

Agile Testing A Practical Guide For Testers

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

Agile Estimating and Planning is the definitive, practical guide to estimating and planning agile projects. In this book, Agile Alliance cofounder Mike Cohn discusses the philosophy of agile estimating and planning and shows you exactly how to get the job done, with real-world examples and case studies. Concepts are clearly illustrated and readers are guided, step by step, toward how to answer the following questions: What will we build? How big will it be? When must it be done? How much can I really complete by then? You will first learn what makes a good plan—and then what makes it agile. Using the techniques in Agile Estimating and Planning, you can stay agile from start to finish, saving time, conserving resources, and accomplishing more. Highlights include: Why conventional prescriptive planning fails and why agile planning works How to estimate feature size using story points and ideal days—and when to use each How and when to re-estimate How to prioritize features using both financial and nonfinancial approaches How to split large features into smaller, more manageable ones How to plan iterations and predict your team's initial rate of progress How to schedule projects that have unusually high uncertainty or schedule-related risk How to estimate projects that will be worked on by multiple teams Agile Estimating and Planning supports any agile, semiagile, or iterative process, including Scrum, XP, Feature-Driven Development, Crystal, Adaptive Software Development, DSDM, Unified Process, and many more. It will be an indispensable resource for every development manager, team

leader, and team member.

Succeed with Scrum in Even the Largest, Most Complex Distributed Development Projects Forewords by Ken Schwaber, Scott Ambler, Roman Pichler, and Matthew Wang This is the first comprehensive, practical guide for Scrum practitioners working in large-scale distributed environments. Written by three of IBM's leading Scrum practitioners—in close collaboration with the IBM QSE Scrum Community of more than 1000 members worldwide—this book offers specific, actionable guidance for everyone who wants to succeed with Scrum in the enterprise. Readers will follow a journey through the lifecycle of a distributed Scrum project, from envisioning products and setting up teams to preparing for Sprint planning and running retrospectives. Each chapter presents a baseline drawn from “conventional” Scrum, then discusses additional issues faced by distributed teams, and presents specific best-practice solutions, alternatives, and tips the authors have identified through hard, empirical experience. Using real-world examples, the book demonstrates how to apply key Scrum practices, such as look-ahead planning in geographically distributed environments. Readers will also gain valuable new insights into the agile management of complex problem and technical domains. Coverage includes Developing user stories and working with Product Owners as a distributed team Recognizing and fixing the flaws Scrum may reveal in existing processes Engaging in more efficient Release and Sprint planning Conducting intense, brief daily Scrum meetings in distributed environments Managing cultural and language differences Resolving dependencies, performing frequent integration, and maintaining transparency in geographically distributed environments Successfully running remote software reviews and demos Brainstorming what worked and what didn't, to improve future Sprints This book will be an indispensable resource for every team leader, member, product owner, or manager working with Scrum or other agile methods in any distributed software development organization.

How to scale ATDD to large projects --

How do successful agile teams deliver bug-free, maintainable software—iteration after iteration? The answer is: By seamlessly combining development and testing. On such teams, the developers write testable code that enables them to verify it using various types of automated tests. This approach keeps regressions at bay and prevents “testing crunches”—which otherwise may occur near the end of an iteration—from ever happening. Writing testable code, however, is often difficult, because it requires knowledge and skills that cut across multiple disciplines. In *Developer Testing*, leading test expert and mentor Alexander Tarlinder presents concise, focused guidance for making new and legacy code far more testable. Tarlinder helps you answer questions like: When have I tested this enough? How many tests do I need to write? What should my tests verify? You'll learn how to design for testability and utilize techniques like refactoring, dependency breaking, unit testing, data-driven testing, and test-driven development to achieve the highest possible confidence in your software. Through practical examples in Java, C#, Groovy, and Ruby, you'll discover what works—and what doesn't. You can quickly begin using Tarlinder's technology-agnostic insights with most languages and toolsets while not getting buried in specialist details. The author helps you adapt your current programming style for testability, make a testing mindset “second nature,” improve your code, and enrich your day-to-day experience

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

Let Over Lambda is one of the most hardcore computer programming books out there. Starting with the fundamentals, it describes the most advanced features of the most advanced language: Common Lisp. Only the top percentile of programmers use lisp and if you can understand this book you are in the top percentile of lisp programmers. If you are looking for a dry coding manual that re-hashes common-sense techniques in whatever langue du jour, this book is not for you. This book is about pushing the boundaries of what we know about programming. While this book teaches useful skills that can help solve your programming problems today and now, it has also been designed to be entertaining and inspiring. If you have ever wondered what lisp or even programming itself is really about, this is the book you have been looking for. From three design partners at Google Ventures, a unique five-day process--called the sprint--for solving tough problems using design, prototyping, and testing ideas with customers.

