# S Test Driven Development By Example Kent Beck

Yeah, reviewing a ebook **s Test Driven Development By Example Kent Beck** could be credited with your near connections listings. This is just one of the solutions for you to be successful. As understood, attainment does not recommend that you have astounding points.

Comprehending as capably as treaty even more than extra will offer each success. next to, the notice as competently as acuteness of this s Test Driven Development By Example Kent Beck can be taken as skillfully as picked to act.

Test-Driven Java Development Viktor Farcic 2015-08-27 Invoke TDD principles for end-to-end application development with Java About This Book Explore the most popular TDD tools and frameworks and become more proficient in building applications Create applications with better code design, fewer bugs, and higher test coverage, enabling you to get them to market quickly Implement test-driven programming methods into your development workflows Who This Book Is For If you're an experienced Java developer and want to implement more effective methods of programming systems and applications, then this book is for you. What You Will Learn Explore the tools and frameworks required for effective TDD development Perform the Red-Green-Refactor process efficiently, the pillar around which all other TDD procedures are based Master effective unit testing in isolation from the rest of your code Design simple and easily maintainable codes by implementing different techniques Use mocking frameworks and techniques to easily write and quickly execute tests Develop an application to implement behaviour-driven development in conjunction with unit testing Enable and disable features using Feature Toggles In Detail Test-driven development (TDD) is a development approach that relies on a test-first procedure that emphasises writing a test before writing the necessary code, and then refactoring the code to optimize it. The value of performing TDD with Java, one of the most established programming languages, is to improve the productivity of programmers, the maintainability and performance of code, and develop a deeper understanding of the language and how to employ it effectively. Starting with the basics of TDD and reasons why its adoption is beneficial, this book will take you from the first steps of TDD with Java until you are confident enough to embrace the practice in your day-to-day routine. You'll be guided through setting up tools, frameworks, and the environment you need, and will dive right in to hands-on exercises with the goal of mastering one practice, tool, or framework at a time. You'll learn about the Red-Green-Refactor procedure, how to write unit tests, and how to use them as executable documentation. With this book you'll also discover how to design simple and easily maintainable code, work with mocks, utilise behaviour-driven development, refactor old legacy code, and release a half-finished feature to production with feature toggles. You will finish this book with a deep understanding of the test-driven development methodology and the confidence to apply it to application programming with Java. Style and approach An easy-to-follow, hands-on guide to building applications through effective coding practices. This book covers practical examples by introducing different problems, each one designed as a learning exercise to help you understand each aspect of TDD.

**Extreme Programming and Agile Processes in Software Engineering** Michele Marchesi 2003-08-03 This book contains most of the papers presented at the 4th International C-ference on Extreme Programming and Agile Processes in Software Engineering (XP 2003),

held in Genoa, Italy, May 2003. The XP 200n series of conferences were started in 2000 to promote the - change of new ideas, research and applications in the emerging ?eld of agile methodologies for software development. Over the years, the conference has - come the main world forum for all major advances in this important ?eld. Also this year the contributions to Agile Methodologies and Extreme P- gramming were substantial. They demonstrate that the topic is continuing to gain more and more momentum. In spite of some criticism of agile meth- ologies, everyone agrees that they address some unresolved needs of software practitioners. People still do not know how to develop software on time, with the desired features, and within the given budget! This volume is divided into several thematic sections, easing reader's na- gation through the content. Full papers are presented ?rst, followed by research reports, papers from the Educational Symposium, and papers from the Ph.D. Symposium. The presentations given during three panel sessions held at the conference conclude the book. The section on Managing Agile Processes includes contributions highlighting the sometimes di?cult relationship between agile methodologies and mana- ment, and includes approaches and suggestions that should facilitate the acc- tance of agile methodologies at the di?erent levels of management.

Das DevOps-Handbuch Gene Kim 2017-08-09 Mehr denn je ist das effektive Management der IT entscheidend für die Wettbewerbsfähigkeit von Organisationen. Viele Manager in softwarebasierten Unternehmen ringen damit, eine Balance zwischen Agilität, Zuverlässigkeit und Sicherheit ihrer Systeme herzustellen. Auf der anderen Seite schaffen es High-Performer wie Google, Amazon, Facebook oder Netflix, routinemäßig und zuverlässig hundertoder gar tausendmal pro Tag Code auszuliefern. Diese Unternehmen verbindet eins: Sie arbeiten nach DevOps-Prinzipien. Die Autoren dieses Handbuchs folgen den Spuren des Romans Projekt Phoenix und zeigen, wie die DevOps-Philosophie praktisch implementiert wird und Unternehmen dadurch umgestaltet werden können. Sie beschreiben konkrete Tools und Techniken, die Ihnen helfen, Software schneller und sicherer zu produzieren. Zudem stellen sie Ihnen Maßnahmen vor, die die Zusammenarbeit aller Abteilungen optimieren, die Arbeitskultur verbessern und die Profitabilität Ihres Unternehmens steigern können. Themen des Buchs sind: Die Drei Wege: Die obersten Prinzipien, von denen alle DevOps-Maßnahmen abgeleitet werden. Einen Ausgangspunkt finden: Eine Strategie für die DevOps-Transformation entwickeln, Wertketten und Veränderungsmuster kennenlernen, Teams schützen und fördern. Flow beschleunigen: Den schnellen Fluss der Arbeit von Dev hin zu Ops ermöglichen durch eine optimale Deployment-Pipeline, automatisierte Tests, Continuous Integration und Continuous Delivery. Feedback verstärken: Feedback-Schleifen verkürzen und vertiefen, Telemetriedaten erzeugen und Informationen unternehmensweit sichtbar machen. Kontinuierliches Lernen ermöglichen: Eine Just Culture aufbauen und ausreichend Zeit reservieren, um das firmenweite Lernen zu fördern.

