

Automating And Testing A REST API A Case Study In API Testing Using Java REST Assured Postman Tracks CURL And HTTP Proxies

Eventually, you will utterly discover a further experience and attainment by spending more cash. nevertheless when? do you tolerate that you require to get those every needs in imitation of having significantly cash? Why dont you try to acquire something basic in the beginning? Thats something that will guide you to understand even more not far off from the globe, experience, some places, afterward history, amusement, and a lot more?

It is your totally own grow old to sham reviewing habit. in the course of guides you could enjoy now is **Automating And Testing A REST API A Case Study In API Testing Using Java REST Assured Postman Tracks CURL And HTTP Proxies** below.

Automating and Testing a Rest API - Alan J. Richardson 2017-07-04

Have you ever wished that you had a worked example of how to test a REST API? Not just automate the API, but how to interact with it, using command line and GUI tools, to support your manual interactive testing. Then take your testing forward into automating the API? That's what this book provides. A step by step case study covering:

- How to read the REST API documentation.
- How to tell if the application is using the API.
- How to interact with the API from the command line with cURL.
- Automating with BASH and Windows Command Line.
- Sending API requests through an HTTP Proxy so you can see in detail the requests and responses.
- How to use HTTP Proxies to create data in the application through Fuzzing.
- Postman REST API GUI tool.
- Automate 'under the GUI' parts of the application that don't have an API.
- Automate the API with Java using REST Assured.
- Build abstraction code to make your automated efforts readable and maintainable.
- JSON and XML parsing with Serialization and Deserialization.

The book is fully supported by executable code which you can find on GitHub, and the support page for the book has sample videos showing some of the early steps in the case study in detail. By working through this case study you will be able to interact with an

API from the command line, GUI tools, HTTP messages in Proxies and with Java code. Over the last few years, the Author has used the Open Source Tracks application as an example testing target to teach: Technical Web Testing, Automating GUIs and REST API Testing. This book collates the preparatory work and teaching from the REST API workshops. The code from the workshops is included: for creating users, generating random data, testing basic API calls with PUT, GET, POST and DELETE. Also the early steps of exploring and investigating the API interactively to support manual technical testing are explained in depth.

Java Coding Problems - Anghel Leonard 2019-09-20

Develop your coding skills by exploring Java concepts and techniques such as Strings, Objects and Types, Data Structures and Algorithms, Concurrency, and Functional programming Key Features Solve Java programming challenges and get interview-ready by using the power of modern Java 11 Test your Java skills using language features, algorithms, data structures, and design patterns Explore areas such as web development, mobile development, and GUI programming Book Description The super-fast evolution of the JDK between versions 8 and 12 has increased the learning curve of modern Java, therefore has

increased the time needed for placing developers in the Plateau of Productivity. Its new features and concepts can be adopted to solve a variety of modern-day problems. This book enables you to adopt an objective approach to common problems by explaining the correct practices and decisions with respect to complexity, performance, readability, and more. Java Coding Problems will help you complete your daily tasks and meet deadlines. You can count on the 300+ applications containing 1,000+ examples in this book to cover the common and fundamental areas of interest: strings, numbers, arrays, collections, data structures, date and time, immutability, type inference, Optional, Java I/O, Java Reflection, functional programming, concurrency and the HTTP Client API. Put your skills on steroids with problems that have been carefully crafted to highlight and cover the core knowledge that is accessed in daily work. In other words (no matter if your task is easy, medium or complex) having this knowledge under your tool belt is a must, not an option. By the end of this book, you will have gained a strong understanding of Java concepts and have the confidence to develop and choose the right solutions to your problems. What you will learn Adopt the latest JDK 11 and JDK 12 features in your applications Solve cutting-edge problems relating to collections and data structures Get to grips with functional-style programming using lambdas Perform asynchronous communication and parallel data processing Solve strings and number problems using the latest Java APIs Become familiar with different aspects of object immutability in Java Implement the correct practices and clean code techniques Who this book is for If you are a Java developer who wants to level-up by solving real-world problems, then this book is for you. Working knowledge of Java is required to get the most out of this book.

Building RESTful Web Services with PHP 7 - Haafiz Waheed-ud-din Ahmad 2017-09-11 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.

Developer Testing - Alexander Tarlinder 2016-09-07

How do successful agile teams deliver bug-free, maintainable software—iteration after iteration? The answer is: By seamlessly combining development and testing. On such teams, the developers write testable code that enables them to verify it using various types of automated tests. This approach keeps regressions at bay and prevents “testing crunches”—which otherwise may occur near the end of an

iteration—from ever happening. Writing testable code, however, is often difficult, because it requires knowledge and skills that cut across multiple disciplines. In *Developer Testing*, leading test expert and mentor Alexander Tarlinder presents concise, focused guidance for making new and legacy code far more testable. Tarlinder helps you answer questions like: When have I tested this enough? How many tests do I need to write? What should my tests verify? You'll learn how to design for testability and utilize techniques like refactoring, dependency breaking, unit testing, data-driven testing, and test-driven development to achieve the highest possible confidence in your software. Through practical examples in Java, C#, Groovy, and Ruby, you'll discover what works—and what doesn't. You can quickly begin using Tarlinder's technology-agnostic insights with most languages and toolsets while not getting buried in specialist details. The author helps you adapt your current programming style for testability, make a testing mindset "second nature," improve your code, and enrich your day-to-day experience as a software professional. With this guide, you will

