The Robert C Martin Clean Code Collection Collection Robert C Martin Series

Have you ever felt frustrated working with someone else’s code? Difficult-to-maintain source code is a big problem in software development today, leading to costly delays and defects. Be part of the solution. With this practical book, you’ll learn 10 easy-to-follow guidelines for delivering C# software that’s easy to maintain and adapt. These guidelines have been derived from analyzing hundreds of real-world systems. Written by consultants from the Software Improvement Group (SIG), this book provides clear and concise explanations, with advice for turning the guidelines into practice. Examples for this edition are written in C#, while our companion Java book provides clear examples in that language. Write short units of code: limit the length of methods and constructors Write simple units of code: limit the number of branch points per method Write code once, rather than risk copying buggy code Keep unit interfaces small by extracting parameters into objects Separate concerns to avoid building large classes Couple architecture components loosely Balance the number and size of top-level components in your code Keep your codebase as small as possible Automate tests for your codebase Write clean code, avoiding "code smells" that indicate deeper problems

Newnes Electrical Pocket Book is the ideal daily reference source for electrical engineers, electricians and students. First published in 1932 this classic has been fully updated in line with the latest technical developments, regulations and industry best practice. Providing both in-depth knowledge and a broad overview of the field this pocket book is an invaluable tool of the trade. A handy source of essential information and data on the practice and principles of electrical engineering and installation. The 23rd edition has been updated by engineering author and consultant electrical engineer, Martin Heathcote. Major revisions have been made to the sections on semiconductors, power generation, transformers, building automation systems, electric vehicles, electrical equipment for use in hazardous areas, and electrical installation (reflecting the changes introduced to the IEE Wiring Regulations BS7671: 2001).

Get the most out of JavaScript for building web applications through a series of patterns, techniques, and case studies for clean coding Key Features Write maintainable JS code using internal abstraction, well-written tests, and well-documented code Understand the agents of clean coding like SOLID principles, OOP, and functional programming Explore solutions to tackle common JavaScript challenges in building UIs, managing APIs, and writing states Book Description Building robust apps starts with creating clean code. In this book, you’ll explore techniques for doing this by learning everything from the basics of JavaScript through to the practices of clean code. You’ll write functional, intuitive, and maintainable code while also understanding how your code affects the end user and the wider community. The book starts with popular clean-coding principles such as SOLID, and the Law of Demeter (LoD), along with highlighting the enemies of writing clean code such as cargo culting and over-management. You’ll then delve into JavaScript, understanding the more complex aspects of the language. Next, you’ll create meaningful abstractions using design patterns, such as the Class Pattern and the Revealing Module Pattern. You’ll explore real-world challenges such as DOM reconciliation, state management, dependency management, and security, both within browser and server environments. Later, you’ll cover tooling and testing methodologies and the importance of documenting code. Finally, the book will focus on advocacy and good communication for improving code cleanliness within teams or workplaces, along with covering a case study for clean coding. By the end of this book, you’ll be well-versed with JavaScript and have learned how to create clean abstractions, test them, and communicate about them via documentation. What you will learn Understand the true purpose of code and the problems it solves for your end-users and colleagues Discover the tenets and enemies of clean code considering the effects of cultural and syntactic conventions Use modern JavaScript syntax and design patterns to craft intuitive abstractions Maintain code quality within your team via wise adoption of tooling and advocating best practices Learn the modern ecosystem of JavaScript and its challenges like DOM reconciliation and state management Express the behavior of your code both within tests and via various forms of documentation Who this book is for This book is for anyone who writes JavaScript, professionally or otherwise. As this book does not relate specifically to any particular framework or environment, no prior experience of any JavaScript web framework is required. Some knowledge of programming is assumed to understand the concepts covered in the book more effectively.

The latest title in Addison Wesley's world-renowned Robert C. Martin Series on better software development, Code That Fits in Your Head offers indispensable practical advice for writing code at a sustainable pace, and controlling the complexity that causes too many software projects to spin out of control. Reflecting decades of experience consulting on software projects and helping development teams succeed, Mark Seemann shares proven practices and heuristics, supported by realistic advice. His guidance ranges from checklists to teamwork, encapsulation to decomposition, API design to unit testing and troubleshooting. Throughout, Seemann illuminates his insights with up-to-date code examples drawn from a start to finish sample project. Seemann's examples are written in C##, and designed to be clear and useful to every object-oriented enterprise developer, whether they use C#, Java, or another language. Code That Fits in Your Head is accompanied by the complete code base for this sample application, organized in a Git repository to facilitate further exploration of details that don't fit in the text.