Clean Code - Refactoring, Patterns, Testen und Techniken für sauberen Code Robert C. Martin 2013-12-18 h2> Kommentare, Formatierung, Strukturierung Fehler-Handling und Unit-Tests Zahlreiche Fallstudien, Best Practices, Heuristiken und Code Smells Clean Code - Refactoring, Patterns, Testen und Techniken für sauberen Code Aus dem Inhalt: Lernen Sie, guten Code von schlechtem zu unterscheiden Sauberen Code schreiben und schlechten Code in guten umwandeln Aussagekräftige Namen sowie gute Funktionen, Objekte und Klassen erstellen Code so formatieren, strukturieren und kommentieren, dass er bestmöglich lesbar ist Ein vollständiges Fehler-Handling implementieren, ohne die Logik des Codes zu verschleiern Unit-Tests schreiben und Ihren Code testgesteuert entwickeln Selbst schlechter Code kann funktionieren. Aber wenn der Code nicht sauber ist, kann er ein Entwicklungsunternehmen in die Knie zwingen. Jedes Jahr gehen unzählige Stunden und beträchtliche Ressourcen verloren, weil Code schlecht geschrieben ist. Aber das muss nicht sein. Mit Clean Code präsentiert Ihnen der bekannte Software-Experte Robert C. Martin ein revolutionäres Paradigma, mit dem er Ihnen aufzeigt, wie Sie guten Code schreiben und schlechten Code überarbeiten. Zusammen mit

seinen Kollegen von Object Mentor destilliert er die besten Praktiken der agilen Entwicklung von sauberem Code zu einem einzigartigen Buch. So können Sie sich die Erfahrungswerte der Meister der Software-Entwicklung aneignen, die aus Ihnen einen besseren Programmierer machen werden – anhand konkreter Fallstudien, die im Buch detailliert durchgearbeitet werden. Sie werden in diesem Buch sehr viel Code lesen. Und Sie werden aufgefordert, darüber nachzudenken, was an diesem Code richtig und falsch ist. Noch wichtiger: Sie werden herausgefordert, Ihre professionellen Werte und Ihre Einstellung zu Ihrem Beruf zu überprüfen. Clean Code besteht aus drei Teilen:Der erste Teil beschreibt die Prinzipien, Patterns und Techniken, die zum Schreiben von sauberem Code benötigt werden. Der zweite Teil besteht aus mehreren, zunehmend komplexeren Fallstudien. An jeder Fallstudie wird aufgezeigt, wie Code gesäubert wird – wie eine mit Problemen behaftete Code-Basis in eine solide und effiziente Form umgewandelt wird. Der dritte Teil enthält den Ertrag und den Lohn der praktischen Arbeit: ein umfangreiches Kapitel mit Best Practices, Heuristiken und Code Smells, die bei der Erstellung der Fallstudien zusammengetragen wurden. Das Ergebnis ist eine Wissensbasis, die beschreibt, wie wir denken, wenn wir Code schreiben, lesen und säubern. Dieses Buch ist ein Muss für alle Entwickler, Software-Ingenieure, Projektmanager, Team-Leiter oder Systemanalytiker, die daran interessiert sind, besseren Code zu produzieren. Über den Autor: Robert C. »Uncle Bob« Martin entwickelt seit 1970 professionell Software. Seit 1990 arbeitet er international als Software-Berater. Er ist Gründer und Vorsitzender von Object Mentor, Inc., einem Team erfahrener Berater, die Kunden auf der ganzen Welt bei der Programmierung in und mit C++, Java, C#, Ruby, OO, Design Patterns, UML sowie Agilen Methoden und eXtreme Programming helfen.
**Test Driven** Lasse Koskela 2007-08-31 In test driven development, you first write an executable test ofwhat your application code must do. Only then do you write thecode itself and, with the test spurring you on, you improve yourdesign. In acceptance test driven development (ATDD), you usethe same technique to implement product features,

benefiting fromiterative development, rapid feedback cycles, and better-definedrequirements. TDD and its supporting tools and techniques leadto better software faster. Test Driven brings under one cover practical TDD techniquesdistilled from several years of community experience. With examplesin Java and the Java EE environment, it explores both the techniquesand the mindset of TDD and ATDD. It uses carefully chosen examplesto illustrate TDD tools and design patterns, not in the abstractbut concretely in the context of the technologies you face at work.It is accessible to TDD beginners, and it offers effective and less wellknown techniques to older TDD hands. 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 Learn hands-on to test drive Java code How to avoid common TDD adoption pitfalls Acceptance test driven development and the Fit framework How to test Java EE components-Servlets, JSPs, and SpringControllers Tough issues like multithreaded programs and data access code

**Professional Test Driven Development with C#** James Bender 2011-04-15 Hands-on guidance to creating great test-driven developmentpractice Test-driven development (TDD) practice helps developersrecognize a well-designed application, and encourages writing atest before writing the functionality that needs to be implemented.This hands-on guide provides invaluable insight for creatingsuccessful test-driven development processes. With source code andexamples featured in both C# and .NET, the book walks you throughthe TDD methodology and shows how it is applied to a real-worldapplication. You'll witness the application built fromscratch and details each step that is involved in the development,as well as any problems that were encountered and the solutionsthat were applied. Clarifies the motivation behind test-driven development (TDD),what it is, and how it works Reviews the various steps involved in developing an applicationand the testing that is involved prior to implementing thefunctionality Discusses unit testing and refactoring Professional Test-Driven Development with C# shows youhow to create great TDD processes right away.

**Software Quality. Model-Based Approaches for Advanced Software and Systems Engineering** Dietmar Winkler 2014-01-09 This book constitutes the refereed proceedings of the 6th Software Quality Days Conference (SWQD) held in Vienna, Austria, in January 2014. This professional symposium and conference offers a range of comprehensive and valuable opportunities for advanced professional training, new ideas and networking with a series of keynote speeches, professional lectures, exhibits and tutorials. The four scientific full papers accepted for SWQD were each peer reviewed by three or more reviewers and selected out of 24 high-quality submissions. Further, one keynote and ten short papers on promising research directions were also presented and included in order to spark discussions between researchers and practitioners. The papers are organized into topical sections on software process improvement and measurement, requirements management, value-based software engineering, software and systems testing, automation-supported testing and quality assurance and collaboration.