Understand the discipline and vocabulary of testing from the developer's standpoint
Base developer tests on well-established testing techniques and best practices
Recognize code constructs that impact testability
Effectively name, organize, and execute unit tests
Master the essentials of classic and "mockist-style" TDD
Leverage test doubles with or without mocking frameworks
Capture the benefits of programming by contract, even without runtime support for contracts
Take control of dependencies between classes, components, layers, and tiers
Handle combinatorial explosions of test cases, or scenarios requiring many similar tests
Manage code duplication when it can't be eliminated
Actively maintain and improve your test suites
Perform more advanced tests at the integration, system, and end-to-end levels
Develop an understanding for how the organizational context influences quality assurance
Establish well-balanced and effective testing strategies suitable for agile teams

[Agile Testing](#) - Lisa Crispin 2009

Crispin and Gregory define agile testing and illustrate the tester's role with examples from

real agile teams. They teach you how to use the agile testing quadrants to identify what testing is needed, who should do it, and what tools might help. The book chronicles an agile software development iteration from the viewpoint of a tester and explains the seven key success factors of agile testing.

Python API Development Fundamentals - Jack Chan 2019-11-22

Learn all that's needed to build a fully functional web application from scratch. Key Features
Delve deep into the principle behind RESTful API
Learn how to build a scalable web application with the RESTful API architecture and Flask framework
Know what are the exact tools and methodology to test your applications and how to use them
Book Description Python is a flexible language that can be used for much more than just script development. By knowing the Python RESTful APIs work, you can build a powerful backend for web applications and mobile applications using Python. You'll take your first steps by building a simple API and learning how the frontend web interface can communicate with the backend. You'll also learn how to serialize and deserialize objects using the marshmallow library. Then, you'll learn how to authenticate and authorize users using Flask-JWT. You'll also learn how to enhance your APIs by adding useful features, such as email, image upload, searching, and pagination. You'll wrap up the whole book by deploying your APIs to the cloud. By the end of this book, you'll have the confidence and skill to leverage the power of RESTful APIs and Python to build efficient web applications. What you will learn
Understand the concept of a RESTful API
Build a RESTful API using Flask and the Flask-Restful extension
Manipulate a database using Flask-SQLAlchemy and Flask-Migrate
Send out plaintext and HTML format emails using the Mailgun API
Implement a pagination function using Flask-SQLAlchemy
Use caching to improve API performance and efficiently obtain the latest information
Deploy an application to Heroku and test it using Postman
Who this book is for This book is ideal for aspiring software developers who have a basic-to-intermediate knowledge of Python programming and who want to develop web applications using Python. Knowledge of how web applications work will be beneficial but

is not essential.

Network Programmability and Automation - Jason Edelman 2018-02-02

Like sysadmins before them, network engineers are finding that they cannot do their work manually anymore. As the field faces new protocols, technologies, delivery models, and a pressing need for businesses to be more agile and flexible, network automation is becoming essential. This practical guide shows network engineers how to use a range of technologies and tools—including Linux, Python, JSON, and XML—to automate their systems through code. Network programming and automation will help you simplify tasks involved in configuring, managing, and operating network equipment, topologies, services, and connectivity. Through the course of the book, you'll learn the basic skills and tools you need to make this critical transition. This book covers: Python programming basics: data types, conditionals, loops, functions, classes, and modules Linux fundamentals to provide the foundation you need on your network automation journey Data formats and models: JSON, XML, YAML, and YANG for networking Jinja templating and its applicability for creating network device configurations The role of application programming interfaces (APIs) in network automation Source control with Git to manage code changes during the automation process How Ansible, Salt, and StackStorm open source automation tools can be used to automate network devices Key tools and technologies required for a Continuous Integration (CI) pipeline in network operations

Learning WordPress REST API - Sufyan bin Uzayr 2016-07-28

A practical tutorial to get you up and running with the revolutionary WordPress REST API About This Book Learn how to run the latest WordPress REST API with various platforms Create exciting apps and manage non-WordPress content with them Secure, export, and manage your data through illustrative examples Who This Book Is For This book is for WordPress developers and designers who want to get a complete practical understanding of the WordPress REST API and leverage it to create fully-featured web apps. What You Will Learn Use the WordPress REST API to read, write, and

