

Writing Better Requirements

In April 1991 BusinessWeek ran a cover story entitled, "Can't Work This Thing," about the difficulties many people have with consumer products, such as cell phones and VCRs. More than 15 years later, the situation is much the same—but at a very different level of scale. The disconnect between people and technology has had society-wide consequences in the large-scale system accidents from major human error, such as those at Three Mile Island and in Chernobyl. To prevent both the individually annoying and nationally significant consequences, human capabilities and needs must be considered early and throughout system design and development. One challenge for such consideration has been providing the background and data needed for the seamless integration of humans into the design process from various perspectives: human factors engineering, manpower, personnel, training, safety and health, and, in the military, habitability and survivability. This collection of development activities has come to be called human-system integration (HSI). Human-System Integration in the System Development Process reviews in detail more than 20 categories of HSI methods to provide invaluable guidance and information for system designers and developers.

Requirements engineering is the process by which the requirements for software systems are gathered, analyzed, documented, and managed throughout their complete lifecycle. Traditionally it has been concerned with technical goals for, functions of, and constraints on software systems. Aurum and Wohlin, however, argue that it is no longer appropriate for software systems professionals to focus only on functional and non-functional aspects of the intended system and to somehow assume that organizational context and needs are outside their remit. Instead, they call for a broader perspective in order to gain a better understanding of the interdependencies between enterprise stakeholders, processes, and software systems, which would in turn give rise to more appropriate techniques and higher-quality systems. Following an introductory chapter that provides an exploration of key issues in requirements engineering, the book is organized in three parts. Part 1 presents surveys of state-of-the-art requirements engineering process research along with critical assessments of existing models, frameworks and techniques. Part 2 addresses key areas in requirements engineering, such as market-driven requirements engineering, goal modeling, requirements ambiguity, and others. Part 3 concludes the book with articles that present empirical evidence and experiences from practices in industrial projects. Its broader perspective gives this book its distinct appeal and makes it of interest to both researchers and practitioners, not only in software engineering but also in other disciplines such as business process engineering and management science.

Publisher Fact Sheet A concise, hands-on approach to managing & improving the critical requirements process in software development.

Extending the scenario method beyond interface design, this important book shows developers how to design more effective systems by soliciting, analyzing, and elaborating stories from end-users. Contributions from leading industry consultants and opinion-makers present a range of scenario techniques, from the light, sketchy, and agile to the careful and systematic. Includes real-world case studies from Philips, DaimlerChrysler, and Nokia, and covers systems ranging from custom software to

embedded hardware-software systems

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.

Addressing systems engineers, this book introduces techniques for discovering and expressing systems requirements. The authors treat requirements as simple pieces of text, supported by operational scenarios and informal diagrams. They present the information in a step-by-step format addressing capturing requirements from users, organizing them into a clear message, techniques for requirement writing, and informal review processes. Annotation copyrighted by Book News, Inc., Portland, OR

A comprehensive reference for developing and managing precise software requirements shares guidelines for fostering communications between business and technical teams to maximize accuracy at the request and developmental levels.

Apply best practices for capturing, analyzing, and implementing software requirements through visual models—and deliver better results for your business. The authors—experts in eliciting and visualizing requirements—walk you through a simple but comprehensive language of visual models that has been used on hundreds of real-world, large-scale projects. Build your fluency with core concepts—and gain essential, scenario-based context and implementation advice—as you progress through each chapter. Transcend the limitations of text-based requirements data using visual models that more rigorously identify, capture, and validate requirements Get real-world guidance on best ways to use visual models—how and when, and ways to combine them for best project outcomes Practice the book's concepts as you work through chapters Change your focus from writing a good requirement to ensuring a complete system

By following the techniques in this book, it is possible to write requirements and specifications that customers, testers, programmers and technical writers will actually read, understand and use. These pages provide precise, practical instructions on how to distinguish requirements from design to produce clear solutions.

This guide will help readers learn how to employ the significant power of use cases to their software development efforts. It provides a practical methodology,

presenting key use case concepts.

Provides guidelines and examples for handling research, outlining, spelling, punctuation, formatting, and documentation.