Decades of software testing experience condensed into the most important lessons learned. The world's leading software testing experts lend you their wisdom and years of experience to help you avoid the most common mistakes in testing software. Each lesson is an assertion related to software testing, followed by an explanation or example that shows you the how, when, and why of the testing lesson. More than just tips, tricks, and pitfalls to avoid, Lessons Learned in Software Testing speeds you through the critical testing phase of the software development project without the extensive trial and error it normally takes to do so. The ultimate resource for software testers and developers at every level of expertise, this guidebook features:

- * Over 200 lessons gleaned from over 30 years of combined testing experience
- * Tips, tricks, and common pitfalls to avoid by simply reading the book rather than finding out the hard way
- * Lessons for all key topic areas, including test design, test management, testing strategies, and bug reporting
- * Explanations and examples of each testing trouble spot help illustrate each lesson's assertion

Rely on this robust and thorough guide to build and maintain successful test automation. As the software industry shifts from traditional waterfall paradigms into more agile ones, test automation becomes a highly important tool that allows your development teams to deliver software at an ever-increasing pace without compromising quality. Even though it may seem trivial to automate the repetitive tester's work, using test automation efficiently and properly is not trivial. Many test automation endeavors end up in the "graveyard" of software projects. There are many things that affect the value of test automation, and also its costs. This book aims to cover all of these aspects in great detail so you can make decisions to create the best test automation solution that will not only help your test automation project to succeed, but also

allow the entire software project to thrive. One of the most important details that affects the success of the test automation is how easy it is to maintain the automated tests. Complete Guide to Test Automation provides a detailed hands-on guide for writing highly maintainable test code. What You'll Learn Know the real value to be expected from test automation Discover the key traits that will make your test automation project succeed Be aware of the different considerations to take into account when planning automated tests vs. manual tests Determine who should implement the tests and the implications of this decision Architect the test project and fit it to the architecture of the tested application Design and implement highly reliable automated tests Begin gaining value from test automation earlier Integrate test automation into the business processes of the development team Leverage test automation to improve your organization's performance and quality, even without formal authority Understand how different types of automated tests will fit into your testing strategy, including unit testing, load and performance testing, visual testing, and more Who This Book Is For Those involved with software development such as test automation leads, QA managers, test automation developers, and development managers. Some parts of the book assume hands-on experience in writing code in an object-oriented language (mainly C# or Java), although most of the content is also relevant for nonprogrammers.

Thoroughly reviewed and eagerly anticipated by the agile community, *User Stories Applied* offers a requirements process that saves time, eliminates rework, and leads directly to better software. The best way to build software that meets users' needs is to begin with "user stories": simple, clear, brief descriptions of functionality that will be valuable to real users. In *User Stories Applied*, Mike Cohn provides you with a front-to-back blueprint for writing these user stories and weaving them into your development lifecycle. You'll learn what makes a great user story, and what makes a bad one. You'll discover practical ways to gather user stories, even when you can't speak with your users. Then, once you've compiled your user stories, Cohn shows how to organize them, prioritize them, and use them for planning, management, and testing. User role modeling: understanding what users have in common, and where they differ Gathering stories: user interviewing, questionnaires, observation, and workshops Working with managers, trainers, salespeople and other "proxies" Writing user stories for acceptance testing Using stories to prioritize, set schedules, and estimate release costs Includes end-of-chapter practice questions and exercises *User Stories Applied* will be invaluable to every software developer, tester, analyst, and manager working with any agile method: XP, Scrum... or even your own home-grown approach.

This open access book, published to mark the 15th anniversary of the International Software Quality Institute (iSQI), is intended to raise the profile of software testers and their profession. It gathers contributions by respected software testing experts in order to highlight the state of the art as well as future challenges and trends. In addition, it covers current and emerging technologies like test automation, DevOps, and artificial intelligence methodologies used for software testing, before taking a look into the future. The contributing authors answer questions like: "How is the profession of tester currently changing? What should testers be prepared for in the years to come, and what skills will the next generation need? What opportunities are available for further training today? What will testing look like in an agile world that is user-centered and fast-paced? What tasks will remain for testers once the most important processes are automated?" iSQI has been focused on the education and certification of software testers for fifteen years now, and in the process has contributed to improving the quality of software in many areas. The papers gathered here clearly reflect the numerous ways in which software quality assurance can play a critical role in various areas. Accordingly, the book will be of interest to both professional software testers and managers working in software testing or software quality assurance.

