

The Cucumber For Java Book Behaviour Driven Development For Testers And Developers

Build Java-based microservices architecture using the Spring Boot 3 framework by evolving an application from a small monolith to an event-driven architecture composed of several services. This revised book follows an incremental approach in teaching the structure of microservices, test-driven development, Eureka, Ribbon, Zuul, and end-to-end tests with Cucumber. This updated book now covers what's been added to the new Spring Boot 3 release, including support for the latest Java SE LTS; changes to the Stream Editor UI; Maven preemptive authentication; building Docker images using cloud-native build packs; building layered jars for optimized Docker images; E2E traceability for configuration properties; many dependency upgrades; support for Spring Data Neumann; and more. Author Moises Macero uses a pragmatic approach to explain the benefits of using this type of software architecture, instead of keeping you distracted with theoretical concepts. He covers some of the state-of-the-art techniques in computer programming, from a practical point of view. You'll focus on what's important, starting with the minimum viable product but keeping the flexibility to evolve it. What You Will Learn Build microservices with Spring Boot 3 Use event-driven architecture and messaging with RabbitMQ Master service discovery with Eureka and load balancing with Ribbon Route requests with Zuul as your API gateway Write end-to-end tests for an event-driven architecture using Cucumber Carry out continuous integration and deployment Who This Book Is For Those with at least some prior experience with Java programming. Some prior exposure to Spring Boot recommended but not required.

With Acceptance Test-Driven Development (ATDD), business customers, testers, and developers can collaborate to produce testable requirements that help them build higher quality software more rapidly. However, ATDD is still widely misunderstood by many practitioners. ATDD by Example is the first practical, entry-level, hands-on guide to implementing and successfully applying it. ATDD pioneer Markus Gärtner walks readers step by step through deriving the right systems from business users, and then implementing fully automated, functional tests that accurately reflect business requirements, are intelligible to stakeholders, and promote more effective development. Through two end-to-end case studies, Gärtner demonstrates how ATDD can be applied using diverse frameworks and languages. Each case study is accompanied by an extensive set of artifacts, including test automation classes, step definitions, and full sample implementations. These realistic examples illuminate ATDD's fundamental principles, show how ATDD fits into the broader development process, highlight tips from Gärtner's extensive experience, and identify crucial pitfalls to avoid. Readers will learn to Master the thought processes associated with successful ATDD implementation Use ATDD with Cucumber to describe software in ways businesspeople can understand Test web pages using ATDD tools Bring ATDD to Java with the FitNesse wiki-based acceptance test framework Use examples more effectively in Behavior-Driven Development (BDD) Specify software collaboratively through innovative workshops Implement more user-friendly and collaborative test automation Test more cleanly, listen to test results, and refactor tests for greater value If you're a tester, analyst, developer, or project manager, this book offers a concrete foundation for achieving real benefits with ATDD now—and it will help you reap even more value as you gain experience.

JSON is becoming the backbone for meaningful data interchange over the internet. This format is now supported by an entire ecosystem of standards, tools, and technologies for building truly elegant, useful, and efficient applications. With this hands-on guide, author and architect Tom Marrs shows you how to build enterprise-class applications and services by leveraging JSON tooling and message/document design. JSON at Work provides application architects and developers with guidelines, best practices, and use cases, along with lots of real-world examples and code samples. You'll start with a comprehensive JSON overview, explore the JSON ecosystem, and then dive into JSON's use in the enterprise. Get acquainted with JSON basics and learn how to model JSON data Learn how to use JSON with Node.js, Ruby on Rails, and Java Structure JSON documents with JSON Schema to design and test APIs Search the contents of JSON documents with JSON Search tools Convert JSON documents to other data formats with JSON Transform tools Compare JSON-based hypermedia formats, including HAL and jsonapi Leverage MongoDB to store and access JSON documents Use Apache Kafka to exchange JSON-based messages between services

Teams working on the JVM can now say goodbye forever to misunderstood requirements, tedious manual acceptance tests, and out-of-date documentation. Cucumber - the popular, open-source tool that helps teams communicate more effectively with their customers - now has a Java version, and our bestselling Cucumber Book has been updated to match. The Cucumber for Java Book has the same great advice about how to deliver rock-solid applications collaboratively, but with all code completely rewritten in Java. New chapters cover features unique to the Java version of Cucumber, and reflect insights from the Cucumber team since the original book was published. Until now it's been difficult for teams developing Java applications to learn how to benefit from Behaviour-Driven Development (BDD). This book changes all that by describing in detail how to use Cucumber to harness the power of plain language specifications in your development process. In part 1, you'll discover how to use Cucumber's Gherkin DSL to describe the behavior your customers want from the system. You'll also learn how to write Java code that interprets those plain language specifications and checks them against your application. Part 2 guides you through a worked example, using Spring, MySQL, and Jetty. Enhanced chapters teach you how to use Selenium to drive your application and handle asynchronous Ajax calls, and new chapters cover Dependency Injection (DI) and advanced techniques to help keep your test suites fast. Part 3 shows you how to integrate Cucumber with your Continuous Integration (CI) system, work with a REST web service, and even use BDD with legacy applications. Written by the creator of Cucumber and two of its most experienced users and contributors, The Cucumber for Java Book is an authoritative guide that will give you and your team all the knowledge you need to start using Cucumber with confidence.

