

## Building RESTful Web Services With Go: Learn How To Build Powerful RESTful APIs With Golang That Scale Gracefully

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

A step-by-step guide that will help you design, develop, scale, and deploy RESTful APIs with TypeScript 3 and Node.js Key FeaturesGain in-depth knowledge of OpenAPI and Swagger to build scalable web servicesExplore a variety of test frameworks and test runners such as Stryker, Mocha, and ChaiCreate a pipeline by Dockerizing your environment using Travis CI, Google Cloud Platform, and GitHubBook Description In the world of web development, leveraging data is the key to developing comprehensive applications, and RESTful APIs help you to achieve this systematically. This book will guide you in designing and developing web services with the power of TypeScript 3 and Node.js. You'll design REST APIs using best practices for request handling, validation, authentication, and authorization. You'll also understand how to enhance the capabilities of your APIs with ODMs, databases, models and views, as well as asynchronous callbacks. This book will guide you in securing your environment by testing your services and initiating test automation with different testing approaches. Furthermore, you'll get to grips with developing secure, testable, and more efficient code, and be able to scale and deploy TypeScript 3 and Node.js-powered RESTful APIs on cloud platforms such as the Google Cloud Platform. Finally, the book will help you explore microservices and give you an overview of what GraphQL can allow you to do. By the end of this book, you will be able to use RESTful web services to create your APIs for mobile and web apps and other platforms. What you will learnExplore various methods to plan your services in a scalable wayUnderstand how to handle different request types and the response status codeGet to grips with securing web servicesDelve into error handling and logging your web services for improved debuggingUncover the microservices architecture and GraphQLCreate automated CI/CD pipelines for release and deployment strategiesWho this book is for If you're a developer who has a basic understanding of REST concepts and want to learn how to design and develop RESTful APIs, this book is for you. Prior knowledge of TypeScript will help you make the most out of this book.

"Working with REST and Web-Sockets on Yaws"--Cover.

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.

Building Scalable Web Apps and RESTful Services

RESTful Web Services Cookbook

Design, Build and Integrate with REST, JSON, XML and JAX-RS

Building RESTful Web Services with PHP 7

Hands-On RESTful Web Services with Go, Second Edition

Building REST APIs with Flask

RESTful Java Web Services

Find out how to implement the REST architecture to build resilient software in Java with the help of the Spring 5.0 framework. About This Book Follow best practices and explore techniques such as clustering and caching to achieve a reactive, scalable web service, Leverage the Spring Framework to quickly implement RESTful endpoints, Learn to implement a client library for a RESTful web service using the Spring Framework along with the new front end framework. Who This Book Is For This book is intended for those who want to learn to build RESTful web services with the latest Spring 5.0 Framework. To make best use of the code samples included in the book, you should have a basic knowledge of the Java language. Previous experience with the Spring Framework would also help you get up and running quickly. What You Will Learn Deep dive into the principles behind REST Expose CRUD operations through RESTful endpoints with the Spring Framework Devise response formats and error handling strategies, offering a consistent and flexible structure to simplify integration for service consumers Follow the best approaches for dealing with a service's evolution while maintaining backward compatibility Understand techniques to secure web services Comply with the best ways to test RESTful web services, including tips for load testing Optimize and scale web services using techniques such as caching and clustering In Detail REST is an architectural style that tackles the challenges of building scalable web services. In today's connected world, APIs have taken a central role on the web. APIs provide the fabric through which systems interact, and REST has become synonymous with APIs. The depth, breadth, and ease of use of Spring makes it one of the most attractive frameworks in the Java ecosystem. Marrying the two technologies is therefore a very natural choice. This book takes you through the design of RESTful web services and leverages the Spring Framework to implement these services. Starting from the basics of the philosophy behind REST, you'll go through the steps of designing and implementing an enterprise-grade RESTful web service. Taking a practical approach, each chapter provides code samples that you can apply to your own circumstances. This second edition brings forth the power of the latest Spring 5.0 release, working with MVC built-in as well as the front end framework. It then goes beyond the use of Spring to explores approaches to tackle resilience, securit ...

Explore the necessary concepts of REST API development by building few real world services from scratch. Key Features Follow best practices and explore techniques such as clustering and caching to achieve a reactive, scalable web service Leverage the Gin Framework to quickly implement RESTful endpoints Learn to implement a client library for a RESTful web service using Go Book Description REST is an architectural style that tackles the challenges of building scalable web services and in today's connected world, APIs have taken a central role on the web. APIs provide the fabric through which systems interact, and REST has become synonymous with APIs. The depth, breadth, and ease of use of Go, makes it a breeze for developers to work with it to build robust Web APIs. This book takes you through the design of RESTful web services and leverages a framework like Gin to implement these services. The book starts with a brief introduction to REST API development and how it transformed the modern web. You will learn how to handle routing and authentication of web services along with working with middleware for internal service. The book explains how to use Go frameworks to build RESTful web services and work with MongoDB to create REST API. You will learn how to integrate Postgres SQL and JSON with a Go web service and build a client library in Go for consuming REST API. You will learn how to scale APIs using the microservice architecture and deploy the REST APIs using Nginx as a proxy server. Finally you will learn how to metricize a REST API using an API Gateway. By the end of the book you will be proficient in building RESTful APIs in Go. What you will learn Create HTTP handler and introspect the Gorilla Mux router OAuth 2 implementation with Go Build RESTful API with Gin Framework Create REST API with MongoDB and Go Build a working client library and unit test for REST API Debug, test, and profile RESTful APIs with each of the frameworks Optimize and scale REST API using microservices Who this book is for This book is intended for those who want to learn to build RESTful web services with a framework like Gin. To make best use of the code samples included in the book, you should have a basic knowledge of Go programming.