**Jenseits des Hockey Sticks** Chris Bradley 2019-01-23

**Continuous API Management** Mehdi Medjaoui 2021-10-18 A lot of work is required to release an API, but the effort doesn't always pay off. Overplanning before an API matures is a wasted investment, while underplanning can lead to disaster. The second edition of this book provides maturity models for individual APIs and multi-API landscapes to help you invest the right human and company resources for the right maturity level at the right time. How do you balance the desire for agility and speed with the need for robust and scalable operations? Four experts show software architects, program directors, and product owners how to maximize the value of their APIs by managing them as products through a continuous lifecycle. Learn which API decisions you need to govern Design, deploy, and manage APIs using an API-as-a-product (AaaP) approach Examine 10 pillars that form the foundation of API product work Learn how the continuous improvement model governs changes throughout an APIâ??s lifetime Explore the five stages of a complete API product lifecycle Delve into team roles needed to design, build, and maintain your APIs Learn how to manage APIs published by your organization

**Test Driven Development in Ruby** Bala Paranj 2017-03-15 Learn the basics of test driven development (TDD) using Ruby. You will carry out problem domain analysis, solution domain analysis, designing test cases, and writing tests first. These fundamental concepts will give you a solid TDD foundation to build upon. Test Driven Development in Ruby is written by a developer for developers. The concepts are first explained, then a coding demo illustrates how to apply the theory in practice. At the end of each chapter an exercise is given to reinforce the material. Complete with working files and code samples, you'll be able to work alongside the author, a trainer, by following the material in this book. What You Will Learn Carry out problem domain analysis, solution domain analysis, designing test cases, and writing tests first Use assertions Discover the structure of a test and the TDD cycle Gain an understanding of minimal implementation, starter test, story test, and next test Handle refactoring using Ruby Hide implementation details Test precisely and concretely Make your code robust Who This Book Is For Experienced Ruby programmers or web developers with some prior experience with Ruby.

**Test Driven Development- simpleNeasyBook by WAGmob** WAGmob 2013-11-27 ***** WAGmob: Over One million Paying Customers ***** WAGmob brings you, simpleNeasy, on-the-go learning ebook for "Test Driven Development". The ebook provides: Snack sized chapters for easy learning. Designed for both students and adults. This ebook provides a quick summary of essential concepts in Test Driven Development by following snack sized chapters: Introduction: • Introduction • Test First Development (TFD) • Benefits of Test-Driven Development • Process Example to TDD Approach Introduction to Unit Testing: • What is Unit Testing? • Method • When is it Performed? • Who Performs it? • Benefits of Unit Testing • Mock Objects • Why Mocking is Important? • Test Double • Types of Test Doubles A Quick Review of Refactoring: • What is Code Refactoring? • Overview of Refactoring • Why do You Refactor? • When do You Refactor? • Steps for Refactoring • Two Categories of Benefits to the Activity of

Refactoring Refactoring Examples: • Refactoring Examples • Rename Class/ Method/ Variables • Method Slicing/Extraction • Architecture Driven Refactoring – Modularity • Movement of Methods or Class • Code to Interface • Constructors Chaining Phases of Test Driven Development: • Steps to be followed in Test Driven Development • Test Structure • Shortcomings Software of Test Driven Development: • Software for Test Driven Development • CppUTest • csUnit • DbUnit • jMock • JUnit • NUnit • PHPUnit Integration Testing: • Integration Testing • Why is Integration Testing Required? • Big Bang • Top Down • Bottom Up • Limitations GUI Testing: • GUI Testing • Text Based GUI Testing Framework • Introducing Bailey Testing Framework (Graphic based GUI Testing Framework) • How it Works? • Pseudo Code .NET TDD Iteration I: • .NET TDD (Test Driven Development) by Example • Introduction • Development Costs • Sample Code • The Tools • Iteration I • Creating the Libraries • Going Back to the Requirements • First Two Tests – RED • Get the Tests Failing with the Minimal Amount of Code • Using the Test Explorer to View and Run the Tests • Make the Test Pass (Green) • Make Some Changes .NET TDD Iteration II: • Iteration II • Introduce More Tests (Red) • Make the Test Pass (a second time; Green) • Debugging Tests About WAGmob ebooks: 1) A companion ebook for on-the-go, bite-sized learning. 2) Over One million paying customers from 175+ countries. Why WAGmob ebooks: 1) Beautifully simple, Amazingly easy, Massive selection of ebooks. 2) Effective, Engaging and Entertaining ebooks. 3) An incredible value for money. Lifetime of free updates! WAGmob Vision : simpleNeasy ebooks for a lifetime of on-the-go learning WAGmob Mission : A simpleNeasy WAGmob ebook in every hand. Visit us : www.SimpleNEasyBook.Com Please write to us at Team (at)simpleNeasyBook.Com. We would love to improve this Book.

Pro Visual Studio 2005 Team System Jeff Levinson 2006-11-22 *Will significantly increase developer and manager effectiveness using this complex technology *Authors convey proven track record with the technology *This is among the first (if not the first) VSTS book on the market IOS Test-Driven Development (Second Edition) raywenderlich Tutorial Team 2022-01-19 Learn how to test iOS Applications!iOS Test-Driven Development introduces you to a broad range of concepts with regard to not only writing an application from scratch with testing in mind, but also applying these concepts to already written applications which have little or no tests written for their functionality.Who This Book Is ForThis book is for intermediate iOS developers who already know the basics of iOS and Swift development but want to learn how to write code which is both testable and maintainable.Topics Covered in iOS Test-Driven DevelopmentThe TDD Cycle: Learn the concepts of Test-Driven Development and how to implement these concepts within an iOS application.Test Expressions and Expectations: Learn how to test both synchronous code using expressions and asynchronous code using expectations.Test RESTful Networking: Write tests to verify networking endpoints and the ability to mock the returned results.Test Authentication: Write tests which run against authenticated endpoints.Legacy Problems: Explore the problems legacy applications written without any unit tests or without thought of testing the code.Breaking Dependencies into Modules: Learn how to take dependencies within your code and compartmentalize these into their own modules with their own tests.Refactoring Large Classes: Learn how to refactor large unweilding classes into smaller more manageable and testable classes / objects.One thing you can count on: after reading this book, you'll be prepared to write testable applications which you can have confidence in making changes too with the knowledge your tests will catch breaking changes.