From the creator of the popular website Ask a Manager and New York's work-advice columnist comes a witty, practical guide to 200 difficult professional conversations—featuring all-new advice! There's a reason Alison Green has been called "the Dear Abby of the work world." Ten years as a workplace-advice columnist have taught her that people avoid awkward conversations in the office because they simply don't know what to say. Thankfully, Green does—and in this incredibly helpful book, she tackles the tough discussions you may need to have during your career. You'll learn what to say when • coworkers push their work on you—then take credit for it • you accidentally trash-talk someone in an email then hit "reply all" • you're being micromanaged—or not being managed at all • you catch a colleague in a lie • your boss seems unhappy with your work • your cubemate's loud speakerphone is making you homicidal • you got drunk at the holiday party Praise for Ask a Manager "A must-read for anyone who works . . . [Alison Green's] advice boils down to the idea that you should be professional (even when others are not) and that communicating in a straightforward manner with candor and kindness will get you far, no matter where you work."—Booklist (starred review) "The author's friendly, warm, no-nonsense writing is a pleasure to read, and her advice can be widely applied to relationships in all areas of readers' lives. Ideal for anyone new to the job market or new to management, or anyone hoping to improve their work experience."—Library Journal (starred review) "I am a huge fan of Alison Green's Ask a Manager column. This book is even better. It teaches us how to deal with many of the most vexing big and little problems in our workplaces—and to do so with grace, confidence, and a sense of humor."—Robert Sutton, Stanford professor and author of *The No Asshole Rule* and *The Asshole Survival Guide* "Ask a Manager is the ultimate playbook for navigating the traditional workforce in a diplomatic but firm way."—Erin Lowry, author of *Broke Millennial: Stop Scraping By and Get Your Financial Life Together*

WHAT IS THIS BOOK ABOUT? Communicate Business Needs in an Agile (e.g. Scrum) or Lean (e.g. Kanban) Environment Problem solvers are in demand in every organization, large and small, from a Mom and Pop shop to the federal government. Increase your confidence and your value to organizations by improving your ability to analyze, extract, express, and discuss business needs in formats supported by Agile, Lean, and DevOps. The single largest challenge facing organizations around the world is how to leverage their Information Technology to gain competitive advantage. This is not about how to program the devices; it is figuring out what the devices should do. The skills needed to identify and define the best IT solutions are invaluable for every role in the organization. These skills can propel you from the mail room to the boardroom by making your organization more effective and more profitable. Whether you: - are tasked with

defining business needs for a product or existing software, - need to prove that a digital solution works, - want to expand your User Story and requirements discovery toolkit, or - are interested in becoming a Business Analyst, this book presents invaluable ideas that you can steal. The future looks bright for those who embrace Lean concepts and are prepared to engage with the business community to ensure the success of Agile initiatives. **WHAT YOU WILL LEARN** Learn Step by Step When and How to Define Lean / Agile Requirements Agile, Lean, DevOps, and Continuous Delivery do not change the need for good business analysis. In this book, you will learn how the new software development philosophies influence the discovery, expression, and analysis of business needs. We will cover User Stories, Features, and Quality Requirements (a.k.a. Non-functional Requirements – NFR). User Story Splitting and Feature Drill-down transform business needs into technology solutions. Acceptance Tests (Scenarios, Scenario Outlines, and Examples) have become a critical part of many Lean development approaches. To support this new testing paradigm, you will also learn how to identify and optimize Scenarios, Scenario Outlines, and Examples in GIVEN-WHEN-THEN format (Gherkin) that are the bases for Acceptance Test Driven Development (ATDD) and Behavior Driven Development (BDD). This book presents concrete approaches that take you from day one of a change initiative to the ongoing acceptance testing in a continuous delivery environment. The authors introduce novel and innovative ideas that augment tried-and-true techniques for: - discovering and capturing what your stakeholders need, - writing and refining the needs as the work progresses, and - developing scenarios to verify that the software does what it should. Approaches that proved their value in conventional settings have been redefined to ferret out and eliminate waste (a pillar of the Lean philosophy). Those approaches are fine-tuned and perfected to support the Lean and Agile movement that defines current software development. In addition, the book is chock-full of examples and exercises that allow you to confirm your understanding of the presented ideas. **WHO WILL BENEFIT FROM READING THIS BOOK?** How organizations develop and deliver working software has changed significantly in recent years. Because the change was greatest in the developer community, many books and courses justifiably target that group. There is, however, an overlooked group of people essential to the development of software-as-an-asset that have been neglected. Many distinct roles or job titles in the business community perform business needs analysis for digital solutions. They include: - Product Owners - Business Analysts - Requirements Engineers - Test Developers - Business- and Customer-side Team Members - Agile Team Members - Subject Matter Experts (SME) - Project Leaders and Managers - Systems Analysts and Designers - AND “anyone wearing the business analysis hat”, meaning anyone responsible for defining a future IT solution **TOM AND ANGELA’S** (the authors) **STORY** Like all good IT stories, theirs started on a project many years ago. Tom was the super techie, Angela the super SME. They fought their way through the 3-year

development of a new policy maintenance system for an insurance company. They vehemently disagreed on many aspects, but in the process discovered a fundamental truth about IT projects. The business community (Angela) should decide on the business needs while the technical team's (Tom)'s job was to make the technology deliver what the business needed. Talk about a revolutionary idea! All that was left was learning how to communicate with each other without bloodshed to make the project a resounding success. Mission accomplished. They decided this epiphany was so important that the world needed to know about it. As a result, they made it their mission (and their passion) to share this ground-breaking concept with the rest of the world. To achieve that lofty goal, they married and began the mission that still defines their life. After over 30 years of living and working together 24x7x365, they are still wildly enthusiastic about helping the victims of technology learn how to ask for and get the IT solutions they need to do their jobs better. More importantly, they are more enthusiastically in love with each other than ever before!