Written by the founder and executive director of the Quality Assurance Institute, which

sponsors the most widely accepted certification program for software testing Software testing is a weak spot for most developers, and many have no system in place to find and correct defects quickly and efficiently This comprehensive resource provides step-by-step guidelines, checklists, and templates for each testing activity, as well as a self-assessment that helps readers identify the sections of the book that respond to their individual needs Covers the latest regulatory developments affecting software testing, including Sarbanes-Oxley Section 404, and provides guidelines for agile testing and testing for security, internal controls, and data warehouses CD-ROM with all checklists and templates saves testers countless hours of developing their own test documentation Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

This is a comprehensive guide to Scrum for all (team members, managers, and executives). If you want to use Scrum to develop innovative products and services that delight your customers, this is the complete, single-source reference you've been searching for. This book provides a common understanding of Scrum, a shared vocabulary that can be used in applying it, and practical knowledge for deriving maximum value from it.

A Comprehensive Collection of Agile Testing Best Practices: Two Definitive Guides from Leading Pioneers Janet Gregory and Lisa Crispin haven't just pioneered agile testing, they have also written two of the field's most valuable guidebooks. Now, you can get both guides in one indispensable eBook collection: today's must-have resource for all agile testers, teams, managers, and customers. Combining comprehensive best practices and wisdom contained in these two titles, The Agile Testing Collection will help you adapt agile testing to your environment, systematically improve your skills and processes, and strengthen engagement across your entire development team. The first title, Agile Testing: A Practical Guide for Testers and Agile Teams, defines the agile testing discipline and roles, and helps you choose, organize, and use the tools that will help you the most. Writing from the tester's viewpoint, Gregory and Crispin chronicle an entire agile software development iteration, and identify and explain seven key success factors of agile testing. The second title, More Agile Testing: Learning Journeys for the Whole Team, addresses crucial emerging issues, shares evolved practices, and covers key issues that delivery teams want to learn more about. It offers powerful new insights into continuous improvement, scaling agile testing across teams and the enterprise, overcoming pitfalls of automation, testing in regulated environments, integrating DevOps practices, and testing mobile/embedded and business intelligence systems. The Agile Testing Collection will help you do all this and much more. Customize agile testing processes to your needs, and successfully transition to them Organize agile teams, clarify roles, hire new testers, and quickly bring them up to speed Engage testers in agile development, and help agile team members improve their testing skills Use tests and collaborate with business experts to plan features and guide development Design automated tests for superior reliability and easier maintenance Plan "just enough," balancing small increments with larger feature sets and the entire system Test to identify and mitigate risks, and prevent future defects Perform exploratory testing using personas, tours, and test charters with session- and thread-based techniques Help testers, developers, and operations experts collaborate on shortening feedback cycles with continuous integration and delivery Both guides in this collection are thoroughly grounded in the authors' extensive experience, and supported by examples from actual projects. Now, with both books integrated into a single, easily searchable, and cross-linked eBook, you can learn from their experience even more easily.

These days, more and more software development projects are being carried out using agile methods like Scrum. Agile software development promises higher software quality, a shorter time to market, and improved focus on customer needs. However, the transition to working within an agile methodology is not easy. Familiar processes and procedures change drastically. Software testing and software quality assurance have a crucial role in ensuring that

a software development team, department, or company successfully implements long-term agile development methods and benefits from this framework. This book discusses agile methodology from the perspective of software testing and software quality assurance management. Software development managers, project managers, and quality assurance managers will obtain tips and tricks on how to organize testing and assure quality so that agile projects maintain their impact. Professional certified testers and software quality assurance experts will learn how to work successfully within agile software teams and how best to integrate their expertise. Topics include: Agile methodology and classic process models How to plan an agile project Unit tests and test first approach Integration testing and continuous integration System testing and test nonstop Quality management and quality assurance Also included are five case studies from the manufacturing, online-trade, and software industry as well as test exercises for self-assessment. This book covers the new ISTQB Syllabus for Agile Software Testing and is a relevant resource for all students and trainees worldwide who plan to undertake this ISTQB certification.

"Software Testing: Principles and Practices is a comprehensive treatise on software testing. It provides a pragmatic view of testing, addressing emerging areas like extreme testing and ad hoc testing"--Resource description page.