“One of the most significant books in my life.” –Obie Fernandez, Author, The Rails Way “Twenty years ago, the first edition of The Pragmatic Programmer completely changed the trajectory of my career. This new edition could do the same for yours.” –Mike Cohn, Author of Succeeding with Agile, Agile Estimating and Planning, and User Stories Applied “. . . filled with practical advice, both technical and professional, that will serve you and your projects well for years to come.” –Andrea Goulet, CEO, Corgibytes, Founder, LegacyCode.Rocks “. . . lightning does strike twice, and this book is proof.” –VM (Vicky) Brasseur, Director of Open Source Strategy, Juniper Networks The Pragmatic Programmer is one of those rare tech books you’ll read, re-read, and read again over the years. Whether you’re new to the field or an experienced practitioner, you’ll come away with fresh insights each and every time. Dave Thomas and Andy Hunt wrote the first edition of this influential book in 1999 to help their clients create better software and rediscover the joy of coding. These lessons have helped a generation of programmers examine the very essence of software development, independent of any particular language, framework, or methodology, and the Pragmatic philosophy has spawned hundreds of books, screencasts, and audio books, as well as thousands of careers and success stories. Now, twenty years later, this new edition re-examines what it means to be a modern programmer. Topics range from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you’ll learn how to: Fight software rot Learn continuously Avoid the trap of duplicating knowledge Write flexible, dynamic, and adaptable code Harness the power of basic tools Avoid programming by coincidence Learn real requirements Solve the underlying problems of concurrent code Guard against security vulnerabilities Build teams of Pragmatic Programmers Take responsibility for your work and career Test ruthlessly and effectively, including property-based testing Implement the Pragmatic Starter Kit Delight your users Written as a series of self-contained sections and filled with classic and fresh anecdotes, thoughtful examples, and interesting analogies, The Pragmatic Programmer illustrates the best approaches and major pitfalls of many different aspects of software development. Whether you’re a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you’ll quickly see improvements in personal productivity, accuracy, and job satisfaction. You’ll learn skills and develop habits and attitudes that form the foundation for long-term success in your career. You’ll become a Pragmatic Programmer. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

If you're one of the many developers uncertain about concurrent and multithreaded development, this practical cookbook will change your mind. With more than 75 code-rich recipes, author Stephen Cleary

demonstrates parallel processing and asynchronous programming techniques, using libraries and language features in .NET 4.5 and C# 5.0. Concurrency is becoming more common in responsive and scalable application development, but it’s been extremely difficult to code. The detailed solutions in this cookbook show you how modern tools raise the level of abstraction, making concurrency much easier than before. Complete with ready-to-use code and discussions about how and why the solution works, you get recipes for using: async and await for asynchronous operations Parallel programming with the Task Parallel Library The TPL Dataflow library for creating dataflow pipelines Capabilities that Reactive Extensions build on top of LINQ Unit testing with concurrent code Interop scenarios for combining concurrent approaches Immutable, threadsafe, and producer/consumer collections Cancellation support in your concurrent code Asynchronous-friendly Object-Oriented Programming Thread synchronization for accessing data

The Unified Modeling Language has become the industry standard for the expression of software designs. The Java programming language continues to grow in popularity as the language of choice for the serious application developer. Using UML and Java together would appear to be a natural marriage, one that can produce considerable benefit. However, there are nuances that the seasoned developer needs to keep in mind when using UML and Java together. Software expert Robert Martin presents a concise guide, with numerous examples, that will help the programmer leverage the power of both development concepts. The author ignores features of UML that do not apply to java programmers, saving the reader time and effort. He provides direct guidance and points the reader to real-world usage scenarios. The overall practical approach of this book brings key information related to Java to the many presentations. The result is an highly practical guide to using the UML with Java.