No matter how much instruction you've had on managing software requirements, there's no substitute for experience. Too often, lessons about requirements engineering processes lack the no-nonsense guidance that supports real-world solutions. Complementing the best practices presented in his book, *Software Requirements, Second Edition*, requirements engineering authority Karl Wiegers tackles even more of the real issues head-on in this book. With straightforward, professional advice and practical solutions based on actual project experiences, this book answers many of the tough questions raised by industry professionals. From strategies for estimating and working with customers to the nuts and bolts of documenting requirements, this essential companion gives developers, analysts, and managers the cosmic truths that apply to virtually every software development project. Discover how to:

- Make the business case for investing in better requirements practices
- Generate estimates using three specific techniques
- Conduct inquiries to elicit meaningful business and user requirements
- Clearly document project scope
- Implement use cases, scenarios, and user stories effectively
- Improve inspections and peer reviews
- Write requirements that avoid ambiguity

This is a guide to eliminating the waste of time, money and effort resulting from poor product development. It provides product definition requirements needed at the start of any product development process.

With plenty of ideas, suggestions, and practical cases on software quality, this book will help you to improve the quality of your software and to deliver high-quality products to your users and satisfy the needs of your customers and stakeholders. Many methods for product quality improvement start by investigating the problems, and then work their way back to the point where the problem started. For instance audits and root cause analysis work this way. But what if you could prevent problems from happening, by building an understanding what drives quality, thus enabling to take action before problems actually occur?

What Drives Quality explores how quality plays a role in all of the software development activities. It takes a deep dive into quality by listing the relevant factors of development and management activities that drive the quality of software products. It provides a lean approach to quality by analyzing the full development chain from customer requests to delivering products to users. I'm aiming this book at software developers and testers, architects, product owners and managers, agile coaches, Scrum masters, project managers, and operational and senior managers who consider quality to be important. A book on quality should be practical. It should help you, the reader of this book, to improve the quality of your software and deliver better products. It should inspire you and give you energy to persevere on your quality journey. What drives quality tries to do just that, and more. This book is based on my experience as a developer, tester, team leader, project manager, quality manager, process manager, consultant, coach, trainer, and adviser in Agile, Lean, Quality and Continuous Improvement. It takes a deep dive into quality with views from different perspectives and provides ideas, suggestions, practices, and experiences that will help you to improve quality of the products that your organization is delivering. This book views software quality from an engineering, management, and social perspective. It explores the interaction between all involved in delivering high-quality software to users and provides ideas to do it quicker and at lower costs.

The business analyst role can cover a wide range of responsibilities, including the elicitation and documenting of business requirements, upfront strategic work, design and implementation phases. Typical difficulties faced by analysts include stakeholders who disagree or don't know their requirements, handling estimates and project deadlines that conflict, and what to do if all the requirements are top priority. The Business Analysis Handbook offers practical solutions to these and other common problems which arise when uncovering requirements or conducting business analysis. Getting requirements right is difficult; this book offers guidance on delivering the right project results, avoiding extra cost and work, and increasing the benefits to the organization. The Business Analysis Handbook provides an understanding of the analyst role and the soft skills required, and outlines industry standard tools and techniques with guidelines on their use to suit the most appropriate situations. Covering numerous techniques such as Business Process Model and Notation (BPMN), use cases and user stories, this essential guide also includes standard templates to save time and ensure nothing important is missed.

Negotiating a Common Understanding. Ways to the Get Started. Exploring the Possibilities. Clarifying Expectations. Greatly Improving the Odds of Success. "I spend much time helping organizations capture requirements and even more time helping them recover from not capturing requirements. Many of them have gone through some motions regarding requirements as if they were sleepwalking. It's time to wake up and do it right-and this book is going to be