Design, build and test RESTful web services with the Django framework and Python Key Features Create efficient real-world RESTful web services with the latest Django framework Authenticate, secure, and integrate third-party packages efficiently in your Web Services Leverage the power of Python for faster Web Service development Book Description Django is a Python web framework that makes the web development process very easy. It reduces the amount of trivial code, which simplifies the creation of web applications and results in faster development. It is very powerful and a great choice for creating RESTful web services. If you are a Python developer and want to efficiently create RESTful web services with Django for your apps, then this is the right book for you. The book starts off by showing you how to install and configure the environment, required software, and tools to create RESTful web services with Django and the Django REST framework. We then move on to working with advanced serialization and migrations to interact with SQLite and non-SQL data sources. We will use the features included in the Django REST framework to improve our simple web service. Further, we will create API views to process diverse HTTP requests on objects, go through relationships and hyperlinked API management, and then discover the necessary steps to include security and permissions related to data models and APIs. We will also apply throttling rules and run tests to check that versioning works as expected. Next we will run automated tests to improve code coverage. By the end of the book, you will be able to build RESTful web services with Django. What you will learn The best way to build a RESTful Web Service or API with Django and the Django REST Framework Develop complex RESTful APIs from scratch with Django and the Django REST Framework Work with either SQL or NoSQL data sources Design RESTful Web Services based on application requirements Use third-party packages and extensions to perform common tasks Create automated tests for RESTful web services Debug, test, and profile RESTful web services with Django and the Django REST Framework Who this book is for This book is for Python developers who want to create RESTful web services with Django; you need to have a basic working knowledge of Django but no previous experience with RESTful web services is required.

Develop RESTful web services using the Flask micro-framework and integrate them using MySQL. Use Flask to develop, deploy, and manage REST APIs with easy-to-read and understand Python code. Solve your problem from a choice of libraries. Learn to use MySQL as the web services database for your Flask API using SQLAlchemy ORM. Building REST APIs with Flask provides a primer on Flask, RESTful services, and working with pip to set up your virtual environment. The key differences between NoSQL and SQL are covered, and you are taught how to connect MySQL and Flask using SQLAlchemy. Author Kunal Relan presents best practices for creating REST APIs and guides you in structuring your app and testing REST endpoints. He teaches you how to set up authentication and render HTML using views. You learn how to write unit tests for your REST APIs, and understand mocks, assertions, and integration testing. You will know how to document your REST APIs, deploy your Flask application on all of the major cloud platforms, and debug and monitor your Flask application. What You'll LearnUse MySQL to create Flask REST APIs Test REST endpoints Create CRUD endpoints with Flask and MySQL Deploy Flask on all of the major cloud platforms Monitor your Flask application Who This Book Is For Python developers interested in REST API development using Flask and web developers with basic programming knowledge who want to learn how Python and REST APIs work together. Readers should be familiar with Python (command line, or at least pip) and MySQL.

The Easiest Way to Build Python RESTful APIs and Web Services with Django

Building RESTful Web Services with Java EE 8

Building a RESTful Web Service with Spring

Enterprise Developer Handbook

Hands-On RESTful API Design Patterns and Best Practices

Spring REST

Leverage the power of Spring 5.0, Java SE 9, and Spring Boot 2.0, 2nd Edition

Explore the necessary concepts of REST API development by building few real world services from scratch. About This Book Follow best practices and explore techniques such as clustering and caching to achieve a reactive, scalable web service Leverage the Gin Framework to quickly implement RESTful endpoints Learn to implement a client library for a RESTful web service using Go Who This Book Is For This book is intended for those who want to learn to build RESTful web services with a framework like Gin. To make best use of the code samples included in the book, you should have a basic knowledge of Go programming. What You Will Learn Create HTTP handler and introspect the Gorilla Mux router OAuth 2 implementation with Go Build RESTful API with Gin Framework Create REST API with MongoDB and Go Build a working client library and unit test for REST API Debug, test, and profile RESTful APIs with each of the frameworks Optimize and scale REST API using microservices In Detail REST is an architectural style that tackles the challenges of building scalable web services and in today's connected world, APIs have taken a central role on the web. APIs provide the fabric through which systems interact, and REST has become synonymous with APIs. The depth, breadth, and ease of use of Go, makes it a breeze for developers to work with it to build robust Web APIs. This book takes you through the design of RESTful web services and leverages a framework like Gin to implement these services. The book starts with a brief introduction to REST API development and how it transformed the modern web. You will learn how to handle routing and authentication of web services along with working with middleware for internal service. The book explains how to use Go frameworks to build RESTful web services and work with MongoDB to create REST API. You will learn how to integrate Postgres SQL and JSON with a Go web service and build a client library in Go for consuming REST API. You will learn how to scale APIs using the microservice architecture and deploy the REST APIs using Nginx as a proxy server. Finally you will learn how to metricize a REST API using an API Gateway. By the end of the book you will be proficient in building RESTful APIs in Go. Style and Approach This book is a step-by-step, hands-on guide to designing and building RESTful web services.