Written by the creator of SpecFlow and the author of The Cucumber for Java Book, this book provides inside information on how to get the most out of the discovery phase of Behaviour Driven Development (BDD). This practical guide demonstrates good collaboration techniques, illustrated by concrete examples. This book is written for everyone involved in the specification and delivery of software (including product owners, business analysts, developers, and testers). The book starts by explaining the reasons BDD exists in the first place and describes techniques for getting the most out of collaboration between business and delivery team members. This is the first in the BDD Books series that will guide you through the entire development process, including specific technical practices needed to successfully drive development using collaboratively-authored specifications and living documentation.

Big Java: Early Objects, 7th Edition focuses on the essentials of effective learning and is suitable for a two-semester introduction to programming sequence. This text requires no prior programming experience and only a modest amount of high school algebra. Objects and classes from the standard library are used where appropriate in early sections with coverage on object-oriented design starting in Chapter 8. This gradual approach allows students to use objects throughout their study of the core algorithmic topics, without teaching bad habits that must be un-learned later. The second half covers algorithms and data structures at a level suitable for beginning students. Choosing the enhanced eText format allows students to develop their coding skills using targeted, progressive interactivities designed to integrate with the eText. All sections include built-in activities, open-ended review exercises, programming exercises, and projects to help students practice programming and build confidence. These activities go far beyond simplistic multiple-choice questions and animations. They have been designed to guide students along a learning path for mastering the complexities of programming. Students demonstrate comprehension of programming structures, then practice programming with simple steps in scaffolded settings, and finally write complete, automatically graded

programs. The perpetual access VitalSource Enhanced eText, when integrated with your school's learning management system, provides the capability to monitor student progress in VitalSource SCORECenter and track grades for homework or participation. *Enhanced eText and interactive functionality available through select vendors and may require LMS integration approval for SCORECenter.

Summary Gradle in Action is a comprehensive guide to end-to-end project automation with Gradle. Starting with the basics, this practical, easy-to-read book discusses how to build a full-fledged, real-world project. Along the way, it touches on advanced topics like testing, continuous integration, and monitoring code quality. You'll also explore tasks like setting up your target environment and deploying your software. About the Technology Gradle is a general-purpose build automation tool. It extends the usage patterns established by its forerunners, Ant and Maven, and allows builds that are expressive, maintainable, and easy to understand. Using a flexible Groovy-based DSL, Gradle provides declarative and extendable language elements that let you model your project's needs the way you want. About the Book Gradle in Action is a comprehensive guide to end-to-end project automation with Gradle. Starting with the basics, this practical, easy-to-read book discusses how to establish an effective build process for a full-fledged, real-world project. Along the way, it covers advanced topics like testing, continuous integration, and monitoring code quality. You'll also explore tasks like setting up your target environment and deploying your software. The book assumes a basic background in Java, but no knowledge of Groovy. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. Whats Inside A comprehensive guide to Gradle Practical, real-world examples Transitioning from Ant and Maven In-depth plugin development Continuous delivery with Gradle About the Author Benjamin Muschko is a member of the Gradleware engineering team and the author of several popular Gradle plugins. Table of Contents PART 1 INTRODUCING GRADLE Introduction to project automation Next-generation builds with Gradle Building a Gradle project by example PART 2 MASTERING THE FUNDAMENTALS Build script essentials Dependency management Multiproject builds Testing with Gradle Extending Gradle Integration and migration PART 3 FROM BUILD TO DEPLOYMENT IDE support and tooling Building polyglot projects Code quality management and monitoring Continuous integration Artifact assembly and publishing Infrastructure provisioning and deployment A comprehensive, hands-on guide on unit testing framework for Java programming language About This Book In-depth coverage of Jupiter, the new programming and extension model provided by JUnit 5 Integration of JUnit 5 with other frameworks such as Mockito, Spring, Selenium, Cucumber, and Docker Best practices for writing meaningful Jupiter test cases Who This Book Is For This book is for Java software engineers and testers. If you are a Java developer who is keen on improving the quality of your code and building world class applications then this book is for you. Prior experience of the concepts of automated testing will be helpful. What You Will Learn The importance of software testing and its impact on software quality The options available for testing Java applications The architecture, features and extension model of JUnit 5 Writing test cases using the Jupiter programming model How to use the latest and advanced features of JUnit 5 Integrating JUnit 5 with existing third-party frameworks Best practices for writing meaningful JUnit 5 test cases Managing software testing activities in a living software project In Detail When building an application it is of utmost importance to have clean code, a productive environment and efficient systems in place. Having automated unit testing in place helps developers to achieve these goals. The JUnit testing framework is a popular choice among Java developers and has recently released a major version update with JUnit 5. This book shows you how to make use of the power of JUnit 5 to write better software. The book begins with an introduction to software quality and software testing. After that, you will see an in-depth analysis of all the features of Jupiter, the new programming and extension model provided by JUnit 5. You will learn how to integrate JUnit 5 with other frameworks such as Mockito, Spring, Selenium, Cucumber, and Docker. After the technical features of JUnit 5, the final part of this book will train you for the daily work of a software tester. You will learn best practices for writing meaningful tests. Finally, you will learn how software testing fits into the overall software development process, and sits alongside continuous integration, defect tracking, and test reporting. Style and approach The book offers definitive and comprehensive coverage of all the Unit testing concepts with JUnit and its features using several real world examples so that readers can put their learning to practice almost immediately. This book is structured in three parts: Software testing foundations (software quality and Java testing) JUnit 5 in depth (programming and extension model of JUnit 5) Software testing in practice (how to write and manage JUnit 5 tests)