Today, even the largest development organizations are turning to agile methodologies, seeking major productivity and quality improvements. However, large-scale agile development is difficult, and publicly available case studies have been scarce. Now, three agile pioneers at Hewlett-Packard present a candid, start-to-finish insider's look at how they've succeeded with agile in one of the company's most mission-critical software environments: firmware for HP LaserJet printers. This book tells the story of an extraordinary experiment and journey. Could agile principles be applied to re-architect an enormous legacy code base? Could agile enable both timely delivery and ongoing innovation? Could it really be applied to 400+ developers distributed across four states, three continents, and four business units? Could it go beyond delivering incremental gains, to meet the stretch goal of 10x developer productivity improvements? It could, and it did—but getting there was not easy. Writing for both managers and technologists, the authors candidly discuss both their successes and failures, presenting actionable lessons for other development organizations, as well as approaches that have proven themselves repeatedly in HP's challenging environment. They not only illuminate the potential benefits of agile in large-scale development, they also systematically show how these benefits can actually be achieved. Coverage includes:

- Tightly linking agile methods and enterprise architecture with business objectives
- Focusing agile practices on your worst development pain points to get the most bang for your buck
- Abandoning classic agile methods that don't work at the largest scale
- Employing agile methods to establish a new architecture
- Using metrics as a "conversation starter" around agile process improvements
- Leveraging continuous integration and quality systems to reduce costs, accelerate schedules, and automate the delivery pipeline
- Taming the planning beast with "light-touch" agile planning and lightweight long-range forecasting
- Implementing effective project management and ensuring accountability in large agile projects
- Managing tradeoffs associated with key decisions about organizational structure
- Overcoming U.S./India cultural differences that can complicate offshore development
- Selecting tools to support quantum leaps in productivity in your organization
- Using change management disciplines to support greater enterprise agility

Deliver Better Games Faster, On Budget—And Make Game Development Fun Again! Game development is in crisis—facing bloated budgets, impossible schedules, unmanageable complexity, and death march overtime. It's no wonder so many development studios are struggling to survive. Fortunately, there is a solution. Scrum and Agile methods are already revolutionizing development outside the game industry. Now, long-time game developer Clinton Keith shows exactly how to successfully apply these methods to the unique challenges of game development. Keith has spent more than fifteen years developing games, seven of them with Scrum and agile methods. Drawing on this unparalleled expertise, he shows how teams can use Scrum to deliver games more efficiently, rapidly, and cost-effectively; craft games that offer more entertainment value; and make life more fulfilling for development teams at the same time. You'll learn to form successful agile teams that incorporate programmers, producers, artists, testers, and designers—and promote effective collaboration within and beyond those teams, throughout the entire process. From long-range planning to progress tracking and continuous integration, Keith offers dozens of tips, tricks, and solutions—all based firmly in reality and hard-won experience. Coverage includes Understanding Scrum's goals, roles, and practices in the context of game development Communicating and planning your game's vision, features, and progress Using iterative techniques to put your game into a playable state every two to four weeks—even daily Helping all team participants succeed in their roles Restoring stability and predictability to the development process Managing ambiguous requirements in a fluid marketplace Scaling Scrum to large, geographically distributed development teams Getting started: overcoming inertia and integrating Scrum into your studio's current processes Increasingly, game developers and managers are recognizing that things can't go on the way they have in the past. Game development organizations need a far better way to work. Agile Game Development with Scrum gives them that—and brings the profitability, creativity, and fun back to game development.

This book is open access under a CC BY license. The volume constitutes the proceedings of the 18th International Conference on Agile Software Development, XP 2017, held in Cologne, Germany, in May 2017. The 14 full and 6 short papers presented in this volume were carefully reviewed and selected from 46 submissions. They were organized in topical sections named: improving agile processes; agile in organization; and safety critical software. In addition, the volume contains 3 doctoral symposium papers (from 4 papers submitted).

Uncover surprises, risks, and potentially serious bugs with exploratory testing. Rather than designing all tests in advance, explorers design and execute small, rapid experiments, using what they learned from the last little experiment to inform the next. Learn essential skills of a master explorer, including how to analyze software to discover key points of vulnerability, how to design experiments on the fly, how to hone your observation skills, and how to focus your efforts. Software is full of surprises. No matter how careful or skilled you are, when you create software it can behave differently than you intended. Exploratory testing mitigates those risks. Part 1 introduces the core, essential skills of a master explorer. You'll learn to craft charters to guide your exploration, to observe what's really happening (hint: it's harder than it sounds), to identify interesting variations, and to determine what expected behavior should be when exercising software in unexpected ways. Part 2 builds on that

foundation. You'll learn how to explore by varying interactions, sequences, data, timing, and configurations. Along the way you'll see how to incorporate analysis techniques like state modeling, data modeling, and defining context diagrams into your explorer's arsenal. Part 3 brings the techniques back into the context of a software project. You'll apply the skills and techniques in a variety of contexts and integrate exploration into the development cycle from the very beginning. You can apply the techniques in this book to any kind of software. Whether you work on embedded systems, Web applications, desktop applications, APIs, or something else, you'll find this book contains a wealth of concrete and practical advice about exploring your software to discover its capabilities, limitations, and risks.