their alarm clock." -Jerry Weinberg, author of numerous books on productivity enhancement "In today's complex, fast-paced software development environment, collaboration-the intense peer-to-peer conversations that result in products, decisions, and knowledge sharing-is absolutely essential to success. But all too often, attempts to collaborate degenerate into agonizing meetings or ineffectual bull sessions. Ellen's wonderful book will help you bridge the gap-turning the agony of meetings into the ecstasy of effective collaboration." -Jim Highsmith, a pioneer in adaptive software development methods "Requirements by Collaboration presents a wealth of practical tools and techniques for facilitating requirements development workshops. It is suitable-no, essential reading-for requirements workshop facilitators. It will help both technical people and customer representatives participate in these critical contributions to software success." -Karl Wiegers, Principal Consultant, Process Impact, author of Software Requirements "The need for this particular book, at this particular time, is crystal clear. We have entered a new age where software development must be viewed as a form of business problem solving. That means direct user participation in developing "requirements," or more accurately, in jointly working the business problem. That, in turn, means facilitated sessions. In this book, Ellen Gottesdiener provides a wealth of practical ideas for ensuring that you have exactly the right stuff for this all-important area of professional art." -Ronald G. Ross, Principal, Business Rule Solutions, LLC, Executive Editor, www.BRCommunity.com "Gottesdiener's years of software development experience coupled with her straight-forward writing style make her book a perfect choice for either a senior developer or a midlevel project manager. In addition to her technical experience, her knowledge of group dynamics balance the book by educating the reader on how to manage conflict and personality differences within a requirements team-something that is missing from most requirements textbooks...It is a required "handbook" that will be referred to again and again." -Kay Christian, ebusiness Consultant, Conifer, Colorado "Requirements by Collaboration is a "must read" for any system stakeholder. End users and system analysts will learn the significant value they can add to the systems development process. Management will learn the tremendous return they may receive from making a modest time/people investment in facilitated sessions. Facilitators will discover ways to glean an amazing amount of high-quality information in a relatively brief time." -Russ Schwartz, Computer System Quality Consultant, Global Biotechnology Firm "In addition to showing how requirements are identified, evaluated, and confirmed, Ellen provides important guidance based on her own real-world experience for creating and managing the workshop environment in which requirements are generated. This book is an engaging and invaluable resource for project teams and sponsors, both business and IT, who are committed to achieving results in the most productive manner possible." -Hal Thilmony, Senior Manager, Business Process Improvement (Finance), CiscoSystems, Inc. "Project managers should read this book for

assistance with planning the requirements process. Experienced facilitators will enrich their knowledge. New facilitators can use this book to get them up to speed and become more effective in less time." -Rob Stroober, Competence Development Manager and Project Manager, Deloitte & Touche Consultdata, The Netherlands "While many books discuss the details of software requirement artifacts (for example, use cases), Ellen's new book zeros in on effective workshop techniques and tools used to gather the content of these artifacts. As a pioneer in requirements workshops, she shares her real-life experiences in a comprehensive and easy-to-read book with many helpful examples and diagrams." -Bill Bird, Aera Energy LLC "Requirements by Collaboration is absolutely full of guidance on the most effective ways to use workshops in requirements capture. This book will help workshop owners and facilitators to determine and gain agreement on a sound set of requirements, which will form a solid foundation for the development work that is to follow." -Jennifer Stapleton, Software Process Consultant and author of DSDM: The Method in Practice "This book provides an array of techniques within a clear, structured process, along with excellent examples of how and when to use them. It's an excellent, practical, and really useful handbook written by a very experienced author!" -Jean-Anne Kirk, Director DSDM Consortium and IAF Professional Development "Ellen has written a detailed, comprehensive, and practical handbook for facilitating groups in gathering requirements. The processes she outlines give the facilitator tools to bring together very different perspectives from stakeholders elegantly and with practical, useable results." -Jo Nelson, Principal, ICA Associates, Inc., Chair, IAF (2001-2002) Requirements by Collaboration: Workshops for Defining Needs focuses on the human side of software development--how well we work with our customers and teammates. Experience shows that the quality and degree of participation, communication, respect, and trust among all the stakeholders in a project can strongly influence its success or failure. Ellen Gottesdiener points out that such qualities are especially important when defining user requirements and she shows in this book exactly what to do about that fact. Gottesdiener shows specifically how to plan and conduct requirements workshops. These carefully organized and facilitated meetings bring business managers, technical staff, customers, and users into a setting where, together, they can discover, evolve, validate, verify, and agree upon their product needs. Not only are their requirements more effectively defined through this collaboration, but the foundation is laid for good teamwork throughout the entire project. Other books focus on how to build the product right. Requirements by Collaboration focuses instead on what must come first--the right product to build. With a spice of wit and illuminating illustration, this collection of 75 short pieces deals with topics in the field of software requirements analysis, specifications and design. The author emphasizes the need to structure and analyze problems, not just specify a solution.