Summary Java Testing with Spock teaches you how to use Spock for a wide range of testing use cases in Java. Readers new to Groovy will appreciate the succinct language tutorial that'll give you just enough Groovy to use Spock effectively. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Spock combines the features of tools like JUnit, Mockito, and JBehave into a single powerful Java testing library. With Spock, you use Groovy to write more readable and concise tests. Spock enables seamless integration testing, and with the intuitive Geb library, you can even handle functional testing of web applications. About the Book Java Testing with Spock teaches you how to use Spock for a wide range of testing use cases in Java. You'll start with a quick overview of Spock and work through writing unit tests using the Groovy language. You'll discover best practices for test design as you learn to write mocks, implement integration tests, use Spock's built-in BDD testing tools, and do functional web testing using Geb. Readers new to Groovy will appreciate the succinct language tutorial in chapter 2 that gives you just enough Groovy to use Spock effectively. What's Inside Testing with Spock from the ground up Write mocks without an external library BDD tests your business analyst can read Just enough Groovy to use Spock About the Reader Written for Java developers. Knowledge of Groovy and JUnit is helpful but not required. About the Author Konstantinos Kapelonis is a software engineer who works with Java daily. Table of Contents PART 1 FOUNDATIONS AND BRIEF TOUR OF SPOCK Introducing the Spock testing framework Groovy knowledge for Spock testing A tour of Spock functionality PART 2 STRUCTURING SPOCK TESTS Writing unit tests with Spock Parameterized tests Mocking and stubbing PART 3 SPOCK IN THE ENTERPRISE Integration and functional testing with Spock Spock features for enterprise testing If you're familiar with functional programming basics and want to gain a much deeper understanding, this in-depth guide takes you beyond syntax and demonstrates how you need to think in a new way. Software architect Neal Ford shows intermediate to advanced developers how functional coding allows you to step back a level of abstraction so you can see your programming problem with greater clarity. Each chapter shows you various examples of functional thinking, using numerous code examples from Java 8 and other JVM languages that include functional capabilities. This book may bend your mind, but you'll come away with a much better grasp of functional programming concepts. Understand why many imperative languages are adding functional capabilities Compare functional and imperative solutions to common problems Examine ways to cede control of routine chores to the runtime Learn how memoization and laziness eliminate hand-crafted solutions Explore functional approaches to design patterns and code reuse View real-world examples of functional thinking with Java 8, and in functional architectures and web frameworks Learn the pros and cons of living in a paradigmatically richer world If you're new to functional programming, check out Josh Backfield's book Becoming Functional.

The Pragmatic Programmers classic is back! Freshly updated for modern software development, Pragmatic Unit Testing in Java 8 With JUnit teaches you how to write and run easily maintained unit tests in JUnit with confidence. You'll learn mnemonics to help you know what tests to write, how to remember all the boundary conditions, and what the qualities of a good test are. You'll see how unit tests can pay off by allowing you to keep your system code clean, and you'll learn how to handle the stuff that seems too