edit posts Create and work with metadata using the WordPress REST API Work with taxonomies using the REST API Add custom routes and build apps using the WordPress REST API Process requests and integrate with external applications and frameworks Make your WordPress projects ready for the RESTful API standard In Detail The WordPress REST API is a recent innovation that has the potential to unlock several new opportunities for WordPress developers. It can help you integrate with technologies outside of WordPress, as well as offer great flexibility when developing themes and plugins for WordPress. As such, the REST API can make developers' lives easier. The book begins by covering the basics of the REST API and how it can be used along with WordPress. Learn how the REST API interacts with WordPress, allowing you to copy posts and modify post metadata. Move on to get an understanding of taxonomies and user roles are in WordPress and how to use them with the WordPress REST API. Next, find out how to edit and process forms with AJAX and how to create custom routes and functions. You will create a fully-functional single page web app using a WordPress site and the REST API. Lastly, you will see how to deal with the REST API in future versions and will use it to interact it with third-party services. By the end of the book, you will be able to work with the WordPress REST API to build web applications. Style and Approach A step by step tutorial to explain the new and exciting world of the WordPress REST API with the real world examples.

Designing Web APIs - Brenda Jin 2018-08-29

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

Building REST APIs with Flask - Kunal Relan
2019-09-12

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 Learn Use 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.

Site Reliability Engineering - Niall Richard

Murphy 2016-03-23

The overwhelming majority of a software system's lifespan is spent in use, not in design or implementation. So, why does conventional wisdom insist that software engineers focus primarily on the design and development of large-scale computing systems? In this collection of essays and articles, key members of Google's Site Reliability Team explain how and why their commitment to the entire lifecycle has enabled the company to successfully build, deploy, monitor, and maintain some of the largest software systems in the world. You'll learn the principles and practices that enable Google engineers to make systems more scalable, reliable, and efficient—lessons directly applicable to your organization. This book is divided into four sections: Introduction—Learn what site reliability engineering is and why it differs from conventional IT industry practices Principles—Examine the patterns, behaviors, and areas of concern that influence the work of a site reliability engineer (SRE)

Practices—Understand the theory and practice of an SRE's day-to-day work: building and operating large distributed computing systems Management—Explore Google's best practices for training, communication, and meetings that your organization can use

Experiences of Test Automation - Dorothy Graham 2012

In this work, over 40 pioneering implementers share their experiences and best practices in 28 case studies. Drawing on their insights, you can avoid the pitfalls associated with test automation, and achieve powerful results on every metric you care about: quality, cost, time to market, usability, and value.

Learn REST APIs: Your Guide to how to Find, Learn, and Connect to the REST APIs that Powers the Internet of Things Revolution. - Tony Gaitatzis 2019-12-07

Learn how REST APIs work. This book will teach you what REST APIs are, why they are useful, and how to use them to build more scalable, faster, more efficient applications. In this book, you will learn: - What is a REST API- How are REST APIs used- Why are REST APIs useful- How REST works with HTTP- Anatomy of a REST Request and Response- Status messages- Best Practices- How to create, read, update, and

delete data- Where to find REST API

Fundamental Approaches to Software Engineering - Esther Guerra 2021-03-20

This open access book constitutes the proceedings of the 24th International Conference on Fundamental Approaches to Software Engineering, FASE 2021, which took place during March 27–April 1, 2021, and was held as part of the Joint Conferences on Theory and Practice of Software, ETAPS 2021. The conference was planned to take place in Luxembourg but changed to an online format due to the COVID-19 pandemic. The 16 full papers presented in this volume were carefully reviewed and selected from 52 submissions. The book also contains 4 Test-Comp contributions.

Build APIs You Won't Hate - Phil Sturgeon 2015-08-12

API development is becoming increasingly common for server-side developers thanks to the rise of front-end JavaScript frameworks, iPhone applications, and API-centric architectures. It might seem like grabbing stuff from a data source and shoving it out as JSON would be easy, but surviving changes in business logic, database schema updates, new features, or deprecated endpoints can be a nightmare. After finding many of the existing resources for API development to be lacking, Phil learned a lot of things the hard way through years of trial and error. This book aims to condense that experience, taking examples and explanations further than the trivial apples and pears nonsense tutorials often provide. By passing on some best practices and general good advice you can hit the ground running with API development, combined with some horror stories and how they were overcome/avoided/averted. This book will discuss the theory of designing and building APIs in any language or framework, with this theory applied in PHP-based examples.

Complete Guide to Test Automation - Arnon Axelrod 2018-09-22

Rely on this robust and thorough guide to build and maintain successful test automation. As the software industry shifts from traditional waterfall paradigms into more agile ones, test automation becomes a highly important tool that allows your development teams to deliver software at an ever-increasing pace without compromising quality. Even though it may seem