Learn how to design and develop distributed web services in Java using RESTful architectural principals and the JAX-RS specification in Java EE 6. With this hands-on reference, you'll focus on implementation rather than theory, and discover why the RESTful method is far better than technologies like CORBA and SOAP. It's easy to get started with services based on the REST architecture. RESTful Java with JAX-RS includes a technical guide that explains REST and JAX-RS, how they work, and when to use them. With the RESTEasy workbook that follows, you get step-by-step instructions for installing, configuring, and running several working JAX-RS examples using the JBoss RESTEasy implementation of JAX-RS. Work on the design of a distributed RESTful interface, and develop it in Java as a JAX-RS service Dispatch HTTP requests in JAX-RS, and learn how to extract information from them Deploy your web services within Java Enterprise Edition using the Application class, Default Component Model, EJB Integration, Spring Integration, and JPA Discover several options for securing your web services Learn how to implement RESTful design patterns using JAX-RS Write RESTful clients in Java using libraries and frameworks such as java.net.URL, Apache HTTP Client, and RESTEasy Proxy

Explore the best tools and techniques to create lightweight, maintainable, and scalable Python web services Key FeaturesCombine Python with different data sources to build complex RESTful APIs from scratchConfigure and fine-tune your APIs using the best tools and techniques availableUse command-line and GUI tools to test CRUD operations performed by RESTful Web Services or APIsBook Description Python is the language of choice for millions of developers worldwide that builds great web services in RESTful architecture. This second edition of Hands-On RESTful Python Web Services will cover the best tools you can use to build engaging web services. This book shows you how to develop RESTful APIs using the most popular Python frameworks and all the necessary stacks with Python, combined with related libraries and tools. You'll learn to incorporate all new features of Python 3.7, Flask 1.0.2, Django 2.1, Tornado 5.1, and also a new framework, Pyramid. As you advance through the chapters, you will get to grips with each of these frameworks to build various web services, and be shown use cases and best practices covering when to use a particular framework. You then successfully develop RESTful APIs with all frameworks and understand how each framework processes HTTP requests and routes URLs. You'll also discover best practices for validation, serialization, and deserialization. In the concluding chapters, you will take advantage of specific features available in certain frameworks such as integrated ORMs, built-in authorization and authentication, and work with asynchronous code. At the end of each framework, you will write tests for RESTful APIs and improve code coverage. By the end of the book, you will have gained a deep understanding of the stacks needed to build RESTful web services. What you will learnSelect the most appropriate framework based on requirementsDevelop complex RESTful APIs from scratch using PythonUse request handlers, URL patterns, serialization, and validationsAdd authentication, authorization, and interaction with ORMs and databasesDebug, test, and improve RESTful APIs with four frameworksDesign RESTful APIs with frameworks and create automated testsWho this book is for This book is for web developers who have a working knowledge of Python and would like to build amazing web services by taking advantage of the various frameworks of Python. You should have some knowledge of RESTful APIs.

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

Services for a Changing World

Learn how to build powerful RESTful APIs with Golang that scale gracefully

Building APIs That Developers Love

RESTful Web API Design with Node.js 10, Third Edition

Developing Distributed Web Services to improve scalability with .NET Core 2.0 and ASP.NET Core 2.0

RESTful PHP Web Services

Hands-On RESTful Web Services with Go

Summary Go in Action introduces the Go language, guiding you from inquisitive developer to Go guru. The book begins by introducing the unique features and concepts of Go. Then, you'll get hands-on experience writing real-world applications including websites and network servers, as well as techniques to manipulate and convert data at speeds that will make your friends jealous. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Application development can be tricky enough even when you aren't dealing with complex systems programming problems like web-scale concurrency and real-time performance. While it's possible to solve these common issues with additional tools and frameworks, Go handles them right out of the box, making for a more natural and productive coding experience. Developed at Google, Go powers nimble startups as well as big enterprises—companies that rely on high-performing services in their infrastructure. About the Book Go in Action is for any intermediate-level developer who has experience with other programming languages and wants a jump-start in learning Go or a more thorough understanding of the language and its internals. This book provides an intensive, comprehensive, and idiomatic view of Go. It focuses on the specification and implementation of the language, including topics like language syntax, Go's type system, concurrency, channels, and testing. What's Inside Language specification and implementation Go's type system Internals of Go's data structures Testing and benchmarking About the Reader This book assumes you're a working developer proficient with another language like Java, Ruby, Python, C#, or C++. About the Authors William Kennedy is a seasoned software developer and author of the blog GoingGo.Net. Brian Ketelsen and Erik St. Martin are the organizers of GopherCon and coauthors of the Go-based Skynet framework. Table of Contents Introducing Go Go quick-start Packaging and tooling Arrays, slices, and maps Go's type system Concurrency Concurrency patterns Standard library Testing and benchmarking Take a deep dive into web development using the Go programming language to build web apps and RESTful services to create reliable and efficient software. Web Development with Go provides Go language fundamentals and then moves on to advanced web development concepts and successful deployment of Go web apps to the cloud. Web Development with Go will teach you how to develop scalable real-world web apps, RESTful services, and backend systems with Go. The book starts off by covering Go programming language fundamentals as a prerequisite for web development. After a thorough understanding of the basics, the book delves into web development using the built-in package, net/http. With each chapter you'll