tough to test. Pragmatic Unit Testing in Java 8 With JUnit steps you through all the important unit testing topics. If you've never written a unit test, you'll see screen shots from Eclipse, IntelliJ IDEA, and NetBeans that will help you get past the hard part--getting set up and started. Once past the basics, you'll learn why you want to write unit tests and how to effectively use JUnit. But the meaty part of the book is its collected unit testing wisdom from people who've been there, done that on production systems for at least 15 years: veteran author and developer Jeff Langr, building on the wisdom of Pragmatic Programmers Andy Hunt and Dave Thomas. You'll learn: How to craft your unit tests to minimize your effort in maintaining them. How to use unit tests to help keep your system clean. How to test the tough stuff. Memorable mnemonics to help you remember what's important when writing unit tests. How to help your team reap and sustain the benefits of unit testing. You won't just learn about unit testing in theory--you'll work through numerous code examples. When it comes to programming, hands-on is the only way to learn! This book is intended for business and development personnel who want to use Cucumber for behavior-driven development and test automation. Readers with some familiarity with Cucumber will find this book of most benefit. Since the main objective of this book is to create test automation frameworks, previous experience in automation will be helpful.

JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. Summary JUnit is the gold standard for unit testing Java applications. Filled with powerful new features designed to automate software testing, JUnit 5 boosts your productivity and helps avoid debugging nightmares. Whether you're just starting with JUnit or you want to ramp up on the new features, JUnit in Action, Third Edition has you covered. Extensively revised with new code and new chapters, JUnit in Action, Third Edition is an up-to-date guide to smooth software testing. Dozens of hands-on examples illustrate JUnit 5's innovations for dependency injection, nested testing, parameterized tests, and more. Throughout, you'll learn how to use JUnit 5 to automate your testing, for a process that consumes less resources, and gives you more time for developing. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology The JUnit framework is the gold standard for unit testing Java applications—and knowing it is an essential skill for Java developers. The latest version, JUnit 5, is a total overhaul, now supporting modern Java features like Lambdas and Streams. About the book JUnit in Action, Third Edition has been completely rewritten for this release. The book is full of examples that demonstrate JUnit's modern features, including its new architecture; nested, tagged, and dynamic tests; and dependency injection. You'll benefit from author Catalin Tudose's unique "pyramid" testing strategy, which breaks the testing process into layers and sets you on the path to bug-free code creation. What's inside Migrating from JUnit 4 to 5 Effective test automation Test-driven development and behavior-driven development Using mocks for test isolation Connecting JUnit 5 with Maven or Gradle About the reader For intermediate Java developers. About the author Catalin Tudose has a Ph.D. in Computer Science, and over 15 years of experience as a Senior Java Developer and Technical Team Lead. Previous editions were authored by Petar Tahchiev, Felipe Leme, Gary Gregory, and Vincent Massol. Table of Contents PART 1 - JUNIT 1 JUnit jump-start 2 Exploring core JUnit 3 JUnit architecture 4 Migrating from JUnit 4 to JUnit 5 5 Software testing principles PART 2 - DIFFERENT TESTING STRATEGIES 6 Test quality 7 Coarse-grained testing with stubs 8 Testing with mock objects 9 In-container testing PART 3 - WORKING WITH JUNIT 5 AND OTHER TOOLS 10 Running JUnit tests from Maven 3 11 Running JUnit tests from Gradle 6 12 JUnit 5 IDE support 13 Continuous integration with JUnit 5 PART 4 - WORKING WITH MODERN FRAMEWORKS AND JUNIT 5 14 JUnit 5 extension model 15 Presentation-layer testing 16 Testing Spring applications 17 Testing Spring Boot applications 18 Testing a REST API 19 Testing database applications PART 5 - DEVELOPING APPLICATIONS WITH JUNIT 5 20 Test-driven development with JUnit 5 21 Behavior-driven development in JUnit 5 22 Implementing a test pyramid strategy with JUnit 5

Intermediate level, for programmers fairly familiar with Java, but new to the functional style of programming and lambda expressions. Get ready to program in a whole new way. Functional Programming in Java will help you quickly get on top of the new, essential Java 8 language features and the functional style that will change and improve your code. This short, targeted book will help you make the paradigm shift from the old imperative way to a less error-prone, more elegant, and concise coding style that's also a breeze to parallelize. You'll explore the syntax and semantics of lambda expressions, method and constructor references, and functional interfaces. You'll design and write applications better using the new standards in Java 8 and the JDK. Lambda expressions are lightweight, highly concise anonymous methods backed by functional interfaces in Java 8. You can use them to leap forward into a whole new world of programming in Java. With functional programming capabilities, which have been around for decades in other languages, you can now write elegant, concise, less error-prone code using standard Java. This book will guide you through the paradigm change, offer the essential details about the new features, and show you how to transition from your old way of coding to an improved style. In this book you'll see popular design patterns, such as decorator, builder, and strategy, come to life to solve common design problems, but with little ceremony and effort. With these new capabilities in hand, Functional Programming in Java will help you pick up techniques to implement designs that were beyond easy reach in earlier versions of Java. You'll see how you can reap the benefits of tail call optimization, memoization, and effortless parallelization techniques. Java 8 will change the way you write applications. If you're eager to take advantage of the new features in the language, this is the book for you. What you need: Java 8 with support for lambda expressions and the JDK is required to make use of the concepts and the examples in this book.