**Refactoring to patterns** Joshua Kerievsky 2005 Learning Test-Driven Development Saleem Siddiqui 2021-10-12 Your code is a testament to your skills as a developer. No matter what language you use, code should be clean, elegant, and uncluttered. By using test-driven development (TDD), you'll write code that's easy to understand, retains its elegance, and works for months, even years, to come. With this indispensable guide, you'll learn how to use TDD with three different languages: Go, JavaScript, and Python. Author Saleem Siddiqui shows you how to tackle domain complexity using a unit test-driven approach. TDD partitions

requirements into small, implementable features, enabling you to solve problems irrespective of the languages and frameworks you use. With Learning Test-Driven Development at your side, you'll learn how to incorporate TDD into your regular coding practice. This book helps you: Use TDD's divide-and-conquer approach to tame domain complexity Understand how TDD works across languages, testing frameworks, and domain concepts Learn how TDD enables continuous integration Support refactoring and redesign with TDD Learn how to write a simple and effective unit test harness in JavaScript Set up a continuous integration environment with the unit tests produced during TDD Write clean, uncluttered code using TDD in Go, JavaScript, and Python

Test Driven Development for Embedded C James W. Grenning 2011-04-25 Another day without Test-Driven Development means more time wasted chasing bugs and watching your code deteriorate. You thought TDD was for someone else, but it's not! It's for you, the embedded C programmer. TDD helps you prevent defects and build software with a long useful life. This is the first book to teach the hows and whys of TDD for C programmers. TDD is a modern programming practice C developers need to know. It's a different way to program---unit tests are written in a tight feedback loop with the production code, assuring your code does what you think. You get valuable feedback every few minutes. You find mistakes before they become bugs. You get early warning of design problems. You get immediate notification of side effect defects. You get to spend more time adding valuable features to your product. James is one of the few experts in applying TDD to embedded C. With his 1.5 decades of training,coaching, and practicing TDD in C, C++, Java, and C# he will lead you from being a novice in TDD to using the techniques that few have mastered. This book is full of code written for embedded C programmers. You don't just see the end product, you see code and tests evolve. James leads you through the thought process and decisions made each step of the way. You'll learn techniques for test-driving code right nextto the hardware, and you'll learn design principles and how to apply them to C to keep your code clean and flexible. To run the examples in this book, you will need a C/C++

development environment on your machine, and the GNU GCC tool chain or Microsoft Visual Studio for C++ (some project conversion may be needed).

Test-Driven Development in Microsoft .NET Alexei Vorontsov 2004-03-17 With the clarity and precision intrinsic to the Test-Driven Development (TDD) process itself, experts James Newkirk and Alexei Vorontsov demonstrate how to implement TDD principles and practices to drive lean, efficient coding—and better design. The best way to understand TDD is to see it in action, and Newkirk and Vorontsov walk step by step through TDD and refactoring in an n-tier, .NET-connected solution. And, as members of the development team for NUnit, a leading unit-testing framework for Microsoft .NET, the authors can offer matchless insights on testing in this environment—ultimately making their expertise your own. Test first—and drive ambiguity out of the development process: Document your code with tests, rather than paper Use test lists to generate explicit requirements and completion criteria Refactor—and improve the design of existing code Alternate programmer tests with customer tests Change how you build UI code—a thin layer on top of rigorously tested code Use tests to make small, incremental changes—and minimize the debugging process Deliver software that's verifiable, reliable, and robust

**Practical Test-Driven Development using C# 7** John Callaway 2018-02-15 Develop applications for the real world with a thorough software testing approach Key Features Develop a thorough understanding of TDD and how it can help you develop simpler applications with no defects using C# and JavaScript Adapt to the mindset of writing tests before code by incorporating business goals, code manageability, and other factors Make all your software units and modules pass tests by analyzing failed tests and refactoring code as and when required Book Description Test-Driven Development (TDD) is a methodology that helps you to write as little as code as possible to satisfy software requirements, and ensures that what you've written does what it's supposed to do. If you're looking for a practical resource on Test-Driven Development this is the book for you. You've found a practical end-to-end guide that will help you implement Test-Driven Techniques

for your software development projects. You will learn from industry standard patterns and practices, and shift from a conventional approach to a modern and efficient software testing approach in C# and JavaScript. This book starts with the basics of TDD and the components of a simple unit test. Then we look at setting up the testing framework so that you can easily run your tests in your development environment. You will then see the importance of defining and testing boundaries, abstracting away third-party code (including the .NET Framework), and working with different types of test double such as spies, mocks, and fakes. Moving on, you will learn how to think like a TDD developer when it comes to application development. Next, you'll focus on writing tests for new/changing requirements and covering newly discovered bugs, along with how to test JavaScript applications and perform integration testing. You'll also learn how to identify code that is inherently un-testable, and identify some of the major problems with legacy applications that weren't written with testability in mind. By the end of the book, you'll have all the TDD skills you'll need and you'll be able to re-enter the world as a TDD expert! What you will learn The core concepts of TDD Testing in action with a real-world case study in C# and JavaScript using React Writing proper Unit Tests and testable code for your application Using different types of test double such as stubs, spies, and mocks Growing an application guided by tests Exploring new developments on a green-field application Mitigating the problems associated with writing tests for legacy applications Modifying a legacy application to make it testable Who this book is for This book is for software developers with a basic knowledge of Test Driven Development (TDD) who want a thorough understanding of how TDD can benefit them and the applications they produce. The examples in this book are in C#, and you will need a basic understanding of C# to work through these examples.

*Refactoring* Martin Fowler 2020-03-20 • Umfassend überarbeitete und aktualisierte Neuauflage des Standardwerks in vollständig neuer Übersetzung • Verbesserungsmöglichkeiten von bestehender Software anhand von Code-Smells erkennen und Code effizient überarbeiten • Umfassender Katalog von Refactoring-Methoden mit Code-Beispielen in JavaScript Seit mehr als zwanzig Jahren greifen erfahrene Programmierer rund um den Globus auf dieses Buch zurück, um bestehenden Code zu verbessern und leichter lesbar zu machen sowie Software besser warten und erweitern zu können. In diesem umfassenden Standardwerk zeigt Ihnen Martin Fowler, was die Vorteile von Refactoring sind, wie Sie verbesserungsbedürftigen Code erkennen und wie Sie ein Refactoring – unabhängig von der verwendeten Programmiersprache – erfolgreich durchführen. In einem umfangreichen Katalog gibt Fowler Ihnen verschiedene Refactoring-Methoden mit ausführlicher Erläuterung, Motivation, Vorgehensweise und einfachen Beispielen in JavaScript an die Hand. Darüber hinaus behandelt er insbesondere folgende Schwerpunkte: • Allgemeine Prinzipien und Durchführung des Refactorings • Refactoring anwenden, um die Lesbarkeit, Wartbarkeit und Erweiterbarkeit von Programmen zu verbessern • Code-Smells erkennen, die auf Verbesserungsmöglichkeiten durch Refactoring hinweisen • Entwicklung zuverlässiger Tests für das Refactoring • Erkennen von Fallstricken und notwendigen Kompromissen bei der Durchführung eines Refactorings Diese vollständig neu übersetzte Ausgabe wurde von Grund auf überarbeitet, um den maßgeblichen Veränderungen der modernen Programmierung Rechnung zu tragen. Sie enthält einen aktualisierten Katalog von Refactoring-Methoden sowie neue Beispiele für einen funktionalen Programmieransatz.

