more.

Microservices are the next big thing in designing scalable, easy-to-maintain applications. This latest edition of Mastering Microservices with Java, works on Java 11. It covers a wide range of exciting, new developments in the world of microservices such as microservices patterns, interprocess communication with gRPC, and service orchestration.

Microservices Security in Action teaches you how to address microservices-specific security challenges throughout the system. This practical guide includes plentiful hands-on exercises using industry-leading open-source tools and examples using Java and Spring Boot. Summary Unlike traditional enterprise applications, Microservices applications are collections of independent components that function as a system. Securing the messages, queues, and API endpoints requires new approaches to security both in the infrastructure and the code. Microservices Security in Action teaches you how to address microservices-specific security challenges throughout the system. This practical guide includes plentiful hands-on exercises using industry-leading open-source tools and examples using Java and Spring Boot. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Integrating independent services into a single system presents special security challenges in a microservices deployment. With proper planning, however, you can build in security from the start. Learn to create secure services and protect application data throughout development and deployment. As microservices continue to change enterprise application systems, developers and architects must learn to integrate security into their design and implementation. Because microservices are created as a system of independent components, each a possible point of failure, they can multiply the security risk. With proper planning, design, and implementation, you can reap the benefits of microservices while keeping your application data—and your company's reputation—safe! About the book Microservices Security in Action is filled with solutions, teaching best practices for throttling and monitoring, access control, and microservice-to-microservice communications. Detailed code samples, exercises, and real-world use cases help you put what you've learned into production. Along the way, authors and software security experts Prabath Siriwardena and Nuwan Dias shine a light on important concepts like throttling, analytics gathering, access control at the API gateway, and microservice-to-microservice communication. You'll also discover how to securely deploy microservices using state-of-the-art technologies including Kubernetes, Docker, and the Istio service mesh. Lots of

hands-on exercises secure your learning as you go, and this straightforward guide wraps up with a security process review and best practices. When you're finished reading, you'll be planning, designing, and implementing microservices applications with the priceless confidence that comes with knowing they're secure! What's inside Microservice security concepts Edge services with an API gateway Deployments with Docker, Kubernetes, and Istio Security testing at the code level Communications with HTTP, gRPC, and Kafka About the reader For experienced microservices developers with intermediate Java skills. About the author Prabath Siriwardena is the vice president of security architecture at WSO2. Nuwan Dias is the director of API architecture at WSO2. They have designed secure systems for many Fortune 500 companies. Table of Contents PART 1 OVERVIEW 1 Microservices security landscape 2 First steps in securing microservices PART 2 EDGE SECURITY 3 Securing north/south traffic with an API gateway 4 Accessing a secured microservice via a single-page application 5 Engaging throttling, monitoring, and access control PART 3 SERVICE-TO-SERVICE COMMUNICATIONS 6 Securing east/west traffic with certificates 7 Securing east/west traffic with JWT 8 Securing east/west traffic over gRPC 9 Securing reactive microservices PART 4 SECURE DEPLOYMENT 10 Conquering container security with Docker 11 Securing microservices on Kubernetes 12 Securing microservices with Istio service mesh PART 5 SECURE DEVELOPMENT 13 Secure coding practices and automation

A cloth bag containing 20 paperback copies of the title that may also include a folder with sign out sheets.

Mastering Spring Boot 2.0

Protect your web applications using Spring Security

Spring 5.0 Projects

Pro Spring Security

Spring Security in Action

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

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

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 confgurations 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 confgurations 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.

Spring in Action introduces you to the ideas behind Spring and then quickly launches into a hands-on exploration of the framework. Combining short code snippets and an ongoing example developed throughout the book, it shows you how to build simple and efficient J2EE applications. You will see how to solve persistence problems using the leading open-source tools, and also how to integrate your application with the most popular web frameworks. You will learn how to use Spring to manage the bulk of your infrastructure code so you can focus on what really matters your critical business needs. Spring in Action has been completely updated to cover the exciting new features of Spring 2.0. The book begins by introducing you to the core concepts of Spring and then quickly launches into a hands-on exploration of the framework.Part 1 - Spring EssentialsPart 2 - Spring in the

Business LayerPart 3 - Spring in the Web Layer
The book starts by teaching the basic fundamentals of Spring Security 3 such as setup and configuration. Later it looks at more advanced topics showing the reader how to solve complex real world security issues. 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.
Spring in Action, Sixth Edition
Advanced Penetration Testing for Highly-Secured Environments
Spring In Action
Build robust Android applications with Kotlin 1.3 and Spring 5
The Ultimate Security Guide
From Novice to Professional