Thousands of organizations are adopting Scrum to transform the way they execute complex projects, in software and beyond. This guide will give you the skills and confidence needed to deploy Scrum, resulting in high-performing teams and satisfied customers. Drawing on years of hands-on experience helping companies succeed, Certified Scrum Trainer (CST) Mitch Lacey helps you overcome the major challenges of Scrum adoption and the deeper issues that emerge later. Extensively revised to reflect improved Scrum practices and tools, this edition adds an all-new section of tips from the field. Lacey covers many new topics, including immersive interviewing, collaborative estimation, and deepening business alignment. In 35 engaging chapters, you'll learn how to build support and maximize value across your company. Now part of the renowned Mike Cohn Signature Series on agile development, this pragmatic guide addresses everything from establishing roles and priorities to determining team velocity, setting sprint length, and conducting customer reviews. Coverage includes Bringing teams and new team members on board Creating a workable definition of "done" Planning for short-term wins, and removing impediments to success Balancing predictability and adaptability in release planning Running productive daily scrums Fixing failing sprints Accurately costing projects, and measuring the value they deliver Managing risks in dynamic Scrum projects Prioritizing and estimating backlogs Working with distributed and offshore teams Institutionalizing improvements, and extending agility throughout the organization Packed with real-world examples straight from Lacey's experience, this book will be invaluable to anyone transitioning to Scrum, seeking to improve their early results, or trying to get back on track.

Agile Testing A Practical Guide for Testers and Agile Teams Pearson Education
2012 Jolt Award finalist! Pioneering the Future of Software Test Do you need to get it right, too? Then, learn from Google. Legendary testing expert James Whittaker, until recently a Google testing leader, and two top Google experts reveal exactly how Google tests software, offering brand-new best practices you can use even if you're not quite Google's size...yet! Breakthrough Techniques You Can Actually Use Discover 100% practical, amazingly scalable techniques for analyzing risk and planning tests...thinking like real users...implementing exploratory, black box, white box, and acceptance testing...getting usable feedback...tracking issues...choosing and creating tools...testing "Docs & Mocks," interfaces, classes, modules, libraries, binaries, services, and infrastructure...reviewing code and refactoring...using test hooks, presubmit scripts, queues, continuous builds, and more. With these techniques, you can transform testing from a bottleneck into an accelerator—and make your whole organization more productive!

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.

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.

Written by a leading expert in the field, this unique volume contains current test design approaches and focuses only on software test design. Copeland illustrates each test design through detailed examples and step-by-step instructions.

Getting quality right in Agile software development is hard. The principles and values provide little guidance, and the practical frameworks tend to gloss over the questions of quality. * How is a transition to Agile managed without sacrificing quality? * How is testing done in an Agile environment? * How is quality monitored and managed in the Agile environment? * Where do QA managers and testers test engineers fit in an Agile team? * How can Agile team members improve and expand their testing skills? * What to look for when hiring an Agile tester? * How are bugs managed in an Agile environment?

Agile Quality is a practical guide, providing guidance and advice that can be put into action quickly and easily. It contains solutions to quality related questions that come up before or during an Agile transition. It guides you on how to manage quality in Agile, and how to monitor the process and keep improving it. This knowledge is presented simply, with context and case-studies that come from a wealth of experience in the practical applications of software quality processes. Audience This book reflects the spirit of simplicity, which is the best way to influence and touch the reader with the hope that he will gain value from my words. If you are familiar with my blog, you will find this book similar to the spirit I represent there. The writing is mostly practical and aimed towards the reader, with some sense of humor and examples from my own world. This book is suitable for anyone starting a journey in the world of Agile, but also for those who have experience and need to expand their knowledge, skills and to try to use a spirit that goes beyond the boundaries of the existing rules. In addition, the book focuses on quality in the Agile world. It will be great for anyone coming from this world (e.g. software testers, developers, architects) that wants to understand how to adapt to the Agile environment and meet the challenges they are likely to encounter. The first few volumes of this book are about Agile and specifically about Scrum, these volumes are the basis for the rest of the book, including the advanced volumes that concentrate on quality and testing. Therefore, I suggest you read this book in order. Based on the needs of the educational community, and the software professional, this book takes a unique approach to teaching software testing. It introduces testing concepts that are managerial, technical, and process oriented, using the Testing Maturity Model (TMM) as a guiding framework. The TMM levels and goals support a structured presentation of fundamental and advanced test-related concepts to the reader. In this context, the interrelationships between theoretical, technical, and managerial concepts become more apparent. In addition, relationships between the testing process, maturity goals, and such key players as managers, testers and client groups are introduced. Topics and features: - Process/engineering-oriented text -