Use an Approach Inspired by Domain-Driven Design to Build Documentation That Evolves to Maximize Value Throughout Your Development Lifecycle Software documentation can come to life, stay dynamic, and actually help you build better software. Writing for developers, coding architects, and other software professionals, Living Documentation shows how to create documentation that evolves throughout your entire design and development lifecycle. Through patterns, clarifying illustrations, and concrete examples, Cyrille Martraire demonstrates how to use well-crafted artifacts and automation to dramatically improve the value of documentation at minimal extra cost. Whatever your domain, language, or technologies, you don't have to choose between working software and comprehensive, high-quality documentation: you can have both. · Extract and augment available knowledge, and make it useful through living curation · Automate the creation of documentation and diagrams that evolve as knowledge changes · Use development tools to refactor documentation · Leverage documentation to improve software designs · Introduce living documentation to new and legacy environments

Behaviour Driven Development is about writing software that matters. It is an approach to agile software development that takes cues from Test Driven Development, Domain Driven Design, and Acceptance Test Driven Planning. RSpec and Cucumber are the leading Behaviour Driven Development tools in Ruby. RSpec supports Test Driven Development in Ruby through the BDD lens,

keeping your focus on design and documentation while also supporting thorough testing and quick fault isolation. Cucumber, RSpec's steadfast companion, supports Acceptance Test Driven Planning with business-facing, executable requirements documentation that helps to ensure that you are writing relevant software targeted at real business needs. The RSpec Book will introduce you to RSpec, Cucumber, and a number of other tools that make up the Ruby BDD family. Replete with tutorials and practical examples, the RSpec Book will help you get your BDD on, taking you from executable requirements to working software that is clean, well tested, well documented, flexible and highly maintainable.

Think in the Clojure way! Once you're familiar with Clojure, take the next step with extended lessons on the best practices and most critical decisions you'll need to make while developing. Learn how to model your domain with data, transform it with pure functions, manage state, spread your work across cores, and structure apps with components. Discover how to use Clojure in the real world, and unlock the speed and power of this beautiful language on the Java Virtual Machine. Clojure Applied gives you the practical, realistic advice and depth of field that's been missing from your development practice. You want to develop software in the most effective, efficient way possible. This book gives you the answers you've been looking for in friendly, clear language. Dive into the core concepts of Clojure: immutable collections, concurrency, pure functions, and state management. You'll finally get the complete picture you've been looking for, rather than dozens of puzzle pieces you must assemble yourself. First, explore the core concepts of Clojure development: learn how to model your domain with immutable data; choose the ideal collection; and write simple, pure functions for efficient transformation. Next you'll apply those core concepts to build applications: discover how Clojure manages state and identity; spread your work for concurrent programming; and create and assemble components. Finally, see how to manage external integration and deployment concerns by developing a testing strategy, connecting with other data sources, and getting your libraries and applications out the door. Go beyond the toy box and into Clojure's way of thinking. By the end of this book, you'll have the tools and information to put Clojure's strengths to work. What You Need: To follow along with the examples in the book, you will need Clojure 1.6, Leiningen 2, and Java 6 or higher.

Learn how Appium is implemented in Java and integrated with tools, such as TestNG, Cucumber, Maven, Jenkins and Selenium Grid to create test automation frameworks. With these frameworks, you can test mobile apps on simulators or real devices and create CI/CD pipelines. This brief book focuses on using Appium for automation on both Android and iOS platforms. Appium Recipes illustrates test automation framework and Cloud Test Lab scenarios that will empower you to take full advantage of Appium's critical features to achieve continuous integration and deployments in your live projects. Readers will also learn about mobile-specific actions such as Swipe, Scroll, and Tap, and mobile-specific locators such as iOSUIAutomator. What You'll Learn: Set up Appium for mobile, Web and Hybrid App Automation Use mobile-specific actions, such as Swipe, Scroll, and Tap Work with mobile-specific locators, such as iOSUIAutomator Integrate Appium with Selenium Grid and Cloud Test Labs, such as Perfecto and Sauce Labs Who This Book Is For: Readers familiar with the basic concepts of test automation, mobile landscape, core java programming (basic) and maven, and Appium.