*Modern C++ Programming with Test-Driven Development* Jeff Langr 2013-10-10 If you program in C++ you've been neglected. Test-driven development (TDD) is a modern software development practice that can dramatically reduce the number of defects in systems, produce more maintainable code, and give you the confidence to change your software to meet changing needs. But C++ programmers have been ignored by those promoting TDD--until now. In this book, Jeff Langr gives you hands-on lessons in the challenges and rewards of doing TDD in C++. Modern C++ Programming With Test-Driven Development, the only comprehensive treatment on TDD in C++ provides you with everything you need to know

about TDD, and the challenges and benefits of implementing it in your C++ systems. Its many detailed code examples take you step-by-step from TDD basics to advanced concepts. As a veteran C++ programmer, you're already writing high-quality code, and you work hard to maintain code quality. It doesn't have to be that hard. In this book, you'll learn: how to use TDD to improve legacy C++ systems how to identify and deal with troublesome system dependencies how to do dependency injection, which is particularly tricky in C++ how to use testing tools for C++ that aid TDD new C++11 features that facilitate TDD As you grow in TDD mastery, you'll discover how to keep a massive C++ system from becoming a design mess over time, as well as particular C++ trouble spots to avoid. You'll find out how to prevent your tests from being a maintenance burden and how to think in TDD without giving up your hard-won C++ skills. Finally, you'll see how to grow and sustain TDD in your team. Whether you're a complete unit-testing novice or an experienced tester, this book will lead you to mastery of test-driven development in C++. What You Need A C++ compiler running under Windows or Linux, preferably one that supports C++11. Examples presented in the book were built under gcc 4.7.2. Google Mock 1.6 (downloadable for free; it contains Google Test as well) or an alternate C++ unit testing tool. Most examples in the book are written for Google Mock, but it isn't difficult to translate them to your tool of choice. A good programmer's editor or IDE. cmake, preferably. Of course, you can use your own preferred make too. CMakeLists.txt files are provided for each project. Examples provided were built using cmake version 2.8.9. Various freely-available third-party libraries are used as the basis for examples in the book. These include: cURL JsonCpp Boost (filesystem, date_time/gregorian, algorithm, assign) Several examples use the boost headers/libraries. Only one example uses cURL and JsonCpp.

ATDD in der Praxis Markus Gärtner 2013-04-02 Diese Buch bietet eine praxisbezogene und anschauliche Einführung in die akzeptanztestgetriebene Entwicklung (Acceptance Test-driven Development, ATTD, auch bekannt als Behavior-driven Development oder Specification-by-Example). Anhand zweier ausführlicher Praxisbeispiele erfährt der Leser, wie sich Testautomatisierung innerhalb eines agilen Entwicklungsprozesses verwenden lässt. Anschließend werden die grundlegenden Prinzipien zusammengefasst und verdeutlicht. Dadurch erlebt der Leser praxisnah, was ATDD ist, und bekommt wertvolle Hinweise, wie er entsprechende Prozesse aufbauen kann.

Testgetriebene Entwicklung mit C++ Jeff Langr 2014-11-20 Testgetriebene Entwicklung (TDD) ist eine moderne Methode in der Softwareentwicklung, mit der Programmierer und Tester die Anzahl der Fehler im System erheblich verringern, wartungsfreundlicheren Code schreiben und die Software gefahrlos an geänderte Anforderungen anpassen können. Dieses Buch vermittelt praktische TDD-Kenntnisse und beschreibt die Probleme und Vorteile der Verwendung dieser Technik für C++-Systeme. Die vielen ausführlichen Codebeispiele führen schrittweise von den Grundlagen von TDD zu anspruchsvollen Themen: • TDD verwenden, um C++-Altsysteme zu verbessern • Problematische Systemabhängigkeiten erkennen und handhaben • Abhängigkeiten in C++ injizieren • Frameworks für C++ einsetzen, die TDD unterstützen • C++11-Features nutzen, die die Anwendung von TDD erleichtern Unabhängig davon, ob Sie viel Erfahrung mit Unit Tests haben oder ein absoluter Neuling auf diesem Gebiet sind, lernen Sie mit diesem Buch die testgetriebene Entwicklung in C++ erfolgreich anzuwenden.

PSD: Professional Scrum Developer Question Bank and Reference Guide. Sidharth Bathia 2019-04-15 Welcome! Congratulations on taking the first important step towards preparing for the Professional Scrum Developer (PSD) Exam! Professional Scrum Developer (PSD) is an advanced assessment created to test your knowledge of how to build complex software products using Scrum. This book is a Quick Reference Guide created for the Professional Scrum Developer (PSD) Examination. The Guide also contains Questions and Answers which will help you prepare for the Professional Scrum Developer (PSD) . Information in this Guide references: The Scrum Guide.Scrum Forums (Scrum.Org).Other Scrum and Development Education Sites.Scrum and PSD Glossary Note: 1) This Reference guide is not a text book or a

replacement to any Textbooks. It's simply your workbook which has content (present on the Scrum guide, Discussion forums & Other Sites) presented systematically to help you understand and memorize for the exam. 2) The Reference guide also has 150+ exclusive questions and answers which will help you prepare for PSD Exams. It also contains 150+ PSM Exam Questions which are asked on the PSD Exam. 3) % of the book is available for you to see before you buy it in the "Look Inside" Amazon Feature. This will help you understand exactly what you are buying. 4) Content found on the Scrum Guide and Other Websites is repeated on this Reference Guide. 5) Reach out to ScrumReferenceGuides@gmail.com for questions and feedback. The Scrum.org Professional Scrum Developer I (PSD I) assessment is a 60 minute time boxed assessment where you'll answer 80 questions (in English) of multiple choice type, very similar in style to the Scrum Developer Open assessment. Prepare for the exam: 1.Prepare for or Revisit PSM I Exam. 2.Carefully read the Scrum Guide (Nov 2020) along with this Reference book. The Scrum Guide is extremely condensed and thus we have decomposed and categorized the most important information present on the Scrum Guide in this Reference Guide. This Book / PSD Reference Guide. 3. Research the topics online if you don't understand them.Be thorough with all the content. 4.Go through the questions and answers at the bottom of the book. (150+ PSD Questions + 150+ PSM Questions).These questions were compiled very carefully. Go through the answers and make sure you understand the concepts. Make sure you go through the answers explanations regardless of whether you answered the questions correctly or not. Go back to the Reference Table and reread. 5.Take the Professional Scrum Developer Open Assessment until you can do the assessment quickly and score close to 100% three times in a row. Few Questions which are asked on the exam are the exact same.