Promotes the growth and value of software testing as a profession - Introduces both technical and managerial aspects of testing in a clear and precise style - Uses the TMM framework to introduce testing concepts in a systematic, evolutionary way to facilitate understanding - Describes the role of testing tools and measurements, and how to integrate them into the testing process Graduate students and industry professionals will benefit from the book, which is designed for a graduate course in software testing, software quality assurance, or software validation and verification Moreover, the number of universities with graduate courses that cover this material will grow, given the evolution in software development as an engineering discipline and the creation of degree programs in software engineering.

Continuous Testing for DevOps Professionals is the definitive guide for DevOps teams and covers the best practices required to excel at Continuous Testing (CT) at each step of the DevOps pipeline. It was developed in collaboration with top industry experts from across the DevOps domain from leading companies such as CloudBees, Tricentis, Testim.io, Test.ai, Perfecto, and many more. The book is aimed at all DevOps practitioners, including software developers, testers, operations managers, and IT/business executives. It consists of 4 sections: 1. Fundamentals of Continuous Testing 2. Continuous Testing for Web Apps 3. Continuous Testing for Mobile Apps 4. Advancing Continuous Testing All profits from Continuous Testing for DevOps Professionals will be donated to code.org, which is a nonprofit dedicated to expanding access to computer science in schools and increasing participation by women and underrepresented minorities.

Agile Practice Guide – First Edition has been developed as a resource to understand, evaluate, and use agile and hybrid agile approaches. This practice guide provides guidance on when, where, and how to apply agile approaches and provides practical tools for practitioners and organizations wanting to increase agility. This practice guide is aligned with other PMI standards, including A Guide to the Project Management Body of Knowledge (PMBOK® Guide) – Sixth Edition, and was developed as the result of collaboration between the Project Management Institute and the Agile Alliance.

How to Find and Fix the Killer Software Bugs that Evade Conventional Testing In Exploratory Software Testing, renowned software testing expert James Whittaker reveals the real causes of today's most serious, well-hidden software bugs--and introduces powerful new "exploratory" techniques for finding and correcting them. Drawing on nearly two decades of experience working at the cutting edge of testing with Google, Microsoft, and other top software organizations, Whittaker introduces innovative new processes for manual testing that are repeatable, prescriptive, teachable, and extremely effective. Whittaker defines both in-the-small techniques for individual testers and in-the-large techniques to supercharge test teams. He also introduces a hybrid strategy for injecting exploratory concepts into traditional scripted testing. You'll learn when to use each, and how to use them all successfully. Concise, entertaining, and actionable, this book introduces robust techniques that have been used extensively by real testers on shipping software, illuminating their actual experiences with these techniques, and the results they've achieved. Writing for testers, QA specialists, developers, program managers, and architects alike, Whittaker answers crucial questions such as: • Why do some bugs remain invisible to automated testing--and how can I uncover them? • What techniques will help me consistently

discover and eliminate “show stopper” bugs? • How do I make manual testing more effective--and less boring and unpleasant? • What’s the most effective high-level test strategy for each project? • Which inputs should I test when I can’t test them all? • Which test cases will provide the best feature coverage? • How can I get better results by combining exploratory testing with traditional script or scenario-based testing? • How do I reflect feedback from the development process, such as code changes?