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

Modern web development is so much more than just HTML and CSS with a little JavaScript mixed in. People want faster, more usable interfaces that work on multiple devices, and you need the latest tools and techniques to make that happen. This book gives you over 40 concise solutions to today's web development problems, and introduces new solutions that will expand your skill set---proven, practical advice from authors who use these tools and techniques every day. In this completely updated edition, you'll find innovative new techniques and workflows, as well as reworked solutions that take advantage of new developments. Web development is constantly changing, and you need to stay on top of your game. Discover a wide spectrum of web development techniques, from how to improve the way you present content, to solutions for data analysis, testing, and deployment. In this edition we introduce new tools, add new recipes, and modernize old ones. You'll use Vagrant to automate server setup, and you'll discover new ways to develop blogs and static sites. You'll learn how to use Grunt to script the deployment of your web project, and use Angular to build a single-page app. You'll learn how to make content stand out with simple cross-browser styles; create animations that work well everywhere without plugins; and create lightweight, responsive layouts. We'll show you how to use preprocessors like CoffeeScript and Sass; write tests for your code; use Git and Dropbox to collaborate; configure and secure the Apache web server; use virtualization to set up your own servers automatically; and much more. Whether you're new to front-end development, or you've got a few years of experience, you'll become a more versatile developer by finding out how---and why---to use these solutions in your next project. What You Need: Your favorite text editor, the most current version of Mozilla Firefox, Internet Explorer, Google Chrome or Safari, and a working knowledge of HTML and JavaScript. Familiarity with command-line interfaces is a plus.

Master BDD to deliver higher-value software more quickly To develop high-value products quickly, software development teams need better ways to collaborate. Agile methods like Scrum and Kanban are helpful, but they're not enough. Teams need better ways to work inside each sprint or work item. Behavior-driven development (BDD) adds just enough structure for product experts, testers, and developers to collaborate more effectively. Drawing on extensive experience helping teams adopt BDD, Richard Lawrence and Paul Rayner show how to explore changes in system behavior with examples through conversations, how to capture your examples in expressive language, and how to flow the results into effective automated testing with Cucumber. Where most BDD resources focus on test automation, this guide goes deep into how BDD changes team collaboration and what that collaboration looks like day to day. Concrete examples and practical advice will prepare you to succeed with BDD, whatever your context or role. · Learn how to collaborate better by using concrete examples of system behavior · Identify your project's meaningful increment of value so you're always working on something important · Begin experimenting with BDD slowly and at low risk · Move smoothly from informal examples to automated tests in Cucumber · Use BDD to deliver more frequently with greater visibility · Make Cucumber scenarios more expressive to ensure you're building the right thing · Grow a Cucumber suite that acts as high-value living documentation · Sustainably work with complex scenario data · Get beyond the "mini-waterfalls" that often arise on Scrum teams

If you are a quality testing professional, or a software or web application developer looking to create automation test scripts for your web applications, with an interest in Python, then this is the perfect guide for you. Python developers who need to do Selenium testing need not learn Java, as they can directly use Selenium for testing with this book.

This book is intended for automation testers and developers who want to enhance their skills from web-based automation to mobile application automation using Appium. Basic knowledge of mobile application testing, Selenium WebDriver, and programming is assumed. Follow the journey of Timun Mas, a brave young lady with a mission to escape the Giant! Timun Mas is Indonesia's popular folktale from

Central Java. The Story of Timun Mas is a bilingual storybook that provides side-by-side text in Indonesian as well as English. The Story of Timun Mas has been written especially for Indonesian language learners from beginner to intermediate level. Carefully curated to make learning Indonesian easy, this book also includes key features that will support and consolidate your progress: (*) Activity pages and the answer keys (*) A glossary with nearly 200 most frequent words

Your customers want rock-solid, bug-free software that does exactly what they expect it to do. Yet they can't always articulate their ideas clearly enough for you to turn them into code. You need Cucumber: a testing, communication, and requirements tool—all rolled into one. All the code in this book is updated for Cucumber 2.4, Rails 5, and RSpec 3.5. Express your customers' wild ideas as a set of clear, executable specifications that everyone on the team can read. Feed those examples into Cucumber and let it guide your development. Build just the right code to keep your customers happy. You can use Cucumber to test almost any system or any platform. Get started by using the core features of Cucumber and working with Cucumber's Gherkin DSL to describe—in plain language—the behavior your customers want from the system. Then write Ruby code that interprets those plain-language specifications and checks them against your application. Next, consolidate the knowledge you've gained with a worked example, where you'll learn more advanced Cucumber techniques, test asynchronous systems, and test systems that use a database. Recipes highlight some of the most difficult and commonly seen situations the authors have helped teams solve. With these patterns and techniques, test Ajax-heavy web applications with Capybara and Selenium, REST web services, Ruby on Rails applications, command-line applications, legacy applications, and more. Written by the creator of Cucumber and the co-founders of Cucumber Ltd., this authoritative guide will give you and your team all the knowledge you need to start using Cucumber with confidence. What You Need: Windows, Mac OS X (with XCode) or Linux, Ruby 1.9.2 and upwards, Cucumber 2.4, Rails 5, and RSpec 3.5

This book is ideal for any JavaScript developer who is interested in producing well-tested code. If you have no prior experience with testing, Node.js, or any other tool, do not worry, as they will be explained from scratch.