Most IT systems fail to meet expectations. They don't meet business goals and

don't support users efficiently. Why? Because the requirements didn't address the right issues. Writing a good requirements specification doesn't take more time. This book shows how it's done - many times faster and many times smarter. What are the highlights? Two complete real-life requirements specifications (the traditional and the fast approach) and examples from many others. Explanations of both traditional and fast approaches, and discussions of their strengths and weaknesses in different project types (tailor-made, COTS, and product development). Real-life illustrations of all types of requirements, stakeholder analysis, cost/benefit and other techniques to ensure that business goals are met. Proven methods for dealing with difficult or complex requirements, such as specifying ease-of-use, or dealing with 200 reports that might be needed because they are in the old system. Who is it for? Everyone involved in the software supply chain, from analysts and developers to end users, will learn new techniques, benefit from requirements written by other specialists, and discover successes and failures from other companies. Software suppliers will find ideas for helping customers and writing competitive proposals. Programmers and other developers will learn how to express requirements without specifying technical details, and how to reduce risks when developing a system. Students aspiring to IT careers will learn the theory and practice of requirements engineering, and get a strong foundation for case studies and projects. Who is the author? Soren Lauesen is currently professor at the IT-University of Copenhagen. He has worked in the IT industry for 20 years and has been a professor at Copenhagen Business School for 15. He has been co-founder of three educational and two industrial development organizations. His industry projects have encompassed compilers, operating systems, process control, temporal databases, and software quality assurance. His research interests include human-computer interaction, requirements specification, object-oriented design, quality assurance, marketing and product development, and interaction between research and industry. He has a broad range of other interests ranging from biology to dancing and foreign cultures.

Much has been written about requirements engineering, by both academics and practitioners. Yet, in all of these descriptions, the focus is on what to do, rather than how to do it. In particular, most of what is written focuses either on the very high-level consideration of requirements frameworks and elicitation techniques, or on the very low-level activities such as the syntax of good requirement statements. It is important to understand these issues, but it is also important to address what are arguably the most important activities--those that are undertaken to articulate the purpose of the system; gather the relevant information; analyze, negotiate, and synthesize the needs and requirements; and then present them in such a manner that describes the system's mission in order to meet the business needs. While addressing upper-level frameworks and lower-level requirements-writing skills, this text focuses principally on how to 'do' requirements engineering such that the resulting artefacts not only have the right

shape, but also have the right content. The methodology presented provides a framework for requirements-engineering activities associated with the development of the logical (functional) architecture (the conduct of logical design in the Conceptual Design phase of the system life cycle), and is called for convenience the Conceptual Design Methodology (CDM).

"Mastering the Requirements Process: Getting Requirements Right" sets out an industry-proven process for gathering and verifying requirements, regardless of whether you work in a traditional or agile development environment. In this sweeping update of the bestselling guide, the authors show how to discover precisely what the customer wants and needs, in the most efficient manner possible.

"Product management isn't about you and it isn't about your product. It's about solving problems for your customers, creating a solution, and taking it to market." When I started in product management, I had a lot of questions, like "What is product management?" It's a common question still, but most people don't have a good answer. After all these years, the same questions keep coming up. I see them on forums, I hear them when I talk to new and experienced product managers, and I still do not see them being answered well or usefully. So I wrote this book, with the answers to the questions I always had. You'll learn: The real reason people choose to buy a product - it's not about how "good" the product is! How to get the very best from your developers. The 5-word phrase that can accelerate sales and marketing. The best ways to talk to executives and customers about what you're building. Among other critical information, you'll find a powerful framework for thinking about product management - and even for talking to your Mom about what you do. The framework provides an infrastructure for most of *The Secret Product Manager Handbook*. I provide a concrete and explicit explanation of why product management is so important for businesses, including a calculation of the true business value of product management. And the book is full of specific techniques and practices for transforming your product management career. What People Are Saying "Nuggets of product management wisdom and ideas you'll want to hang on your monitor. The book is like having a conversation with a mentor." (Ken Hanson, Growth Product Manager) The summary of product management - identify market problems, guide the creation of solutions, and take the solutions to market - is powerful. As a former engineer, it's especially important to be reminded of the third point" (Frank Licea, Product Manager) "The intro is one of the clearest and smartest explanations of the value a product manager should bring to the table I've ever read." (Luca Candela, VP of Product Management)

Summary Specification by Example is an emerging practice for creating software based on realistic examples, bridging the communication gap between business stakeholders and the dev teams building the software. In this book, author Gojko Adzic distills interviews with successful teams worldwide, sharing how they specify, develop, and deliver software, without defects, in short iterative delivery cycles. About the Technology Specification by Example is a collaborative method for specifying requirements and tests. Seven patterns, fully explored in

this book, are key to making the method effective. The method has four main benefits: it produces living, reliable documentation; it defines expectations clearly and makes validation efficient; it reduces rework; and, above all, it assures delivery teams and business stakeholders that the software that's built is right for its purpose. About the Book This book distills from the experience of leading teams worldwide effective ways to specify, test, and deliver software in short, iterative delivery cycles. Case studies in this book range from small web startups to large financial institutions, working in many processes including XP, Scrum, and Kanban. This book is written for developers, testers, analysts, and business people working together to build great software. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from Manning. Also available is all code from the book.