For any software developer who has spent days in “integration hell,” cobbling together myriad software components, *Continuous Integration: Improving Software Quality and Reducing Risk* illustrates how to transform integration from a necessary evil into an everyday part of the development process. The key, as the authors show, is to integrate regularly and often using continuous integration (CI) practices and techniques. The authors first examine the concept of CI and its practices from the ground up and then move on to explore other effective processes performed by CI systems, such as database integration, testing, inspection, deployment, and feedback. Through more than forty CI-related practices using application examples in different languages, readers learn that CI leads to more rapid software development, produces deployable software at every step in the development lifecycle, and reduces the time between defect introduction and detection, saving time and lowering costs. With successful implementation of CI, developers reduce risks and repetitive manual processes, and teams receive better project visibility. The book covers How to make integration a “non-event” on your software development projects How to reduce the amount of repetitive processes you perform when building your software Practices and techniques for using CI effectively with your teams Reducing the risks of late defect discovery, low-quality software, lack of visibility, and lack of deployable software Assessments of different CI servers and related tools on the market The book’s companion Web site, www.integratebutton.com, provides updates and code examples.

Agile is an iterative approach to software development that has rapidly gained popularity in the wider IT industry. For software testers, Agile testing brings many advantages to teams, from increasing overall product quality to providing greater scope for flexibility. Building on the ISTQB Foundation Level Agile Tester syllabus, this book covers Agile principles, methods, techniques and tools in the context of software testing. The book is perfect for software testers interested in the benefits of Agile testing, working in an Agile environment or undertaking the ISTQB Foundation Level Agile Tester exam.

Agile Automation and Unified Functional Testing is a one-stop resource that explains all concepts, features and benefits of agile automation and UFT with real-time examples and their solutions. This book starts with test automation basics and subsequently moves to its advanced concepts such as test automation life cycle, test automation approach, and framework design. It has been designed to be a beginner's guide for new users, a companion guide for experienced users, and a reference guide for professionals preparing for interviews or certification

examinations on test automation and UFT.

Get past the myths of testing in agile environments - and implement agile testing the RIGHT way. * * For everyone concerned with agile testing: developers, testers, managers, customers, and other stakeholders. * Covers every key issue: Values, practices, organizational and cultural challenges, collaboration, metrics, infrastructure, documentation, tools, and more. * By two of the world's most experienced agile testing practitioners and consultants. Software testing has always been crucial, but it may be even more crucial in agile environments that rely heavily on repeated iterations of software capable of passing tests. There are, however, many myths associated with testing in agile environments. This book helps agile team members overcome those myths -- and implement testing that truly maximizes software quality and value. Long-time agile testers Lisa Crispin and Janet Gregory offer powerful insights for three large, diverse groups of readers: experienced testers who are new to agile; members of newly-created agile teams who aren't sure how to perform testing or work with testers; and test/QA managers whose development teams are implementing agile. Readers will learn specific agile testing practices and techniques that can mean the difference between success and failure; discover how to transition 'traditional' test teams to agile; and learn how to integrate testers smoothly into agile teams. Drawing on extensive experience, the authors illuminate topics ranging from culture to test planning to automated tools. They cover every form of testing: business-facing tests, technology-facing tests, exploratory tests, context-driven and scenario tests, load, stability, and endurance tests, and more. Using this book's techniques, readers can improve the effectiveness and reduce the risks of any agile project or initiative.

A practical guide to effective business model testing 7 out of 10 new products fail to deliver on expectations. Testing Business Ideas aims to reverse that statistic. In the tradition of Alex Osterwalder's global bestseller Business Model Generation, this practical guide contains a library of hands-on techniques for rapidly testing new business ideas. Testing Business Ideas explains how systematically testing business ideas dramatically reduces the risk and increases the likelihood of success for any new venture or business project. It builds on the internationally popular Business Model Canvas and Value Proposition Canvas by integrating Assumptions Mapping and other powerful lean startup-style experiments. Testing Business Ideas uses an engaging 4-color format to:

- Increase the success of any venture and decrease the risk of wasting time, money, and resources on bad ideas
- Close the knowledge gap between strategy and experimentation/validation
- Identify and test your key business assumptions with the Business Model Canvas and Value Proposition Canvas

A definitive field guide to business model testing, this book features practical tips for making major decisions that are not based on intuition and guesses. Testing Business Ideas shows leaders how to encourage an experimentation mindset within their organization and make experimentation a continuous, repeatable process.