You can test just about anything with Cucumber. We certainly have, and in Cucumber Recipes we'll show you how to apply our hard-won field experience to your own projects. Once you've mastered the basics, this book will show you how to get the most out of Cucumber—from specific situations to advanced test-writing advice. With over forty practical recipes, you'll test desktop, web, mobile, and server applications across a variety of platforms. This book gives you tools that you can use today to automate any system that you encounter, and do it well. The Cucumber Book showed you how your team can work together to write executable specifications—documents that tell a clear story and also happen to be working test code. We'll arm you with ready-rolled solutions to real-world problems: your tests will run faster, read more clearly, and work in any environment. Our first tips will help you fit Cucumber into your workflow. Powerful filters will tame tables full of test data, transforming them into the format your application needs. Custom output formatters will generate reports for any occasion. Continuous Integration servers will run your Cucumber tests every time the code changes. Next, you'll find recipes tailored to the platform you're running on. Ever wanted to know how to test a Grails app from Cucumber? Need to put a Windows program through its paces? How about a mobile app running on Android or iOS? We'll show you how to do all of these. Throughout the book, you'll see how to make Cucumber sing as you interoperate with different platforms, languages, and environments. From embedded circuits to Python and PHP web apps, Cucumber has something for you. What You Need: You'll need basic working knowledge of Cucumber and Ruby. Individual recipes may have additional requirements; for example, a recipe on Windows automation might pull in an open source GUI driver. We've written the recipes for compatibility with Ruby 1.9.3 and 1.8.7, plus Cucumber 1.1.4. Other versions may work as well, but these are the ones we test with.

The Cucumber for Java Book Behaviour-Driven Development for Testers and Developers

This book is for software developers, automation testers, Devops and engineers working on selenium automation testing project. Whether you are a beginner or an experienced developer, this book will help you master the skills on Selenium. The book starts with introduction of Selenium and then dives into key concepts like setting up project in IntelliJ, integration with Junit and TestNG, integration with build tools like Gradle and Maven. You will also learn how to integrate selenium with Cucumber. In the end, you will learn how to run the Selenium tests on CI servers like TeamCity, Bamboo and Jenkins. You will also learn how to work with various types of frameworks like Page object models, Page factory Keyword driven frameworks etc. Book also touches the concepts related to mobile automation using Selenium.

Grunt is everywhere. JavaScript projects from jQuery to Twitter Bootstrap use Grunt to convert code, run tests, and produce distributions for production. It's a build tool in the spirit of Make and Rake, but written with modern apps in mind. This book gets you up to speed with Grunt using practical hands-on examples, so you can wrangle your projects with ease. You'll learn how to create and maintain tasks and project builds, and automate your workflow with plugins and custom tasks. JavaScript has moved from being the language you love to hate to the language you need to use. And as JavaScript applications get more complex, you need a process to manage that complexity. While online tutorials just explain how to slap together a configuration file, this book goes further and shows you how to create your own tasks, design your own project templates, combine plugins together to bring a web app to life, and build your own plugins. You'll start by learning the basics of task creation, error handling, and logging as you create a simple configuration that executes basic JavaScript code using Node.js. Then you'll jump right into file manipulation as you read, write, copy, and delete files. You'll learn how Grunt's powerful multitasks work as you build a task to concatenate files together. Once you've got a grasp on these basics, you'll build a simple app with AngularJS and CoffeeScript, using Grunt to do all the heavy lifting and script processing. Finally, you'll create your own plugin so you can understand how plugins work. Each chapter contains hands-on exercises and ideas for further study. Whether you rock Ruby or sling C#, Grunt will be a useful addition to your toolbox. What You Need: This book covers Grunt 0.4.1 and higher, and requires basic knowledge

of JavaScript and command-line tools on Windows, OS X, or Linux.

This is a cookbook packed with code examples and step-by-step instructions to ease your learning curve. This book is intended for software quality assurance/testing professionals, software project managers, or software developers with prior experience in using Selenium and Java for testing web-based applications. This book also provides examples for C#, Python, and Ruby users.