About The Book: Spring in Action, Third Edition continues the practical, hands-on style of the previous bestselling editions. Author Craig Walls has a special knack for crisp and entertaining examples that zoom in on the features and techniques you really need. This edition highlights the most important aspects of Spring 3.0 including REST, remote services, messaging, Security, MVC, Web Flow, and more. JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. Summary JUnit is the gold standard for unit testing Java applications. Filled with powerful new features designed to automate software testing, JUnit 5 boosts your productivity and helps avoid debugging nightmares. Whether you're just starting with JUnit or you want to ramp up on the new features, JUnit in Action, Third Edition has you covered. Extensively revised with new code and new chapters, JUnit in Action, Third Edition is an up-to-date guide to smooth software testing. Dozens of hands-on examples illustrate JUnit 5's innovations for dependency injection, nested testing, parameterized tests, and more. Throughout, you'll learn how to use JUnit 5 to automate your testing, for a process that consumes less resources, and gives you more time for developing. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology The JUnit framework is the gold standard for unit testing Java applications—and knowing it is an essential skill for Java developers. The latest version, JUnit 5, is a total overhaul, now supporting modern Java features like Lambdas and Streams. About the book JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. You'll benefit from author Catalin Tudose's unique "pyramid" testing strategy, which breaks the testing process into layers and sets you on the path to bug-free code creation. What's inside Migrating from JUnit 4 to 5 Effective test automation Test-driven development and behavior-driven development Using mocks for test isolation Connecting JUnit 5 with Maven or Gradle About the reader For intermediate Java developers. About the author Catalin Tudose has a Ph.D. in Computer Science, and over 15 years of experience as a Senior Java Developer and Technical Team Lead. Previous editions were authored by Petar Tahchiev, Felipe Leme, Gary Gregory, and Vincent Massol. Table of Contents PART 1 - JUNIT 1 JUnit jump-start 2 Exploring core JUnit 3 JUnit architecture 4 Migrating from JUnit 4 to JUnit 5 5 Software testing principles PART 2 - DIFFERENT TESTING STRATEGIES 6 Test quality 7 Coarse-grained testing with stubs 8 Testing with mock objects 9 In-container testing PART 3 - WORKING WITH JUNIT 5 AND OTHER TOOLS 10 Runing JUnit

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Summary Spring Microservices in Action teaches you how to build microservice-based applications using Java and the Spring platform. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Microservices break up your code into small, distributed, and independent services that require careful forethought and design. Fortunately, Spring Boot and Spring Cloud simplify your microservice applications, just as the Spring Framework simplifies enterprise Java development. Spring Boot removes the boilerplate code involved with writing a REST-based service. Spring Cloud provides a suite of tools for the discovery, routing, and deployment of microservices to the enterprise and the cloud. About the Book Spring Microservices in Action teaches you how to build microservice-based applications using Java and the Spring platform. You'll learn to do microservice design as you build and deploy your first Spring Cloud application. Throughout the book, carefully selected real-life examples expose microservice-based patterns for configuring, routing, scaling, and deploying your services. You'll see how Spring's intuitive tooling can help augment and refactor existing applications with micro services. What's Inside Core microservice design principles Managing configuration with Spring Cloud Config Client-side resiliency with Spring, Hystrix, and Ribbon Intelligent routing using Netflix Zuul Deploying Spring Cloud applications About the Reader This book is written for developers with Java and Spring experience. About the Author John Carnell is a senior cloud engineer with twenty years of experience in Java. Table of contents Welcome to the cloud, Spring Building microservices with Spring Boot Controlling your configuration with Spring Cloud configuration server On service discovery When bad things happen: client resiliency patterns with Spring Cloud and Netflix Hystrix Service routing with Spring Cloud and Zuul Securing your microservices Event-driven architecture with Spring Cloud Stream Distributed tracing with Spring Cloud Sleuth and Zipkin Deploying your microservices

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.

Spring Security

Securing Spring Framework 5 and Boot 2-based Java Applications

Build modern, cloud-native, and distributed systems using Spring Boot

Build production-grade reactive applications and microservices with Spring Boot

Spring Microservices

Spring Security 3.x Cookbook

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.

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.

Design and develop Java-based RESTful APIs using the latest versions of the Spring MVC and Spring Boot frameworks. This book walks you through the process of designing and building a REST application while delving into design principles and best practices for versioning, security, documentation, error handling, paging, and sorting. Spring REST 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. What You Will Learn Build Java-based microservices, native cloud, or any applications using Spring REST Employ Spring MVC and RESTful Spring Build a QuickPoll application example Document REST services, as well as versioning, paging, and sorting Test, handle errors and secure your application Who This Book Is For Intermediate Java programmers with at least some prior experience with Spring and web/cloud application development.

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 ForSpring developers who have taken the Pivotal Core Spring class are eligible to take the Pivotal Certified Professional exam.
Learn Spring for Android Application Development
JUnit in Action