be introduced to new concepts for gradually building a real-world web system. The book further shows you how to integrate Go with other technologies. For example, it provides an overview of using MongoDB as a means of persistent storage, and provides an end-to-end REST API sample as well. The book then moves on to demonstrate how to deploy web apps to the cloud using the Google Cloud platform. Web Development with Go provides: Fundamentals for building real-world web apps in Go Thorough coverage of prerequisites and practical code examples Demo web apps for attaining a deeper understanding of web development A reference REST API app which can be used to build scalable real-world backend services in Go A thorough demonstration of deploying web apps to the Cloud using the Google Cloud platform Go is a high-performance language while providing greater level of developer productivity, therefore Web Development with Go equips you with the necessary skills and knowledge required for effectively building robust and efficient web apps by leveraging the features of Go. Design and implement scalable and maintainable RESTful solutions with Node.js 10 Key Features Create rich and scalable RESTful API solutions from scratch Explore the new features of Node.js 10, Express 4.0, and MongoDB Integrate MongoDB in your Node.js application to store and secure your data Book Description When building RESTful services, it is really important to choose the right framework. Node.js, with its asynchronous, event-driven architecture, is exactly the right choice for building RESTful APIs. This third edition of RESTful Web API Design with Node.js 10 will teach you to create scalable and rich RESTful applications based on the Node.js platform. You will be introduced to the latest NPM package handler and understand how to use it to customize your RESTful development process. You will begin by understanding the key principle that makes an HTTP application a RESTful-enabled application. After writing a simple HTTP request handler, you will create and test Node.js modules using automated tests and mock objects; explore using the NoSQL database, MongoDB, to store data; and get to grips with using self-descriptive URLs. You' ll learn to set accurate HTTP status codes along with understanding how to keep your applications backward-compatible. Also, while implementing a full-fledged RESTful service, you will use Swagger to document the API and implement automation tests for a REST-enabled endpoint with Mocha. Lastly, you will explore some authentication techniques to secure your application. What you will learn Install, develop, and test your own Node.js user modules Understand the differences between HTTP and RESTful applications Use self-descriptive URLs and set accurate HTTP status codes Eliminate third-party dependencies in your tests with mocking Implement automation tests for a REST-enabled endpoint with Mocha Secure your services with NoSQL database integration within Node.js applications Integrate a simple frontend using JavaScript libraries available on a CDN server Who this book is for If you are a web developer keen to enrich your development skills to create server-side RESTful applications based on the Node.js platform, this book is for you. Some knowledge of REST would be an added advantage, but is definitely not a necessity.

The popularity of REST in recent years has led to tremendous growth in almost-RESTful APIs that don ' t include many of the architecture ' s benefits. With this practical guide, you ' ll learn what it takes to design usable REST APIs that evolve over time. By focusing on solutions that cross a variety of domains, this book shows you how to create powerful and secure applications, using the tools designed for the world ' s most successful distributed computing system: the World Wide Web. You ' ll explore the concepts behind REST, learn different strategies for creating hypermedia-based APIs, and then put everything together with a step-by-step guide to designing a RESTful Web API. Examine API design strategies, including the collection pattern and pure hypermedia Understand how hypermedia ties representations together into a coherent API Discover how XMDP and ALPS profile formats can help you meet the Web API "semantic challenge" Learn close to two-dozen standardized hypermedia data formats Apply best practices for using HTTP in API implementations Create Web APIs with the JSON-LD standard and other the Linked Data approaches Understand the CoAP protocol for using REST in embedded systems

Hands-On RESTful Web Services with ASP.NET Core 3

RESTful .NET

Designing and Developing Distributed Web Services

Designing Web APIs

Working with REST and Web Sockets on Yaws

Design and develop scalable RESTful APIs for your applications

Learn to create robust RESTful web services with Node.js, MongoDB, and Express.js, 3rd Edition

Concurrency can be notoriously difficult to get right, but fortunately, the Go open source programming language makes working with concurrency tractable and even easy. If you're a developer familiar with Go, this practical book demonstrates best practices and patterns to help you incorporate concurrency into your systems. Author Katherine Cox-Buday takes you step-by-step through the process. You'll understand how Go chooses to model concurrency, what issues arise from this model, and how you can compose primitives within this model to solve problems. Learn the skills and tooling you need to confidently write and implement concurrent systems of any size. Understand how Go addresses fundamental problems that make concurrency difficult to do correctly Learn the key differences between concurrency and parallelism Dig into the syntax of Go's memory synchronization primitives Form patterns with these primitives to write maintainable concurrent code Compose patterns into a series of practices that enable you to write large, distributed systems that scale Learn the sophistication behind goroutines and how Go's runtime stitches everything together

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

REST architecture (style) is a pivot of distributed systems, simplify data integration amongst modern and legacy applications leverages through the RESTful paradigm. This book is fully loaded with many RESTful API patterns, samples, hands-on implementations and also discuss the capabilities of many REST API frameworks for Java, Scala, Python and Go