What's Inside Common process patterns How to avoid bad practices Fitting SBE in your process 50+ case studies ===== Table of Contents Part 1 Getting started Part 2 Key process patterns Part 3 Case studies Key benefits Key process patterns Living documentation Initiating the changes Deriving scope from goals Specifying collaboratively Illustrating using examples Refining the specification Automating validation without changing specifications Validating frequently Evolving a documentation system uSwitch RainStor Iowa Student Loan Sabre Airline Solutions ePlan Services Songkick Concluding thoughts

From System Designers to Top Management, Everyone loves a good story Once upon a time, it was well understood that stories teach better than plain facts. Why then are most software requirements documents a baffling hodge-podge of diagrams, data dictionaries, and bullet points, held together by little more than a name and a staple? Telling Stories teaches you to combine proven standards of requirements analysis with the most ancient and effective tool for sharing information, the narrative. Telling Stories simplifies and refines the classic methods of Structured Analysis, providing organization, design, and old-fashioned writing advice. Whether you're just getting started or an experienced requirements writer, Telling Stories can help you turn dull, detailed material into an engaging, logical, and readable story, a story that can make the difference for your project and your career. Learn why readers believe and remember what they learn from stories Work with team members to gather content, tell their stories, and win their support Use stories to find every requirement Create diagrams that almost tell the story on their own (while looking clear and professional) Explain everything important about a process Use precise language to remove the ambiguity from requirements Write a forceful executive summary that stands on its own and sells a project to senior management Summarize often to keep the reader focused on key issues Structure the document so every part has a clear place and purpose

"This book is not only of practical value. It's also a lot of fun to read." Michael Jackson, The Open University. Do you need to know how to create good requirements? Discovering Requirements offers a set of simple, robust, and effective cognitive tools for building requirements. Using worked examples throughout the text, it shows you how to develop an understanding of any problem, leading to questions such as: What are you trying to achieve? Who is involved, and how? What do those people want? Do they agree? How do you envisage this working? What could go wrong? Why are you making these decisions? What are you assuming? The established author team of Ian Alexander and Ljerka Beus-Dukic answer these and related questions, using a set of complementary techniques, including stakeholder analysis, goal modelling, context modelling, storytelling and scenario modelling, identifying risks and threats, describing rationales, defining terms in a project dictionary, and prioritizing. This easy to read guide is full of carefully-checked tips and tricks. Illustrated with worked examples, checklists, summaries, keywords and exercises, this book will encourage you to move closer to the real problems you're trying to solve. Guest boxes from other experts give you additional hints for your projects. Invaluable for anyone specifying requirements including

Read Free Writing Better Requirements

IT practitioners, engineers, developers, business analysts, test engineers, configuration managers, quality engineers and project managers. A practical sourcebook for lecturers as well as students studying software engineering who want to learn about requirements work in industry. Once you've read this book you will be ready to create good requirements!

Market_Desc: Software Designers/Developers and Systems Analysts, Managers/Engineers of Organizational Process Improvement Programmers. Special Features: · Reputable and authoritative authors.· Written in a clear and easy to read format, packed full of jargon-free and unthreatening advice.· Structured as FAQs (questions and answers) - an ideal format for busy practitioners.· Cover quotes from leading software gurus. About The Book: Requirements Engineering is a new term for an old problem, in the past known as Systems Analysis (and also Knowledge Elicitation). Requirements constitute the earliest phase of the software development cycle. Requirements are precise statements that reflect the needs of customers and users of an intended computer system, e.g. a word processor must include a spell-checker, security access is to be given to authorized personnel only, updates to customer information must be made every 10 seconds. Requirements engineering is being recognized as increasingly important - no other aspect of software engineering has enjoyed as much growth in recent years. More and more organizations are either improving their requirements engineering process or thinking about doing so.