**Encyclopedia of Software Engineering Three-Volume Set (Print)** Phillip A. Laplante 2010-11-22 Software engineering requires specialized knowledge of a broad spectrum of topics, including the construction of software and the platforms, applications, and environments in which the software operates as well as an understanding of the people who build and use the software. Offering an authoritative perspective, the two volumes of the Encyclopedia of Software Engineering cover the entire multidisciplinary scope of this important field. More than 200 expert contributors and reviewers from industry and academia across 21 countries provide easy-to-read entries that cover software requirements, design, construction, testing, maintenance, configuration management, quality control, and software engineering management tools and methods. Editor Phillip A. Laplante uses the most universally recognized definition of the areas of relevance to software engineering, the Software Engineering Body of Knowledge (SWEBOK®), as a template for organizing the material. Also available in an electronic format, this encyclopedia supplies software engineering students, IT professionals, researchers, managers, and scholars with unrivaled coverage of the topics that encompass this ever-changing field. Also Available Online This Taylor & Francis encyclopedia is also available through online subscription, offering a variety of extra benefits for researchers, students, and librarians, including: Citation tracking and alerts Active reference linking Saved searches and marked lists HTML and PDF format options Contact Taylor and Francis for more information or to inquire about subscription options and print/online combination packages. US: (Tel) 1.888.318.2367; (E-mail) e-reference@taylorandfrancis.com International: (Tel) +44 (0) 20 7017 6062; (E-mail) online.sales@tandf.co.uk

**Scala Test-Driven Development** Gaurav Sood 2016-10-27 Build robust Scala applications by implementing the fundamentals of test-driven development in your workflow About This Book Get a deep understanding of various testing concepts such as test-driven development (TDD) and BDD Efficient usage of the built-in Scala features such as ScalaTest, specs2, and Scala check Change your approach towards problem solving by thinking about the boundaries of the problem and its definition rather than focusing on the solution Who This Book Is For This book is for Scala developers who are looking to write better quality and easily maintainable code. No previous knowledge of TDD/BDD is required. What You Will Learn Understand the basics of TDD and its

significance Refactoring tests to build APIs in order to increase test coverage How to leverage the inbuilt Scala testing modules like ScalaTest, specs2 and Scala Check Writing test fixtures and apply the concepts of BDD How to divide tests to run at different points in continuous delivery cycle Benefits of refactoring and how it affects the final quality of code produced Understanding of SBT based build environment and how to use it to run tests The fundamentals of mocking and stubbing in Scala and how to use it efficiently In Detail Test-driven development (TDD) produces high-quality applications in less time than is possible with traditional methods. Due to the systematic nature of TDD, the application is tested in individual units as well as cumulatively, right from the design stage, to ensure optimum performance and reduced debugging costs. This step-by-step guide shows you how to use the principles of TDD and built-in Scala testing modules to write clean and fully tested Scala code and give your workflow the change it needs to let you create better applications than ever before. After an introduction to TDD, you will learn the basics of ScalaTest, one of the most flexible and most popular testing tools around for Scala, by building your first fully test-driven application. Building on from that you will learn about the ScalaTest API and how to refactor code to produce high-quality applications. We'll teach you the concepts of BDD (Behavior-driven development) and you'll see how to add functional tests to the existing suite of tests. You'll be introduced to the concepts of Mocks and Stubs and will learn to increase test coverage using properties. With a concluding chapter on miscellaneous tools, this book will enable you to write better quality code that is easily maintainable and watch your apps change for the better. Style and approach This step-by-step guide explains the significance of TDD in Scala through various practical examples. You will learn to write a complete test-driven application throughout the course of the book.

The Art of Agile Development James Shore 2008-01-21 For those considering Extreme Programming, this book provides no-nonsense advice on agile planning, development, delivery, and management taken from the authors' many years of experience. While plenty of books address the what and why of agile development, very few offer the information users can apply directly.

**Test-Driven Development** Thomas Hammell 2007-03-01 * This will be the first book to show how to implement a test-driven development process in detail as it applies to real world J2EE applications. * Combines the tools and methodologies of test-driven development with real world use cases, unlikely most titles which cover one or the other. * Looks at the complete process including test coverage strategies, test organization, incorporating TDD into new and existing projects as well as how to automate it all. * This book is not version specific.

PSM II : Quick Reference Guide and Exam Questions Sidharth Bathia 2020-03 Welcome! Kudos on taking the first important step towards prepping up for the Exam! This book is a quick Reference Guide created for the PSM II (Professional Scrum Master) Examinations. Questions and Answers (similar to the ones in the exam) are included. The guide helps highlight the most important information for you to see at a glance. It also brings the most relevant information for the PSM II Exam together in one resource. Note: 1) The Reference Guide is based on the latest Scrum guides. 2) Information and Content found on the Scrum Guide, Nexus Guides and other articles (found on Scrum.org) is repeated on this Reference guide. 3) This Reference guide is not a text book or a replacement to the Scrum Guide. It's simply your workbook which has content presented systematically to understand and memorize for the exam. 4) The Reference guide also has questions and answers which will help you prepare for the PSM II exam. 5) Your feedback is much appreciated. Please feel free to email ScrumReferenceGuides@gmail.com in case of any questions. 6) % of the book is available for you to see before you buy it in the "Look Inside" Amazon Feature. This will help you understand exactly what you are buying. 7) You do not need to purchase the PSM II Question Bank (ISBN : 978-1-7345536-5-9) if you purchase this book. The PSM II assessment is structured in a similar way to PSM I. It is comprised of 30 multiple choice questions. You have 90 minutes to complete the assessment and must score 85%+ to achieve the certification. The questions and answer options tend to be longer than in PSM I