Get up to speed on the principal technologies in the Java Platform, Enterprise Edition 7, and learn how the latest version embraces HTML5, focuses on higher productivity, and provides functionality to meet enterprise demands. Written by Arun Gupta, a key member of the Java EE team, this book provides a chapter-by-chapter survey of several Java EE 7 specifications, including WebSockets, Batch Processing, RESTful Web Services, and Java Message Service. You'll also get self-paced instructions for building an end-to-end application with many of the technologies described in the book, which will help you understand the design patterns vital to Java EE development. Understand the key components of the Java EE platform, with easy-to-understand explanations and extensive code samples Examine all the new components that have been added to Java EE 7 platform, such as WebSockets, JSON, Batch, and Concurrency Learn about RESTful Web Services, SOAP XML-based messaging protocol, and Java Message Service Explore Enterprise JavaBeans, Contexts and Dependency Injection, and the Java Persistence API Discover how different components were updated from Java EE 6 to Java EE 7

Practical Guide to Building an API Back End with Spring Boot

Django RESTful Web Services

Solutions for Improving Scalability and Simplicity

RESTful Java Web Services - Third Edition

Concurrency in Go

Web Development with Go

REST API Design Rulebook

"Every developer working with the Web needs to read this book." -- David Heinemeier Hansson, creator of the Rails framework "RESTful Web Services finally provides a practical roadmap for constructing services that embrace the Web, instead of trying to route around it." -- Adam Trachtenberg, PHP author and eBay Web Services Evangelist You've built web sites that can be used by humans. But can you also build web sites that are usable by machines? That's where the future lies, and that's what RESTful Web Services shows you how to do. The World Wide Web is the most popular distributed application in history, and Web services and mashups have turned it into a powerful distributed computing platform. But today's web service technologies have lost sight of the simplicity that made the Web successful. They don't work like the Web, and they're missing out on its advantages. This book puts the "Web" back into web services. It shows how you can connect to the programmable web with the technologies you already use every day. The key is REST, the architectural style that drives the Web. This book: Emphasizes the power of basic Web technologies -- the HTTP application protocol, the URI naming standard, and the XML markup language Introduces the Resource-Oriented Architecture (ROA), a common-sense set of rules for designing RESTful web services Shows how a RESTful design is simpler, more versatile, and more scalable than a design based on Remote Procedure Calls (RPC) Includes real-world examples of RESTful web services, like Amazon's Simple Storage Service and the Atom Publishing Protocol Discusses web service clients for popular programming languages Shows how to implement RESTful services in three popular frameworks -- Ruby on Rails, Restlet (for Java), and Django (for Python) Focuses on practical issues: how to design and implement RESTful web services and clients This is the first book that applies the REST design philosophy to real web services. It sets down the best practices you need to make your design a success, and the techniques you need to turn your design into working code. You can harness the power of the Web for programmable applications: you just have to work with the Web instead of against it. This book shows you how.

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

RESTful .NET is the first book that teaches Windows developers to build RESTful web services using the latest Microsoft tools. Written by Windows Communication Foundation (WCF) expert Jon Flanders, this hands-on tutorial demonstrates how you can use WCF and other components of the .NET 3.5 Framework to build, deploy and use REST-based web services in a variety of application scenarios. RESTful architecture offers a simpler approach to building web services than SOAP, SOA, and the cumbersome WS- stack. And WCF has proven to be a flexible technology for building distributed systems not necessarily tied to WS- standards. RESTful .NET provides you with a complete guide to the WCF REST programming model for building web services consumed either by machines or humans. You'll learn how to: Program Read-Only (GET) services Program READ/WRITE services Host REST services Program REST feeds Program AJAX REST clients Secure REST endpoints Use workflow to deliver REST services Consume RESTful XML services using WCF Work with HTTP Work with ADO.NET Data Services (Astoria) RESTful .NET introduces you to the ideas of REST and RESTful architecture, and includes a detailed discussion of how the Web/REST model plugs into the WCF architecture. If you develop with .NET, it's time to jump on the RESTful bandwagon. This book explains how. "While REST is simple, WCF is not. To really understand and exploit this part of WCF requires a knowledgeable and experienced guide. I don't know anybody who's better suited for this role than Jon Flanders. ...Jon is first-rate at explaining complicated things. This book is the best introduction I've seen to creating and using these services with WCF."--David Chappell, Chappell & Associates