Learn how to create good requirements when designing hardware and software systems. While this book emphasizes writing traditional "shall" statements, it also provides guidance on use case design and creating user stories in support of agile methodologies. The book surveys modeling techniques and various tools that support requirements collection and analysis. You'll learn to manage requirements, including discussions of document types and digital approaches using spreadsheets, generic databases, and dedicated requirements tools. Good, clear examples are presented, many related to real-world work the author has done during his career. Requirements Writing for System Engineering advantages of different requirements approaches and implement them correctly as your needs evolve. Unlike most requirements books, Requirements Writing for System Engineering teaches writing both hardware and software requirements because many projects include both areas. To exemplify this approach, two example projects are developed throughout the book, one focusing on hardware and the other on software. This book Presents many techniques for capturing requirements. Demonstrates gap analysis to find missing requirements. Shows how to address both software and hardware, as most projects involve both. Provides extensive examples of "shall" statements, user stories, and use cases. Explains how to supplement or replace traditional requirement statements with user stories and use cases that work well in agile development environments What You Will Learn Understand the 14 techniques for capturing all requirements. Address software and hardware needs; because most projects involve both. Ensure all statements meet the 16 attributes of a good requirement. Differentiate the 19 different functional types of requirement, and the 31 non-functional types. Write requirements properly based on extensive examples of good 'shall' statements, user stories, and use cases. Employ modeling techniques to mitigate the imprecision of words. Audience Writing Requirements teaches you to write requirements the correct way. It is targeted at the requirements engineer who wants to improve and master his craft. This is also an excellent book from which to teach requirements engineering at the university level. Government organizations at all levels, from Federal to local levels, can use this book to ensure they begin all development projects correctly. As well, contractor companies supporting government development are also excellent audiences for this book.

"How do I make my user stories smaller?" "What is the right size for a user story?" "What is the difference between an Epic and a Story? And where do Tasks and Sub-tasks fit in?" "Who writes user stories?" "Why user stories?" ""Do I have to use User Stories?"" Allan Kelly found

himself answering these questions, and similar ones, again and again so... ""As a ... I want ... So that ... "" - this humble little who-what-why template has become the most widely used means of communicating requirements for Agile teams. In this slim volume Allan Kelly provides practical advice on writing, reading and working with user stories.

Incomplete or missed requirements, omissions, ambiguous product features, lack of user involvement, unrealistic customer expectations, and the proverbial scope creep can result in cost overruns, missed deadlines, poor product quality, and can very well ruin a project. *Project Scope Management: A Practical Guide to Requirements for Engineering, Product, Construction, IT and Enterprise Projects* describes how to elicit, document, and manage requirements to control project scope creep. It also explains how to manage project stakeholders to minimize the risk of an ever-growing list of user requirements. The book begins by discussing how to collect project requirements and define the project scope. Next, it considers the creation of work breakdown structures and examines the verification and control of the scope. Most of the book is dedicated to explaining how to collect requirements and how to define product and project scope inasmuch as they represent the bulk of the project scope management work undertaken on any project regardless of the industry or the nature of the work involved. The book maintains a focus on practical and sensible tools and techniques rather than academic theories. It examines five different projects and traces their development from a project scope management perspective—from project initiation to the end of the execution and control phases. The types of projects considered include CRM system implementation, mobile number portability, port upgrade, energy-efficient house design, and airport check-in kiosk software. After reading this book, you will learn how to create project charters, high-level scope, detailed requirements specifications, requirements management plans, traceability matrices, and a work breakdown structure for the projects covered.

Writing Better Requirements Addison-Wesley Professional

Business Analyst's Mentor Book includes tips and best practices in a broad range of topics like: Business analysis techniques and tools Agile and waterfall methodologies Scope management Change request management Conflict management Use cases UML Requirements gathering and documentation User interface design Usability testing Software testing Automation tools Real-life examples are provided to help readers apply these best practices in their own IT organizations. The book also answers the most frequent questions of business analysts regarding software requirements management.

You may be wondering if business analysis is the right career choice, debating if you have what it takes to be successful as a business analyst, or looking for tips to maximize your business analysis opportunities. With the average salary for a business analyst in the United States reaching above \$90,000 per year, more talented, experienced professionals are pursuing business analysis careers than ever before. But the path is not clear cut. No degree will guarantee you will start in a business analyst role. What's more, few junior-level business analyst jobs exist. Yet every year professionals with experience in other occupations move directly into mid-level and even senior-level business analyst roles. My promise to you is that this book will help you find your best path forward into a business analyst career. More than that, you will know exactly what to do next to expand your business analysis opportunities. Follows the adventures of Paul Atreides, the son of a betrayed duke given up for dead on a treacherous desert planet and adopted by its fierce, nomadic people, who help him unravel his most unexpected destiny.