trivial to automate the repetitive tester's work, using test automation efficiently and properly is not trivial. Many test automation endeavors end up in the "graveyard" of software projects. There are many things that affect the value of test automation, and also its costs. This book aims to cover all of these aspects in great detail so you can make decisions to create the best test automation solution that will not only help your test automation project to succeed, but also allow the entire software project to thrive. One of the most important details that affects the success of the test automation is how easy it is to maintain the automated tests. Complete Guide to Test Automation provides a detailed hands-on guide for writing highly maintainable test code. What You'll Learn Know the real value to be expected from test automation Discover the key traits that will make your test automation project succeed Be aware of the different considerations to take into account when planning automated tests vs. manual tests Determine who should implement the tests and the implications of this decision Architect the test project and fit it to the architecture of the tested application Design and implement highly reliable automated tests Begin gaining value from test automation earlier Integrate test automation into the business processes of the development team Leverage test automation to improve your organization's performance and quality, even without formal authority Understand how different types of automated tests will fit into your testing strategy, including unit testing, load and performance testing, visual testing, and more Who This Book Is For Those involved with software development such as test automation leads, QA managers, test automation developers, and development managers. Some parts of the book assume hands-on experience in writing code in an object-oriented language (mainly C# or Java), although most of the content is also relevant for nonprogrammers.

Continuous Delivery - Jez Humble 2010-07-27

Winner of the 2011 Jolt Excellence Award! Getting software released to users is often a painful, risky, and time-consuming process. This groundbreaking new book sets out the principles and technical practices that enable rapid, incremental delivery of high quality, valuable

new functionality to users. Through automation of the build, deployment, and testing process, and improved collaboration between developers, testers, and operations, delivery teams can get changes released in a matter of hours—sometimes even minutes—no matter what the size of a project or the complexity of its code base. Jez Humble and David Farley begin by presenting the foundations of a rapid, reliable, low-risk delivery process. Next, they introduce the “deployment pipeline,” an automated process for managing all changes, from check-in to release. Finally, they discuss the “ecosystem” needed to support continuous delivery, from infrastructure, data and configuration management to governance. The authors introduce state-of-the-art techniques, including automated infrastructure management and data migration, and the use of virtualization. For each, they review key issues, identify best practices, and demonstrate how to mitigate risks. Coverage includes

- Automating all facets of building, integrating, testing, and deploying software
- Implementing deployment pipelines at team and organizational levels
- Improving collaboration between developers, testers, and operations
- Developing features incrementally on large and distributed teams
- Implementing an effective configuration management strategy
- Automating acceptance testing, from analysis to implementation
- Testing capacity and other non-functional requirements
- Implementing continuous deployment and zero-downtime releases
- Managing infrastructure, data, components and dependencies
- Navigating risk management, compliance, and auditing

Whether you’re a developer, systems administrator, tester, or manager, this book will help your organization move from idea to release faster than ever—so you can deliver value to your business rapidly and reliably.

RESTful Web APIs - Leonard Richardson
2013-09-12

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
The UFT API Testing Manifesto - Joe Colantonio
2014-10-01

Want to learn HP's new UFT API functionality as fast as possible? With the release of UFT API testing, I felt most people who were new to the product would be looking for a resource to help get them up to speed quickly. Also, I believe that with the industry-wide adoption of Agile's development process, the need for test automation engineers to understand and be able to create API level test has become critical. This book is what I wished I had when I first began using UFT API testing. I'm adopting a "hands-on" approach, and have tried to include practical examples and pithy explanations for all the concepts presented. This is not meant to be an exhaustive look at every aspect of UFT API but rather to serve as a quick-start workbook. Hopefully, this book will save you some time (and headaches) by painlessly getting you up to speed on UFT API testing. I've been using HP Service Test since its initial 11.0 release. There was little documentation and next to zero information on the web to help me get started. I decided to change that by regularly sharing information, including tips and tricks for service test and other automation tools, on my blog, <http://www.joecolantonio.com>.

[Cracking Spring Microservices Interviews](#) - Munish Chandel
2018-02-28

This ebook discusses 100 plus real problems and their solutions for microservices architecture

based on Spring Boot, Spring Cloud, Cloud Native Applications. It covers core concepts of microservices architecture, various design patterns, interview questions & answers, security in microservices, testing strategies and best practices in distributed system design. Table of Contents: 1. Core concepts related Spring powered microservices architecture 2. Introduction to Spring Boot, Spring Cloud, Cloud Native Applications, Netflix OSS 3. Design Patterns in microservices architecture - API Gateway, Hystrix, etc. 4. 100 plus Interview Questions 5. Security - OAuth2 and JWT 6. Testing Strategies in microservices architecture 7. Best Practices and common pitfalls

"Dear Evil Tester" - Alan Richardson 2016-03-04

Are you in charge of your own testing? Do you have the advice you need to advance your test approach? "Dear Evil Tester" contains advice about testing that you won't hear anywhere else. "Dear Evil Tester" is a three pronged publication designed to: -provoke not placate, -make you react rather than relax, -help you laugh not languish. Starting gently with the laugh out loud Agony Uncle answers originally published in 'The Testing Planet'. "Dear Evil Tester" then provides new answers, to never before published questions, that will hit your beliefs where they change. Before presenting you with essays that will help you unleash your own inner Evil Tester. With advice on automating, communication, talking at conferences, psychotherapy for testers, exploratory testing, tools, technical testing, and more. Dear Evil Tester randomly samples the Software Testing stomping ground before walking all over it. "Dear Evil Tester" is a revolutionary testing book for the mind which shows you an alternative approach to testing built on responsibility, control and laughter. Read what our early reviewers had to say:

"Wonderful stuff there. Real deep." Rob Sabourin, @RobertASabourin Author of "I Am a Bug" "The more you know about software testing, the more you will find to amuse you." Dot Graham, @dorothygraham Author of "Experiences of Test Automation" "laugh-out-loud episodes" Paul Gerrard, @paul_gerrard Author of "The Tester's Pocketbook" "A great read for every Tester." Andy Glover, @cartoontester Author of "Cartoon Tester"

The Art of Lean Software Development - Curt

Hibbs 2009-01-15

This succinct book explains how you can apply the practices of Lean software development to dramatically increase productivity and quality. Based on techniques that revolutionized Japanese manufacturing, Lean principles are being applied successfully to product design, engineering, the supply chain, and now software development. With *The Art of Lean Software Development*, you'll learn how to adopt Lean practices one at a time rather than taking on the entire methodology at once. As you master each practice, you'll see significant, measurable results. With this book, you will: Understand Lean's origins from Japanese industries and how it applies to software development Learn the Lean software development principles and the five most important practices in detail Distinguish between the Lean and Agile methodologies and understand their similarities and differences Determine which Lean principles you should adopt first, and how you can gradually incorporate more of the methodology into your process Review hands-on practices, including descriptions, benefits, trade-offs, and roadblocks Learn how to sell these principles to management

The Art of Lean Software Development is ideal for busy people who want to improve the development process but can't afford the disruption of a sudden and complete transformation. The Lean approach has been yielding dramatic results for decades, and with this book, you can make incremental changes that will produce immediate benefits. "This book presents Lean practices in a clear and concise manner so readers are motivated to make their software more reliable and less costly to maintain. I recommend it to anyone looking for an easy-to-follow guide to transform how the developer views the process of writing good software."-- Bryan Wells, Boeing Intelligence & Security Systems Mission System "If you're new to Lean software development and you're not quite sure where to start, this book will help get your development process going in the right direction, one step at a time."-- John McClenning, software development lead, Aclara

Rest API Interview Questions and Answers - Anand Hooda 2019-10-02

Rest API Interview Questions & Answers book Explain 300 Realtime Rest Assured Automation

testing Interview questions with Answer in a practical Way. This book Explain Followings:1)77 Basic Rest Assured Interview Questions.2)42 GET Call Interview Questions.3)50 POST Call Interview Questions.4)50 PUT Call Interview Questions.5)46 PATCH Call Interview Questions.6)20 DELETE Call Interview Questions.7)15+ Differences Interview Questions.

REST API Design Rulebook - Mark Masse
2011-10-25

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.

Service-Oriented Computing - Hakim Hacid
2021-12-19

This book constitutes the proceedings of the 19th International Conference on Service-Oriented Computing, ICSOC 2020, which is held virtually in November 2021. The 29 full, 28 short, and 3 vision papers included in this volume were carefully reviewed and selected from 189 submissions. They were organized in topical sections named: Blockchains and smart contracts, Architectures, microservices and APIs, Applications, Internet-of-Things, crowdsourced, social, and conversational services, Service composition and recommendation, Cloud computing, and Edge computing.

RESTful API Design - Matthias Biehl 2016-08-29
Looking for Best Practices for RESTful APIs? This book is for you! Why? Because this book is packed with practical experience on what works best for RESTful API Design. You want to design APIs like a Pro? Use API description languages to both design APIs and develop APIs efficiently. The book introduces the two most common API description languages RAML, OpenAPI, and Swagger. Your company cares about its customers? Learn API product management with a customer-centric design and development approach for APIs. Learn how to manage APIs as a product and how to follow an API-first approach. Build APIs your customers love! You want to manage the complete API lifecycle? An API development methodology is proposed to

guide you through the lifecycle: API inception, API design, API development, API publication, API evolution, and maintenance. You want to build APIs right? This book shows best practices for REST design, such as the correct use of resources, URIs, representations, content types, data formats, parameters, HTTP status codes, and HTTP methods. Your APIs connect to legacy systems? The book shows best practices for connecting APIs to existing backend systems. Your APIs connect to a mesh of microservices? The book shows the principles for designing APIs for scalable, autonomous microservices. You expect lots of traffic on your API? The book shows you how to achieve high performance, availability and maintainability. You want to build APIs that last for decades? We study API versioning, API evolution, backward- and forward-compatibility and show API design patterns for versioning. The API-University Series is a modular series of books on API-related topics. Each book focuses on a particular API topic, so you can select the topics within APIs, which are relevant for you.