Get up to speed with the latest features of C# 8, ASP.NET Core 3 and .NET Core 3.1 LTS to create robust and maintainable web services Key FeaturesApply design patterns and techniques to achieve a reactive, scalable web serviceDocument your web services using the OpenAPI standard and test them using PostmanExplore mechanisms to implement a secure web service using client-side SSL and token authenticationBook Description In recent times, web services have evolved to play a prominent role in web development. Applications are now designed to be compatible with any device and platform, and web services help us keep their logic and UI separate. Given its simplicity and effectiveness in creating web services, the RESTful approach has gained popularity, and this book will help you build RESTful web services using ASP.NET Core. This REST book begins by introducing you to the basics of the REST philosophy, where you'll study the different stages of designing and implementing enterprise-grade RESTful web services. You'll also gain a thorough understanding of ASP.NET Core's middleware approach and learn how to customize it. The book will later guide you through improving API resilience, securing your service, and applying different design patterns and techniques to achieve a scalable web service. In addition to this, you'll learn advanced techniques for caching, monitoring, and logging, along with implementing unit and integration testing strategies. In later chapters, you will deploy your REST web services on Azure and document APIs using Swagger and external tools such as Postman. By the end of this book, you will have learned how to design RESTful web services confidently using ASP.NET Core with a focus on code testability and maintainability. What you will learnGain a comprehensive working knowledge of ASP.NET CoreIntegrate third-party tools and frameworks to build maintainable and efficient servicesImplement patterns using dependency injection to reduce boilerplate code and improve flexibilityUse ASP.NET Core's out-of-the-box tools to test your applicationsUse Docker to run your ASP.NET Core web service in an isolated and self-contained environmentSecure your information using HTTPS and token-based authenticationIntegrate multiple web services using resiliency patterns and messaging techniquesWho this book is for This book is for anyone who wants to learn how to build RESTful web services with the ASP.NET Core framework to improve the scalability and performance of their applications. Basic knowledge of C# and .NET Core will help you make the best use of the code samples included in the book.

Tools and Techniques for Developers

Design, develop, and deploy highly adaptable, scalable, and secure RESTful web APIs

Java EE 7 Essentials

Building Web Applications with Erlang

Hands-On RESTful Web Services with TypeScript 3

Pro RESTful APIs

*The basic rules of REST APIs - "many nouns, few verbs, stick with HTTP" - seem easy, but that simplicity and power require discipline to work smoothly. This brief guide provides next steps for implementing complex projects on simple and extensible foundations. Design production-ready, testable, and maintainable RESTful web services for the modern web that scale easily Key FeaturesEmploy a combination of custom and open source solutions for application program interface (API) developmentDiscover asynchronous API and API security patterns and learn how to deploy your web services to the cloudApply design patterns and techniques to build reactive and scalable web servicesBook Description Building RESTful web services can be tough as there are countless standards and ways to develop API. In modern architectures such as microservices, RESTful APIs are common in communication, making idiomatic and scalable API development crucial. This book covers basic through to advanced API development concepts and supporting tools. You'll start with an introduction to REST API development before moving on to building the essential blocks for working with Go. You'll explore routers, middleware, and available open source web development solutions in Go to create robust APIs, and understand the application and database layers to build RESTful web services. You'll learn various data formats like protocol buffers and JSON, and understand how to serve them over HTTP and gRPC. After covering advanced topics such as asynchronous API design and GraphQL for building scalable web services, you'll discover how microservices can benefit from REST. You'll also explore packaging artifacts in the form of containers and understand how to set up an ideal deployment ecosystem for web services. Finally, you'll cover the provisioning of infrastructure using infrastructure as code (IaC) and secure your REST API. By the end of the book, you'll have intermediate knowledge of web service development and be able to apply the skills you've learned in a practical way. What you will learnExplore the fundamentals of API development and web servicesUnderstand the various building blocks of API development in GoUse superior open source solutions for representational state transfer (REST) API developmentScale a service using microservices and asynchronous design patternsDeliver containerized artifacts to the Amazon Web Services (AWS) CloudGet to grips with API security and its implementationWho this book is for This book is for all the Go developers who are comfortable with the language and seeking to learn REST API development. Even senior engineers can enjoy this book, as it discusses many cutting-edge concepts, such as building microservices, developing API with GraphQL, using protocol buffers, asynchronous API design, and Infrastructure as a Code. Developers who are already familiar with REST concepts and stepping into the Go world from other platforms, such as Python and Ruby, can also benefit a lot.*

*Create web services that are lightweight, maintainable, scalable, and secure using the best tools and techniques designed for Python About This Book Develop RESTful Web Services using the most popular frameworks in Python Configure and fine-tune your APIs using the best tools and techniques available This practical guide will help you to implement complete REST-based APIs from scratch Who This Book Is For This book is for web developers who have working knowledge of Python and would like to build amazing web services by taking advantage of the various frameworks of Python. You should have some knowledge of RESTful APIs. What You Will Learn Develop complex RESTful APIs from scratch with Python combined with and without data sources Choose the most appropriate (micro) framework based on the specific requirements of a RESTful API / web service Debug, test, and profile RESTful APIs with each of the frameworks Develop a complex RESTful API that interacts with a PostgreSQL database Add authentication and permissions to a RESTful API built in each of the frameworks Map URL patterns to request handlers and check how the API works Profile an existing API and refactor it to take advantage of asynchronous code In Detail Python is the language of choice for millions of developers worldwide, due to its gentle learning curve as well as its vast applications in day-to-day programming. It serves the purpose of building great web services in the RESTful architecture. This book will show you the best tools you can use to build your own web services. Learn how to develop RESTful APIs using the popular Python frameworks and all the necessary stacks with Python, Django, Flask, and Tornado, combined with related libraries and tools. We will dive deep into each of these frameworks to build various web services, and will provide use cases and best practices on when to use a particular framework to get the best results. We will show you everything required to successfully develop RESTful APIs with the four frameworks such as request handling, URL mapping, serialization, validation, authentication, authorization, versioning, ORMs, databases, custom code for models and views, and asynchronous callbacks. At the end of each framework, we will add authentication and security to the RESTful APIs and prepare tests for it. By the end of the book, you will have a deep understanding of the stacks needed to build RESTful web services. Style and approach The book takes a straightforward approach, not spending time getting you started with RESTful APIs and web services. It will give you the best use cases for each framework to build great web services in Python.*

*Building RESTful Web Services with PHP 7Packt Publishing Ltd*

#### Go in Action

Develop RESTful web services or APIs with modern Python 3.7, 2nd Edition

Building RESTful Web Services with .NET Core

The easiest way to build Python RESTful APIs and web services with Django

Building RESTful Web Services with Go

A pragmatic guide to designing and building RESTful APIs using Java

Hands-On RESTful Python Web Services

Learn the basic architectural concepts and step through examples of consuming and creating RESTful web services in PHP.