and it takes more time to read and understand. As with all Scrum.org assessments, it is challenging and designed to test your real understanding of Scrum. The Guide also contains Questions and Answers which will help you prepare for the Professional Scrum Master II (PSM II) and / or Professional Scrum Product Owner II (Level 2) Exam. Information in this Guide references: 1.The Scrum Guide. (Nov 2020) 2.The Nexus Guide. (Jan 2021) 3.The Kanban Guide. (Jan 2021) 4. Professional Scrum Development Scrum Topics. 5. Evidence Based Management Guide. 6. Scrum Org Professional Scrum Master Learning Path. 7. Scrum Org Professional Scrum Product Owner Learning Path. 8. Scrum Org Professional Agile Learning Path. 9. Scrum Forums, white papers, articles and training videos (Scrum.Org). 10. Other Scrum sites and books. 11. Practice Questions and Answers. A) 160 Professional Scrum Master Basics Questions and Answers. B) 130 Scaled Professional Scrum Questions and Answers. C) 160 Professional Scrum Developer Questions and Answers. D) 134 Kanban Questions and Answers. E) 132 PAL-E and Professional Scrum Master (Level 2) Questions and Answers. F) 80 Professional Scrum Master II (Level 2) Questions and Answers.

**Growing Object-Oriented Software, Guided by Tests** Steve Freeman 2009-10-12 Test-Driven Development (TDD) is now an established technique for delivering better software faster. TDD is based on a simple idea: Write tests for your code before you write the code itself. However, this "simple" idea takes skill and judgment to do well. Now there's a practical guide to TDD that takes you beyond the basic concepts. Drawing on a decade of experience building real-world systems, two TDD pioneers show how to let tests guide your development and "grow" software that is coherent, reliable, and maintainable. Steve Freeman and Nat Pryce describe the processes they use, the design principles they strive to achieve, and some of the tools that help them get the job done. Through an extended worked example, you'll learn how TDD works at multiple levels, using tests to drive the features and the object-oriented structure of the code, and using Mock Objects to discover and then describe relationships between objects. Along the way, the book systematically addresses challenges that development teams encounter with TDD—from integrating TDD into your processes to testing your most difficult features. Coverage includes Implementing TDD effectively: getting started, and maintaining your momentum throughout the project Creating cleaner, more expressive, more sustainable code Using tests to stay relentlessly focused on sustaining quality Understanding how TDD, Mock Objects, and Object-Oriented Design come together in the context of a real software development project Using Mock Objects to guide object-oriented designs Succeeding where TDD is difficult: managing complex test data, and testing persistence and concurrency

The Art of Unit Testing Roy Osherove 2015-02-15 Lesbare, wartbare und zuverlässige Tests entwickelnStubs, Mock-Objekte und automatisierte FrameworksEinsatz von .NET-Tools inkl. NUnit, Rhino Mocks und Typemock Isolator Unit Testing, richtig durchgeführt, kann den Unterschied ausmachen zwischen einem fehlgeschlagenen Projekt und einem erfolgreichen, zwischen einer wartbaren Code-Basis und einer, die niemand freiwillig anpackt, zwischen dem Nach-Hause-Kommen um 2 Uhr nachts oder zum Abendessen, selbst noch kurz vor dem Release-Termin. Roy Osherove führt Sie Schritt für Schritt von einfachen Tests zu Tests, die wartbar, lesbar und zuverlässig sind. Er geht danach auf die Grundlagen des Interaction Testings ein und stellt schließlich bewährte Vorgehensweisen für das Schreiben, das Verwalten und das Warten der Unit Tests in echten Projekten vor. Darüber hinaus werden auch fortgeschrittene Themen behandelt wie Mocks, Stubs und Frameworks wie etwa Typemock Isolator und Rhino Mocks. Sie werden eine Menge zu fortgeschrittenen Testmustern und zur Testorganisation, zum Arbeiten mit Legacy Code und auch zu untestbarem Code erfahren. Und Sie lernen Werkzeuge kennen, die Sie beim Testen von Datenbanken und anderen Technologien brauchen werden. Alle Beispiele sind mit Visual Studio in C# geschrieben, so dass die Beispiele insbesondere für .NET-Entwickler nützlich sind. Aber auch für Programmierer anderer Sprachen wird das Buch von großem Nutzen sein, da die Prinzipien des Unit Testings für andere Sprachen dieselben sind. Roys Blog finden Sie auf ISerializable.com. Aus dem Inhalt: Verwenden eines Test-Frameworks

(NUnit)Grundlegende TestattributeStubs zum Auflösen von AbhängigkeitenInteraction Testing mit Mock-ObjektenTesthierarchie und OrganisationDie Säulen guter TestsIntegration von Unit Testing in das UnternehmenUmgang mit Legacy Code

Effektives Arbeiten mit Legacy Code Michael C. Feathers 2020-11-04 Können Sie Ihren Code leicht ändern? Können Sie fast unmittelbar Feedback bekommen, wenn Sie ihn ändern? Verstehen Sie ihn? Wenn Sie eine dieser Fragen mit nein beantworten, arbeiten Sie mit Legacy Code, der Geld und wertvolle Entwicklungszeit kostet. Michael Feathers erläutert in diesem Buch Strategien für den gesamten Entwicklungsprozess, um effizient mit großen, ungetesteten Code-Basen zu arbeiten. Dabei greift er auf erprobtes Material zurück, das er für seine angesehenen Object-Mentor-Seminare entwickelt hat. Damit hat er bereits zahlreichen Entwicklern, technischen Managern und Testern geholfen, ihre Legacy-Systeme unter Kontrolle zu bringen. Darüber hinaus finden Sie auch einen Katalog mit 24 Techniken zur Aufhebung von Dependencies, die Ihnen zeigen, wie Sie isoliert mit Programmelementen arbeiten und Code sicherer ändern können.