Graph Algorithms - Mark Needham 2019-05-16

Discover how graph algorithms can help you leverage the relationships within your data to develop more intelligent solutions and enhance your machine learning models. You'll learn how graph analytics are uniquely suited to unfold complex structures and reveal difficult-to-find patterns lurking in your data. Whether you are trying to build dynamic network models or forecast real-world behavior, this book illustrates how graph algorithms deliver value—from finding vulnerabilities and bottlenecks to detecting communities and improving machine learning predictions. This practical book walks you through hands-on examples of how to use graph algorithms in Apache Spark and Neo4j—two of the most common choices for graph analytics. Also included: sample code and tips for over 20 practical graph algorithms that cover optimal pathfinding, importance through centrality, and community detection. Learn how graph analytics vary from conventional statistical analysis Understand how classic graph algorithms work, and how they are applied Get guidance on which algorithms to use for different types of questions Explore algorithm examples with working code

and sample datasets from Spark and Neo4j See how connected feature extraction can increase machine learning accuracy and precision Walk through creating an ML workflow for link prediction combining Neo4j and Spark

[Domain-driven Design](#) - Eric Evans 2004

Describes ways to incorporate domain modeling into software development.

Selenium Simplified - Alan John Richardson 2012

The updated second edition of the popular tutorial guide to automated testing. Selenium is one of the most popular open-source automated testing tools available today. Understanding Selenium-RC and writing automated tests in a programming language are sought after skills on the job market and a great way of maximising the benefit from automated testing. Contrary to the beliefs of many testers, learning to code does not have to be complicated or hard. "Selenium Simplified" takes you through the process of installing and learning to use all the basic tools needed to write automated tests using Java as the programming language. Written in a tutorial style, this book helps you learn to code even if you haven't programmed before. No time is wasted on the theory of automation or padding about the tools. This book focuses on the practical knowledge needed to automate tests for production systems.

Pro RESTful APIs - Sanjay Patni 2017-03-20

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.

[BDD in Action](#) - John Smart 2014-09-29

Summary BDD in Action teaches you the Behavior-Driven Development model and shows you how to integrate it into your existing development process. First you'll learn how to apply BDD to requirements analysis to define features that focus your development efforts on underlying business goals. Then, you'll discover how to automate acceptance criteria and use tests to guide and report on the development process. Along the way, you'll apply BDD principles at the coding level to write more maintainable and better documented code. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology You can't write good software if you don't understand what it's supposed to do. Behavior-Driven Development (BDD) encourages teams to use conversation and concrete examples to build up a shared understanding of how an application should work and which features really matter. With an emerging body of best practices and sophisticated new tools that assist in requirement analysis and test automation, BDD has become a hot, mainstream practice. About the Book BDD in Action teaches you BDD principles and practices and shows you how to integrate them into your existing development process, no matter what language you use. First, you'll apply BDD to requirements analysis so you can focus your development efforts on underlying business goals. Then, you'll discover how to automate acceptance criteria and use tests to guide and report on the development process. Along the way, you'll apply BDD principles at the coding level to write more maintainable and better documented code. No prior experience with BDD is required. What's Inside BDD theory and practice How BDD will affect your team BDD for acceptance, integration, and unit testing Examples in Java, .NET, JavaScript, and more Reporting and living documentation About the Author John Ferguson Smart is a specialist in BDD, automated testing, and software lifecycle development optimization. Table of Contents PART 1: FIRST STEPS Building software that makes a difference BDD—the whirlwind tour PART 2: WHAT DO I

WANT? DEFINING REQUIREMENTS USING BDD Understanding the business goals: Feature Injection and related techniques Defining and illustrating features From examples to executable specifications Automating the scenarios PART 3: HOW DO I BUILD IT? CODING THE BDD WAY From executable specifications to rock-solid automated acceptance tests Automating acceptance criteria for the UI layer Automating acceptance criteria for non-UI requirements BDD and unit testing PART 4: TAKING BDD FURTHER Living Documentation: reporting and project management BDD in the build process The Way of the Web Tester - Jonathan Rasmusson 2016-09-22

This book is for everyone who needs to test the web. As a tester, you'll automate your tests. As a developer, you'll build more robust solutions. And as a team, you'll gain a vocabulary and a means to coordinate how to write and organize automated tests for the web. Follow the testing pyramid and level up your skills in user interface testing, integration testing, and unit testing. Your new skills will free you up to do other, more important things while letting the computer do the one thing it's really good at: quickly running thousands of repetitive tasks. This book shows you how to do three things: How to write really good automated tests for the web. How to pick and choose the right ones. * How to explain, coordinate, and share your efforts with others. If you're a traditional software tester who has never written an automated test before, this is the perfect book for getting started. Together, we'll go through everything you'll need to start writing your own tests. If you're a developer, but haven't thought much about testing, this book will show you how to move fast without breaking stuff. You'll test RESTful web services and legacy systems, and see how to organize your tests. And if you're a team lead, this is the Rosetta Stone you've been looking for. This book will help you bridge that testing gap between your developers and your testers by giving your team a model to discuss automated testing, and most importantly, to coordinate their efforts. The Way of the Web Tester is packed with cartoons, graphics, best practices, war stories, plenty of humor, and hands-on tutorial exercises that will get you

doing the right things, the right way.