Learn how to design and develop distributed web services in Java, using RESTful architectural principles and the JAX-RS 2.0 specification in Java EE 7. By focusing on implementation rather than theory, this hands-on reference demonstrates how easy it is to get started with services based on the REST architecture.

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

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

Finally, you will see how to design your web services to equip them for the future technological advances, be it Cloud or mobile computing. By the end of this book, you will be able to efficiently build robust, scalable, and secure RESTful web services, making use of the JAX-RS and Jersey framework extensions. Style and approach This book is written as a step-by-step guide to designing and developing robust RESTful web services. Each topic is explained in a simple and easy-to-understand manner with lots of real-life use-cases and their solutions.

Learn how to build RESTful API and web services in PHP 7 About This Book Leverage the Lumen framework to build RESTful API endpoints for your applications Understand how to increase efficiency and security of your web service. Learn to apply the concepts by implementing the examples covered in the book Who This Book Is For This book is for PHP developers who wish to learn about the REST architecture to be able to build and consume REST APIs in their applications. What You Will Learn Understand the REST API architecture and its benefits Write RESTful API web services in PHP 7 Address security-related issues in a REST API Leverage the importance of automated testing and write tests for API endpoints Identify security flaws in our current API endpoints and tackle them effectively Observe the working of Lumen microframeworks and write RESTful web services in it In Detail REST is the most wide spread and effective standard to develop APIs for internet services. With the way PHP and its eco-system has modernized the way code is written by simplifying various operations, it is useful to develop RESTful APIs with PHP 7 and modern tools. This book explains in detail how to create your own RESTful API in PHP 7 that can be consumed by other users in your organization. Starting with a brief introduction to the fundamentals of REST architecture and the new features in PHP 7, you will learn to implement basic RESTful API endpoints using vanilla PHP. The book explains how to identify flaws in security and design and teach you how to tackle them. You will learn about composer, Lumen framework and how to make your RESTful API cleaner, secure and efficient. The book emphasizes on automated tests, teaches about different testing types and give a brief introduction to microservices which is the natural way forward. After reading this book, you will have a clear understanding of the REST architecture and you can build a web service from scratch. Style and approach This book will get you started with REST architecture and will also teach you different methods to build web services from scratch.

Create Python Web Services with MySQL

Develop elegant RESTful APIs with Golang for microservices and the cloud, 2nd Edition

Build and Consume RESTful Web Services with .NET 3.5

Building RESTful Web services with Go

Learn How to Build Powerful RESTful APIs with Golang That Scale Gracefully

Building RESTful Web Services with Spring 5

RESTful Web APIs

Find out how to implement the REST architecture to build resilient software in Java with the help of the Spring 5.0 framework. Key Features Follow best practices and explore techniques such as clustering and caching to achieve a reactive, scalable web service. Leverage the Spring Framework to quickly implement RESTful endpoints. Learn to implement a client library for a RESTful web service using the Spring Framework along with the new front end framework. Book Description REST is an architectural style that tackles the challenges of building scalable web services. In today's connected world, APIs have taken a central role on the web. APIs provide the fabric through which systems interact, and REST has become synonymous with APIs.The depth, breadth, and ease of use of Spring makes it one of the most attractive frameworks in the Java ecosystem. Marrying the two technologies is therefore a very natural choice.This book takes you through the design of RESTful web services and leverages the Spring Framework to implement these services. Starting from the basics of the philosophy behind REST, you'll go through the steps of designing and implementing an enterprise-grade RESTful web service. Taking a practical approach, each chapter provides code samples that you can apply to your own circumstances.This second edition brings forth the power of the latest Spring 5.0 release, working with MVC built-in as well as the front end framework. It then goes beyond the use of Spring to explore approaches to tackle resilience, security, and scalability concerns. Improve performance of your applications with the new HTTP 2.0 standards. You'll learn techniques to deal with security in Spring and discover how to implement unit and integration test strategies.Finally, the book ends by walking you through building a Java client for your RESTful web service, along with some scaling techniques using the new Spring Reactive libraries. What you will learn Deep dive into the principles behind REST Expose CRUD operations through RESTful endpoints with the Spring Framework Devise response formats and error handling strategies, offering a consistent and flexible structure to simplify integration for service consumers Follow the best approaches for dealing with a service's evolution while maintaining backward compatibility Understand techniques to secure web services Comply with the best ways to test RESTful web services, including tips for load testing Optimise and scale web services using techniques such as caching and clustering Who this book is for This book is intended for those who want to learn to build RESTful web services with the latest Spring 5.0 Framework. To make best use of the code samples included in the book, you should have a basic knowledge of the Java language. Previous experience with the Spring Framework would also help you get up and running quickly.