Extreme Programming Kent Beck 2003

Python Crashkurs Eric Matthes 2017-04-19 "Python Crashkurs" ist eine kompakte und gründliche Einführung, die es Ihnen nach kurzer Zeit ermöglicht, Python-Programme zu schreiben, die für Sie Probleme lösen oder Ihnen erlauben, Aufgaben mit dem Computer zu erledigen. In der ersten Hälfte des Buches werden Sie mit grundlegenden Programmierkonzepten wie Listen, Wörterbücher, Klassen und Schleifen vertraut gemacht. Sie erlernen das Schreiben von sauberem und lesbarem Code mit Übungen zu jedem Thema. Sie erfahren auch, wie Sie Ihre Programme interaktiv machen und Ihren Code testen, bevor Sie ihn einem Projekt hinzufügen. Danach werden Sie Ihr neues Wissen in drei komplexen Projekten in die Praxis umsetzen: ein durch "Space Invaders" inspiriertes Arcade-Spiel, eine Datenvisualisierung mit Pythons superpraktischen Bibliotheken und eine einfache Web-App, die Sie online bereitstellen können. Während der Arbeit mit dem "Python Crashkurs" lernen Sie, wie Sie: - leistungsstarke Python-Bibliotheken und Tools richtig einsetzen –

einschließlich matplotlib, NumPy und Pygal - 2D-Spiele programmieren, die auf Tastendrücke und Mausklicks reagieren, und die schwieriger werden, je weiter das Spiel fortschreitet - mit Daten arbeiten, um interaktive Visualisierungen zu generieren - Web-Apps erstellen und anpassen können, um diese sicher online zu deployen - mit Fehlern umgehen, die häufig beim Programmieren auftreten Dieses Buch wird Ihnen effektiv helfen, Python zu erlernen und eigene Programme damit zu entwickeln. Warum länger warten? Fangen Sie an!

**Test-driven Development** Kent Beck 2003 Write clean code that works with the help of this groundbreaking software method. Example-driven teaching is the basis of Beck's step-by-step instruction that will have readers using TDD to further their projects.

**ATDD by Example** Markus Gärtner 2012 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.

Test-driven Development David Astels 2003 This guide for programmers teaches how to practice Test Driven Development (TDD), also called Test First Development. Contrary to the accepted approach to testing, when you practice TDD you write tests for code before you write the code being tested. This text provides examples in Java.

**Implementation Patterns - Studentenausgabe** Kent Beck 2010

**Test-driven Development** Harry Percival 2014 "Automated tests are great! They tell you when your software is broken and enable you to refactor with confidence, leading to cleaner codebases and less stressed developers. Tests are so great, in fact, that a group of true believers started writing them before the actual code. What they called test-driven development (TDD) turned out to be a fantastic way to develop software. Now, with this video course, you can get started with TDD step-by-step. TDD is often demonstrated with toy examples that fail to represent the challenges of real-world software development. But in this course, Harry Percival takes you through a practical example designed to look more like real life: building a simple web app with all the complexities associated with web browsers, the HTTP protocol, web frameworks, and database integration."--Resource description page.

Mastering React Test-Driven Development Daniel Irvine 2022-09-30 Learn test-driven and behavior-driven development techniques that will give you greater confidence when building React applications Key Features Explore the TDD process, how it works, and why it will help you write maintainable React apps Develop a component testing framework from scratch, which will help you understand the mechanics of good unit testing Reduce complexity by using unit tests and end-to-end acceptance tests to drive the design of your apps Book Description Test-driven development (TDD) is a programming workflow that helps you build your apps by specifying behavior as automated tests. The TDD workflow future-proofs apps so that they can be modified without fear of breaking existing functionality. Another benefit of TDD is that it helps software development teams communicate their intentions more clearly, by way of test specifications. This book teaches you how to apply TDD when building React apps. You'll create a sample app using the same React libraries and tools that professional React developers use, such as Jest, React Router, Redux, Relay (GraphQL), Cucumber, and Puppeteer. The TDD workflow is supported by various testing techniques and patterns, which are useful even if you're not following the TDD process. This book covers these techniques by walking you through the creation of a component test framework. You'll learn automated testing theory which will help you work with any of the test libraries that are in standard usage today, such as React Testing Library. This second edition has been revised with a stronger focus on concise code examples and has been fully updated for React 18. By the end of this TDD book, you'll be able to use React, Redux, and GraphQL to develop robust web apps. What you will learn Build test-driven applications using React 18 and Jest Understand techniques and patterns for writing great automated tests Use test doubles and mocks effectively Test-drive browser APIs, including the Fetch API and the WebSocket API Integrate with libraries such as React Router, Redux, and Relay (GraphQL) Use Cucumber.js and Puppeteer to build Behaviour-Driven Development (BDD) style tests for your applications Build and test async Redux code using redux-saga and expect-redux Who this book is for This book is for frontend developers who are looking to improve their testing practices and increase the quality and maintainability of their applications. To make the most of this book, you'll need knowledge of the JavaScript programming language.

Test-Driven Java Development, Second Edition Viktor Farcic 2018-03-23 This book will teach the concepts of test driven development in Java so you can build clean, maintainable and robust code Key Features Explore the most popular TDD

tools and frameworks and become more proficient in building applications Create applications with better code design, fewer bugs, and higher test coverage, enabling you to get them to market quickly Implement test-driven programming methods into your development workflows Book Description Test-driven development (TDD) is a development approach that relies on a test-first procedure that emphasizes writing a test before writing the necessary code, and then refactoring the code to optimize it.The value of performing TDD with Java, one of the longest established programming languages, is to improve the productivity of programmers and the maintainability and performance of code, and develop a deeper understanding of the language and how to employ it effectively. Starting with the basics of TDD and understanding why its adoption is beneficial, this book will take you from the first steps of TDD with Java until you are confident enough to embrace the practice in your day-to-day routine.You'll be guided through setting up tools, frameworks, and the environment you need, and we will dive right into hands-on exercises with the goal of mastering one practice, tool, or framework at a time. You'll learn about the Red-Green-Refactor procedure, how to write unit tests, and how to use them as executable documentation.With this book, you'll also discover how to design simple and easily maintainable code, work with mocks, utilize behavior-driven development, refactor old legacy code, and release a half-finished feature to production with feature toggles.You will finish this book with a deep understanding of the test-driven development methodology and the confidence to apply it to application programming with Java. What you will learn Explore the tools and frameworks required for effective TDD development Perform the Red-Green-Refactor process efficiently, the pillar around which all other TDD procedures are based Master effective unit testing in isolation from the rest of your code Design simple and easily maintainable code by implementing different techniques Use mocking frameworks and techniques to easily write and quickly execute tests Develop an application to implement behavior-driven development in conjunction with unit testing Enable and disable features using feature toggles Who this book is for If you're an experienced Java developer and want to implement more effective methods of programming systems and applications, then this book is for you.