Selenium Framework Design in Data-Driven Testing - Carl Cocchiaro 2018-01-23

Take a deep dive into building data-driven test frameworks using Selenium WebDriver Key Features A comprehensive guide to designing data-driven test frameworks using the Selenium 3 WebDriver API, AppiumDriver API, Java-Bindings, and TestNG Learn how to use Selenium Page Object Design Patterns and D.R.Y. (Don't Repeat Yourself) Approaches to software development in automated testing Discover the Selenium Grid Architecture and build your own grid for browser and mobile devices Use third party tools and services like ExtentReports for results processing, reporting, and SauceLabs for cloud-based test services Book Description The Selenium WebDriver 3.x Technology is an open source API available to test both Browser and Mobile applications. It is completely platform independent in that tests built for one browser or mobile device, will also work on all other browsers and mobile devices. Selenium supports all major development languages which allow it to be tied directly into the technology used to develop the applications. This guide will provide a step-by-step approach to designing and building a data-driven test framework using Selenium WebDriver, Java, and TestNG. The book starts off by introducing users to the Selenium Page Object Design Patterns and D.R.Y Approaches to Software Development. In doing so, it covers designing and building a Selenium WebDriver framework that supports both Browser and Mobile Devices. It will lead the user through a journey of architecting their own framework with a scalable driver class, Java utility classes, JSON Data Provider, Data-Driven Test Classes, and support for third party tools and plugins. Users will learn how to design and build a Selenium Grid from scratch to allow the framework to scale and support different browsers, mobile devices, versions, and platforms, and how they can leverage third party grids in the Cloud like SauceLabs. Other topics covered include designing abstract base and sub-classes, inheritance, dual-driver support, parallel testing, testing multi-branded applications, best practices for using locators, and data encapsulation. Finally, you will be presented with a sample fully-functional

framework to get them up and running with the Selenium WebDriver for browser testing. By the end of the book, you will be able to design your own automation testing framework and perform data-driven testing with Selenium WebDriver. What you will learn Design the Selenium Driver Class for local, remote, and third party grid support Build Page Object Classes using the Selenium Page Object Model Develop Data-Driven Test Classes using the TestNG framework Encapsulate Data using the JSON Protocol Build a Selenium Grid for RemoteWebDriver Testing Construct Utility Classes for use in Synchronization, File I/O, Reporting and Test Listener Classes Run the sample framework and see the benefits of a live data-driven framework in real-time Who this book is for This book is intended for software quality assurance/testing professionals, software project managers, or software developers with prior experience in using Selenium and Java to test web-based applications. This book is geared towards the quality assurance and development professionals responsible for designing and building enterprise-based testing frameworks. The user should have a working knowledge of the Java, TestNG, and Selenium technologies

RESTful Web Services - Leonard Richardson
2008-12-17

"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. Java for Testers - MR Alan J Richardson

2015-08-06

This book is for people who want to learn Java. Particularly people on a team that want to learn Java, but who aren't going to be coding the main Java application i.e. Testers, Managers, Business Analysts, Front End Developers, Designers, etc. If you already know Java then this book may not be for you. This book is aimed at beginners. Designed to help the reader get started fast, the book is easy to follow, and has examples related to testing. You can find the companion web site for the book at <http://javafortesters.com> The book covers 'just enough' to get people writing tests and abstraction layers. For example, the book cover the basics of Inheritance, but doesn't really cover Interfaces in detail. We explain the concept of Interfaces, because we need to know it to understand Collections, but not how to write them. Why? Because the book covers enough to get you started, and working. But not overload the reader. Once you are on your way, and have gained some experience. You should

have the basic knowledge to understand the additional concepts. Why 'for testers'? Java Developers coding production applications in Java need to learn Java differently from other people on the team. Throughout the author's career, he has have written thousands of lines of Java code, but has rarely had to compile the code into an application. Yet, when we learn Java from most books, one of the first things we learn is 'javac' and the 'main' method and working from the command line. And this is confusing. Most of the code the author writes is wrapped up in a JUnit @Test method. The author has trained many people to write automation in Java, and everytime he has taught Java to testers or other people on the team, we start with a JUnit @Test method and run tests from the IDE. Testers, and other people on the team use java differently. This book provides a different order and approach to learning Java. You can find the source code for all examples and exercises used in the book over on github: <https://github.com/eviltester/javaForTestersCode>

[//github.com/eviltester/javaForTestersCode](https://github.com/eviltester/javaForTestersCode)

Succeeding with Agile - Mike Cohn 2010

Provides recommendations and case studies to help with the implementation of Scrum.