Design production-ready, testable, and maintainable RESTful web services for the modern web that scale easily Key Features Employ a combination of custom and open source solutions for application program interface (API) development Discover asynchronous API and API security patterns and learn how to deploy your web services to the cloud Apply design patterns and techniques to build reactive and scalable web services Book Description Building RESTful web services can be tough as there are countless standards and ways to develop API. In modern architectures such as microservices, RESTful APIs are common in communication, making idiomatic and scalable API development crucial. This book covers basic through to advanced API development concepts and supporting tools. You'll start with an introduction to REST API development before moving on to building the essential blocks for working with Go. You'll explore routers, middleware, and available open source web development solutions in Go to create robust APIs, and understand the application and database layers to build RESTful web services. You'll learn various data formats like protocol buffers and JSON, and understand how to serve them over HTTP and gRPC. After covering advanced topics such as asynchronous API design and GraphQL for building scalable web services, you'll discover how microservices can benefit from REST. You'll also explore packaging artifacts in the form of containers and understand how to set up an ideal deployment ecosystem for web services. Finally, you'll cover the provisioning of infrastructure using infrastructure as code (IaC) and secure your REST API. By the end of the book, you'll have intermediate knowledge of web service development and be able to apply the skills you've learned in a practical way. What you will learn Explore the fundamentals of API development and web services Understand the various building blocks of API development in Go Use superior open source solutions for representational state transfer (REST) API development Scale a service using microservices and asynchronous design patterns Deliver containerized artifacts to the Amazon Web Services (AWS) Cloud Get to grips with API security and its implementation Who this book is for This book is for all the Go developers who are comfortable with the language and seeking to learn REST API development. Even senior engineers can enjoy this book, as it discusses many cutting-edge concepts, such as building microser...

Building Complete E-commerce/Shopping Cart Application Key Features Follow best practices and explore techniques such as clustering and caching to achieve a reactive, scalable web service Leverage the .NET Framework to quickly implement RESTful endpoints. Learn to implement a client library for a RESTful web service using ASP.NET Core. Book Description REST is an architectural style that tackles the challenges of building scalable web services. In today's connected world, APIs have taken a central role on the web. APIs provide the fabric through which systems interact, and REST has become synonymous with APIs. The depth, breadth, and ease of use of ASP.NET Core makes it a breeze for developers to work with for building robust web APIs. This book takes you through the design of RESTful web services and leverages the ASP.NET Core framework to implement these services. This book begins by introducing you to the basics of the philosophy behind REST. You'll go through the steps of designing and implementing an enterprise-grade RESTful web service. This book takes a practical approach, that you can apply to your own circumstances. This book brings forth the power of the latest .NET Core release, working with MVC. Later, you will learn about the use of the framework to explore approaches to tackle resilience, security, and scalability concerns. You will explore the steps to improve the performance of your applications. You'll also learn techniques to deal with security in web APIs and discover how to implement unit and integration test strategies. By the end of the book, you will have a complete understanding of Building a client for RESTful web services, along with some scaling techniques. What you will learn Add basic authentication to your RESTful API Create a Carts Controller and Orders Controller to manage and process Orders Intercept HTTP requests and responses by building your own middleware Test service calls using Postman and Advanced REST Client Secure your data/application using annotations Who this book is for This book is intended for those who want to learn to build RESTful web services with the latest .NET Core Framework. To make best use of the code samples included in the book, you should have a basic knowledge of C# and .NET Core.

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

Create modern RESTful web services with the Java EE 8 API

Hands-On RESTful Web Services with Go - Second Edition

Design production-ready, testable, and flexible RESTful APIs for web applications and microservices

Building RESTful Python Web Services

RESTful Java with JAX-RS

Building RESTful Web Services with Spring 5 - Second Edition

RESTful Java with JAX-RS 2.0

Starting your first project with Spring Boot can be a bit daunting given the vast options that it provides. This book will guide you step-by-step along the way to be a Spring Boot hero in no time. The book covers: \* Setup of your project \* Security and user management for your application \* Writing REST endpoints \* Connecting with a database from your application \* Unit and integration testing for all aspects \* Writing documentation for your REST endpoints \* Support file upload from your REST API

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

Using a web API to provide services to application developers is one of the more satisfying endeavors that software engineers undertake. But building a popular API with a thriving developer ecosystem is also one of the most challenging. With this practical guide, developers, architects, and tech leads will learn how to navigate complex decisions for designing, scaling, marketing, and evolving interoperable APIs. Authors Brenda Jin, Saurabh Sahni, and Amir Shevat explain API design theory and provide hands-on exercises for building your web API and managing its operation in production. You'll also learn how to build and maintain a following of app developers. This book includes expert advice, worksheets, checklists, and case studies from companies including Slack, Stripe, Facebook, Microsoft, Cloudinary, Oracle, and GitHub. Get an overview of request-response and event-driven API design paradigms Learn best practices for designing an API that meets the needs of your users Use a template to create an API design process Scale your web API to support a growing number of API calls and use cases Regularly adapt the API to reflect changes to your product or business Provide developer resources that include API documentation, samples, and tools

RESTful Web Services