Lean User Testing A Pragmatic Step-by-Step Guide to User Tests If you believe in agile software development and delivering value to your customers and your company, reading this book is the right decision as it will greatly support your process to identify and create valuable, feasible and usable products. "We Know What We Need to Build" Who hasn't yet heard that dreaded, gut feeling-based notion in the past? To my experience, it is rarely valid, but more often an expression of an outdated thinking, that values output over outcome, that believes in requirement documents and micromanaging the product team. This book, however, is dedicated to completely different approach, that Steve Blank once wrapped up in his famous quote: There are No Facts Inside Your Building - Get Outside." And you should do so as early as possible in the process -it is the most important task of any product team. This book is therefore a deliberately short, focused, pragmatic manual for everyone, who designs, develops or markets software: Product manager, engineers and designers (UX/UI). It is based on hundreds of user interviews that I have run up to now and provides all you need to know to start your own user interview initiative in about two hours of your time. Save up to 90% of Typical User Interview Costs And there is more good news: The lean user testing approach will save up to 90% of the costs compared to outsourcing user interviews to a professional usability agency, but will return at least 80% of possible insights. Avoid Building Expensive Features Nobody Wants No more flying blind in the early stages: Test your hypotheses quickly and turn product discovery into your advantage over the competition. Learn how to avoid wasting money on software nobody wants and how to deliver value instead. Obsolete features aren't just expensive to build. They also need to be maintained and probably be removed at a later stage again, not to mention their opportunity costs: Imagine what you could have built instead. Gain More Runway for Your Startup Optimizing the cycle-time of your product hypotheses will focus available engineering and product management resources on valuable, usable and feasible features, thus extending your runway and improving your standing for the next funding round. Improve Communication with Stakeholders User tests greatly simplify the communication with stakeholders - the interviews, you will be running, are your product organization's first line of defense when it comes to turning down unreasonable feature requests. About the Author The author has worked for many years as a product manager and agile coach (Scrum, Lean Startup, Lean Change). During that time, he developed B2C as well as B2B software, mainly for startups, including a former Google subsidiary. He originally studied chemistry, business administration, and law. However, he has never worked in a laboratory. Instead, back in 1996, he released the first online shop software with SAP R/3 connectivity, only to learn that the early bird does not necessarily catch the worm. After his move to Berlin, Germany, he founded a marketplace for local service. In 2011, Entrepreneurs Club Berlin e.V. followed, as did Startup Camp Berlin- one of the largest German startup conferences today. His latest project, Age Of Product - Invent For Your

Customers, focuses on the exchange of knowledge between product people, designers, and developers. It is about lessons learned and best practices on how to identify which product to build and how to build it in an efficient way. Age Of Product will host events and workshops in Berlin from autumn 2015 on and might also organize a new conference in the near future."

Janet Gregory and Lisa Crispin pioneered the agile testing discipline with their previous work, *Agile Testing*. Now, in *More Agile Testing*, they reflect on all they've learned since. They address crucial emerging issues, share evolved agile practices, and cover key issues agile testers have asked to learn more about. Packed with new examples from real teams, this insightful guide offers detailed information about adapting agile testing for your environment; learning from experience and continually improving your test processes; scaling agile testing across teams; and overcoming the pitfalls of automated testing. You'll find brand-new coverage of agile testing for the enterprise, distributed teams, mobile/embedded systems, regulated environments, data warehouse/BI systems, and DevOps practices. You'll come away understanding

- How to clarify testing activities within the team
- Ways to collaborate with business experts to identify valuable features and deliver the right capabilities
- How to design automated tests for superior reliability and easier maintenance
- How agile team members can improve and expand their testing skills
- How to plan "just enough," balancing small increments with larger feature sets and the entire system
- How to use testing to identify and mitigate risks associated with your current agile processes and to prevent defects
- How to address challenges within your product or organizational context
- How to perform exploratory testing using "personas" and "tours"
- Exploratory testing approaches that engage the whole team, using test charters with session- and thread-based techniques
- How to bring new agile testers up to speed quickly—without overwhelming them

Janet Gregory is founder of DragonFire Inc., an agile quality process consultancy and training firm. Her passion is helping teams build quality systems. For almost fifteen years, she has worked as a coach and tester, introducing agile practices into companies of all sizes and helping users and testers understand their agile roles. She is a frequent speaker at agile and testing software conferences, and is a major contributor to the agile testing community. Lisa Crispin, an experienced agile testing practitioner and coach, regularly leads conference workshops on agile testing and contributes frequently to agile software publications. She enjoys collaborating as part of an awesome agile team to produce quality software. Since 1982, she has worked in a variety of roles on software teams, in a wide range of industries. She joined her first agile team in 2000 and continually learns from other teams and practitioners.

Testing is a cornerstone of XP, as tests are written for every piece of code before it is programmed. This workbook helps testers learn XP, and XP devotees learn testing. This new book defines how an XP tester can optimally contribute to a project, including what testers should do, when they should do it, and how they

should do it.

[Copyright: fa51eceb2d7f20c246afe62cab291db9](#)