WHAT IS THIS BOOK ABOUT? Effective Requirements Reduce Project Failures Writing requirements is one of the core competencies for anyone in an organization responsible for defining future Information Technology (IT) applications. However, nearly every independently executed root-cause analysis of IT project problems and failures in the past half-century have identified “misunderstood or incomplete requirements” as the primary cause. This has made

writing requirements the bane of many projects. The real problem is the subtle differences between “understanding” someone else’s requirement and “sharing a common understanding” with the author. “How to Write Effective Requirements for IT – Simply Put!” gives you a set of 4 simple rules that will make your requirement statements more easily understood by all target audiences. The focus is to increase the “common understanding” between the author of a requirement and the solution providers (e.g., in-house or outsourced IT designers, developers, analysts, and vendors). The rules we present in this book will reduce the failure rate of projects suffering from poor requirements. Regardless of your job title or role, if you are tasked with communicating your future needs to others, this book is for you. How to Get the Most out of this Book? To maximize the learning effect, you will have optional, online exercises to assess your understanding of each presented technique. Chapter titles prefaced with the phrase “Exercise” contain a link to a web-based exercise that we have prepared to give you an opportunity to try the presented technique yourself. These exercises are optional and they do not “test” your knowledge in the conventional sense. Their purpose is to demonstrate the use of the technique more real-life than our explanations can supply. You need Internet access to perform the exercises. We hope you enjoy them and that they make it easier for you to apply the techniques in real life. Specifically, this eWorkbook will give you techniques to:

- Express business and stakeholder requirements in simple, complete sentences
- Write requirements that focus on the business need
- Test the relevance of each requirement to ensure that it is in scope for your project
- Translate business needs and wants into requirements as the primary tool for defining a future solution and setting the stage for testing
- Create and maintain a question file to reduce the impact of incorrect assumptions
- Minimize the risk of scope creep caused by missed requirements
- Ensure that your requirements can be easily understood by all target audiences
- Confirm that each audience shares a mutual understanding of the requirements
- Isolate and address ambiguous words and phrases in requirements.
- Use our Peer Perception technique to find words and phrases that can lead to misunderstandings.
- Reduce the ambiguity of a statement by adding context and using standard terms and phrases

TOM AND ANGELA’S (the authors) STORY Like all good IT stories, theirs started on a project many years ago. Tom was the super techie, Angela the super SME. They fought their way through the 3-year development of a new policy maintenance system for an insurance company. They vehemently disagreed on many aspects, but in the process discovered a fundamental truth about IT projects. The business community (Angela) should decide on the business needs while the technical team’s (Tom)’s job was to make the technology deliver what the business needed. Talk about a revolutionary idea! All that was left was learning how to communicate with each other without bloodshed to make the project a resounding success. Mission accomplished. They decided this epiphany was so important that the world needed to know about it. As a result, they made it their mission (and their passion) to share this ground-breaking concept with the rest of the world. To achieve that lofty goal, they married and began the mission that still defines their life. After over 30 years of living and working together 24x7x365, they are still wildly enthusiastic about helping the victims of technology learn how to ask for and get the digital (IT) solutions they need to do their jobs better. More importantly, they are more enthusiastically in love with each other than ever before!

Gathering customer requirements is a key activity for developing software that meets the customer's needs. A concise and practical overview of everything a requirement's analyst needs to know about establishing customer requirements, this first-of-its-kind book is the perfect desk guide for systems or software development work. The book enables professionals to identify the real customer requirements for their projects and control changes and additions to these requirements. This unique resource helps practitioners understand the importance of requirements, leverage effective requirements practices, and better utilize resources. The book

also explains how to strengthen interpersonal relationships and communications which are major contributors to project effectiveness. Moreover, analysts find clear examples and checklists to help them implement best practices.

“We need better approaches to understanding and managing software requirements, and Dean provides them in this book. He draws ideas from three very useful intellectual pools: classical management practices, Agile methods, and lean product development. By combining the strengths of these three approaches, he has produced something that works better than any one in isolation.” –From the Foreword by Don Reinertsen, President of Reinertsen & Associates; author of *Managing the Design Factory*; and leading expert on rapid product development

Effective requirements discovery and analysis is a critical best practice for serious application development. Until now, however, requirements and Agile methods have rarely coexisted peacefully. For many enterprises considering Agile approaches, the absence of effective and scalable Agile requirements processes has been a showstopper for Agile adoption. In *Agile Software Requirements*, Dean Leffingwell shows exactly how to create effective requirements in Agile environments. Part I presents the “big picture” of Agile requirements in the enterprise, and describes an overall process model for Agile requirements at the project team, program, and portfolio levels Part II describes a simple and lightweight, yet comprehensive model that Agile project teams can use to manage requirements Part III shows how to develop Agile requirements for complex systems that require the cooperation of multiple teams Part IV guides enterprises in developing Agile requirements for ever-larger “systems of systems,” application suites, and product portfolios This book will help you leverage the benefits of Agile without sacrificing the value of effective requirements discovery and analysis. You’ll find proven solutions you can apply right now—whether you’re a software developer or tester, executive, project/program manager, architect, or team leader.

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