Summary Specification by Example is an emerging practice for creating software based on realistic examples, bridging the communication gap between business stakeholders and the dev teams building the software. In this book, author Gojko Adzic distills interviews with successful teams worldwide, sharing how they specify, develop, and deliver software, without defects, in short iterative delivery cycles. About the Technology Specification by Example is a collaborative method for specifying requirements and tests. Seven patterns, fully explored in this book, are key to making the method effective. The method has four main benefits: it produces living, reliable documentation; it defines expectations clearly and makes validation efficient; it reduces rework; and, above all, it assures delivery teams and business stakeholders that the software that's built is right for its purpose. About the Book This book distills from the experience of leading teams worldwide effective ways to specify, test, and deliver software in short, iterative delivery cycles. Case studies in this book range from small web startups to large financial institutions, working in many processes including XP, Scrum, and Kanban. This book is written for developers, testers, analysts, and business people working together to build great software. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book. What's Inside Common process patterns How to avoid bad practices Fitting SBE in your process 50+ case studies ===== Table of Contents Part 1

Getting started Part 2 Key process patterns Part 3 Case studies Key benefits Key process patterns Living documentation Initiating the changes Deriving scope from goals Specifying collaboratively Illustrating using examples Refining the specification Automating validation without changing specifications Validating frequently Evolving a documentation system uSwitch RainStor Iowa Student Loan Sabre Airline Solutions ePlan Services Songkick Concluding thoughts 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

Test Automation using Selenium with Java - This book teaches how to automate using Selenium.

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!

Learn end-to-end automation testing techniques for web and mobile browsers using Selenium WebDriver, AppiumDriver, Java, and TestNG Key Features Explore the Selenium grid architecture and build your own grid for browser and mobile devices Use ExtentReports for processing results and SauceLabs for cloud-based test services Unlock the full potential of Selenium to test your web applications. Book Description Selenium WebDriver 3.x is an open source API for testing both browser and mobile applications. With the help of this book, you can build a solid foundation and can easily perform end-to-end testing on web and mobile browsers. You'll begin by being introduced to the Selenium Page Object Model for software development. You'll architect your own framework with a scalable driver class, Java utility classes, and support for third-party tools and plugins. You'll design and build a Selenium grid from scratch to enable the framework to scale and support different browsers, mobile devices, and platforms. You'll strategize and handle a rich web UI using the advanced WebDriver API and learn techniques to handle real-time

challenges in WebDriver. You'll perform different types of testing, such as cross-browser testing, load testing, and mobile testing. Finally, you will also be introduced to data-driven testing, using TestNG to create your own automation framework. By the end of this Learning Path, you'll be able to design your own automation testing framework and perform data-driven testing with Selenium WebDriver. This Learning Path includes content from the following Packt products: Selenium WebDriver 3 Practical Guide - Second Edition by Unmesh Gundecha Selenium Framework Design in Data-Driven Testing by Carl Cocchiari What you will learn Use different mobile and desktop browser platforms with Selenium 3 Use the Actions API for performing various keyboard and mouse actions Design the Selenium Driver Class for local, remote, and third-party grid support Build page object classes with 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 Build and use utility classes in synchronization, file I/O, reporting and test listener classes Who this book is for This Learning Path is ideal for software quality assurance/testing professionals, software project managers, or software developers interested in using Selenium for testing their applications. Professionals responsible for designing and building enterprise-based testing frameworks will also find this Learning Path useful. Prior programming experience in Java are TestNG is necessary.

Automate your mobile app testing About This Book How to automate testing with Appium Apply techniques for creating comprehensive tests How to test on physical devices or emulators Who This Book Is For Are you a mobile developer or a software tester who wishes to use Appium for your test automation? If so, then this is the right book for you .You must have basic Java programming knowledge. You don't need to have prior knowledge of Appium. What You Will Learn Discover Appium and how to set up an automation framework for mobile testing Understand desired capabilities and learn to find element locators Learn to automate gestures and synchronize tests using Appium Take an incremental approach to implement page object pattern Learn to run Appium tests on emulators or physical devices Set up Jenkins to run mobile automation tests by easy to learn steps Discover tips and tricks to record video of test execution, inter app automation concepts Learn to run Appium tests in parallel on multiple devices simultaneously In Detail Appium is an open source test automation framework for mobile applications. It allows you to test all three types of mobile applications: native, hybrid, and mobile web. It allows you to run the automated tests on actual devices, emulators, and simulators. Today, when every mobile app is made on at least two platforms, iOS and Android, you need a tool that allows you to test across platforms. Having two different frameworks for the same app increases the cost of the product and time to maintain it as well. Appium helps save this cost. With mobile app growth exploding, mobile app automation is mainstream now. In this book, author Nishant Verma provides you with a firm grounding in the concepts of Appium while diving into how to set up appium & Cucumber-jvm test automation framework, implement page object design pattern, automate gestures, test execution on emulators and physical devices, and implement continuous integration with Jenkins. The mobile app we have referenced in this book is Quikr because of its relatively lower learning curve to understand the application. It's a local classifieds shopping app. Style and approach This book takes a practical, step-by-step approach to testing and automating individual apps such as native, hybrid, and mobile web apps using different examples.

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