[Practical Security Automation and Testing](#) - Tony Hsiang-Chih Hsu 2019-02-04

Your one stop guide to automating infrastructure security using DevOps and DevSecOps Key FeaturesSecure and automate techniques to protect web, mobile or cloud servicesAutomate secure code inspection in C++, Java, Python, and JavaScriptIntegrate security testing with automation frameworks like fuzz, BDD, Selenium and Robot FrameworkBook Description Security automation is the automatic handling of software security assessments tasks. This book helps you to build your security automation framework to scan for vulnerabilities without human intervention. This book will teach you to adopt security automation techniques to continuously improve your entire software development and security testing. You will learn to use open source tools and techniques to integrate security testing tools directly into your CI/CD framework. With this book, you will see how to implement security inspection at every layer, such as secure code inspection, fuzz testing, Rest API, privacy, infrastructure security, and web UI testing. With the help of practical examples, this book will

teach you to implement the combination of automation and Security in DevOps. You will learn about the integration of security testing results for an overall security status for projects. By the end of this book, you will be confident implementing automation security in all layers of your software development stages and will be able to build your own in-house security automation platform throughout your mobile and cloud releases. What you will learnAutomate secure code inspection with open source tools and effective secure code scanning suggestionsApply security testing tools and automation frameworks to identify security vulnerabilities in web, mobile and cloud servicesIntegrate security testing tools such as OWASP ZAP, NMAP, SSLyze, SQLMap, and OpenSCAPImplement automation testing techniques with Selenium, JMeter, Robot Framework, Gauntlt, BDD, DDT, and Python unittestExecute security testing of a Rest API Implement web application security with open source tools and script templates for CI/CD integrationIntegrate various types of security testing tool results from a single project into one dashboardWho this book is for The book is for software developers, architects, testers and QA engineers who are looking to leverage automated security testing techniques.

You Don't Know JS: Scope & Closures - Kyle Simpson 2014-03-10

No matter how much experience you have with JavaScript, odds are you don't fully understand the language. This concise yet in-depth guide takes you inside scope and closures, two core concepts you need to know to become a more efficient and effective JavaScript programmer. You'll learn how and why they work, and how an understanding of closures can be a powerful part of your development skillset. Like other books in the "You Don't Know JS" series, Scope and Closures dives into trickier parts of the language that many JavaScript programmers simply avoid. Armed with this knowledge, you can achieve true JavaScript mastery. Learn about scope, a set of rules to help JavaScript engines locate variables in your code Go deeper into nested scope, a series of containers for variables and functions Explore function- and block-based scope, "hoisting", and the patterns and benefits of scope-based hiding Discover how

to use closures for synchronous and asynchronous tasks, including the creation of JavaScript libraries

JUnit Recipes - Scott Stirling 2004-06-30

When testing becomes a developer's habit good things tend to happen--good productivity, good code, and good job satisfaction. If you want some of that, there's no better way to start your testing habit, nor to continue feeding it, than with "JUnit Recipes," In this book you will find one hundred and thirty-seven solutions to a range of problems, from simple to complex, selected for you by an experienced developer and master tester. Each recipe follows the same organization giving you the problem and its background before discussing your options in solving it. JUnit - the unit testing framework for Java - is simple to use, but some code can be tricky to test. When you're facing such code you will be glad to have this book. It is a how-to reference full of practical advice on all issues of testing, from how to name your test case classes to how to test complicated J2EE applications. Its valuable advice includes side matters that can have a big payoff, like how to organize your test data or how to manage expensive test resources. What's Inside: - Getting started with JUnit - Recipes for: servlets JSPs EJBs Database code much more - Difficult-to-test designs, and how to fix them - How testing saves time - Choose a JUnit extension: HTMLUnit XMLUnit ServletUnit EasyMock and more!

[API Testing and Development with Postman](#) -

Dave Westerveld 2021-05-07

Explore the world of APIs and learn how to integrate them with production-ready applications using Postman and the Newman CLI Key Features Learn the tenets of effective API testing and API design Gain an in-depth understanding of the various features Postman has to offer Know when and how to use Postman for creating high-quality APIs for software and

web apps Book Description Postman enables the exploration and testing of web APIs, helping testers and developers figure out how an API works. With Postman, you can create effective test automation for any APIs. If you want to put your knowledge of APIs to work quickly, this practical guide to using Postman will help you get started. The book provides a hands-on approach to learning the implementation and associated methodologies that will have you up and running with Postman in no time. Complete with step-by-step explanations of essential concepts, practical examples, and self-assessment questions, this book begins by taking you through the principles of effective API testing. A combination of theory coupled with real-world examples will help you learn how to use Postman to create well-designed, documented, and tested APIs. You'll then be able to try some hands-on projects that will teach you how to add test automation to an already existing API with Postman, and guide you in using Postman to create a well-designed API from scratch. By the end of this book, you'll be able to use Postman to set up and run API tests for any API that you are working with. What you will learn Find out what is involved in effective API testing Use data-driven testing in Postman to create scalable API tests Understand what a well-designed API looks like Become well-versed with API terminology, including the different types of APIs Get to grips with performing functional and non-functional testing of an API Discover how to use industry standards such as OpenAPI and mocking in Postman Who this book is for The book is for software testing professionals and software developers looking to improve product and API quality through API test automation. You will find this book useful if understand APIs and want to build your skills for creating, testing, and documenting APIs. The book assumes beginner-level knowledge of JavaScript and API development.