How do you detangle a monolithic system and migrate it to a microservice architecture? How do you do it while maintaining business-as-usual? As a companion to Sam Newman’s extremely popular Building Microservices, this new book details a proven method for transitioning an existing monolithic system to a microservice architecture. With many illustrative examples, insightful migration patterns, and a bevy of practical advice to transition your monolith enterprise into a microservice operation, this practical guide covers multiple scenarios and strategies for a successful migration, from initial planning all the way through application and database decomposition. You’ll learn several tried and tested patterns and techniques that you can use as you migrate your existing architecture. Ideal for organizations looking to transition to microservices, rather than rebuild Helps companies determine whether to migrate, when to migrate, and where to begin Addresses communication, integration, and the migration of legacy systems Discusses multiple migration patterns and where they apply Provides database migration examples, along with synchronization strategies Explores application decomposition, including several architectural refactoring patterns Delves into details of database decomposition, including the impact of breaking referential and transactional integrity, new failure modes, and more

In Clean Craftmanship: Programming with Pride, the legendary Robert C. Martin ("Uncle Bob") has written every programmer's definitive guide to working well. Martin brings together the disciplines, standards, and ethics you need to deliver robust, effective code quickly and productively, and be proud of all the software you write - every single day. Martin, the best-selling author of The Clean Coder, begins with a pragmatic, technical, and prescriptive guide to five foundational disciplines of software craftsmanship: test-driven development, refactoring, simple design, collaborative programming (pairing), and acceptance tests. Next, he moves up to standards -- outlining the baseline expectations the world has of software developers, illuminating how those often differ from their own perspectives, and helping you repair the mismatch. Finally, he turns to the ethics of the programming profession, describing ten fundamental promises all software developers should make to their colleagues, their users, and above all, themselves. With Martin's guidance and advice, you can consistently write code that builds trust instead of undermining it: trust among your users, and throughout a society that depends on software for its very survival.

More C++ Gems picks up where the first book left off, presenting tips, tricks, proven strategies, easy-to-follow techniques, and usable source code.

Risk assessment is the cornerstone of contemporary environmental protection. You must find the answers to questions such as: what might be the impacts of the new synthetic chemicals, what problems might arise from the normal operations of industry, what are the chances of accidental releases and how will they impact the environment? Understanding and assessing these risks is essential to sound environmental policy and management. The first book to address the application of the current National Research Council (NRC) risk assessment paradigm to the coastal marine environment, Coastal and Estuarine Risk Assessment covers topics that range from pollutants of emerging concern to bioavailability and bioaccumulation at the suborganismal through landscape levels. It explores the necessary applications for modifying the NRC paradigm and presents a series of steps to actually accomplish an effective assessment using the modified paradigm. The book highlights the logical framework for assessing causation, and measurement of toxicant fate and effect. The chapter authors bring together experiences from academia, private consultants, and government agencies, resulting in a rich mixture of experience and insights. Exploring the science of exposure, effect, and risk in coastal and estuarine environments, Coastal and Estuarine Risk Assessment gives you a building block approach to the fundamental components of risk assessment.

Psychoanalytic Pioneers is a comprehensive history of psychoanalysis as seen through the lives and the works of its most eminent teachers, thinkers, and clinicians. It is also a definitive portrait of the atmosphere in which psychoanalytic creativity has emerged and flourished. Going beyond mere biographical description, the contributors elucidate the contributions of various psychoanalysts to the evolution of psychoanalytic thought, and evaluate their roles in the development of psychoanalysis as a science, as a method of investigation, as a treatment technique, and as an organization. The editors have assembled profiles of Karl Abraham, Sandor Ferenczi, Otto Rank, Carl Jung, Alfred Adler, Ernest Jones, Paul Federn, Oskar Pfister, Harms Sachs, A.A. Brill, Sandor Rado, Theodor Reik, Melanie Klein, Otto Fenichel, Karen Horney, Heinz Hartmann, Ernst Kris, and twenty-four other pioneers, whose influence on psychoanalysis reverberates to this day. In a new introduction, Eisenstein maintains that while man and his unconscious have not changed much since Freud's time, today psychoanalysis is full of many different clinical and theoretical viewpoints. Among the ideas being debated are object theory, drive theory, the oedipal concept, intersubjectivity, and self-psychology. Eisenstein also discusses the contributions of psychohistory, a recent and significant development in psychoanalysis in which psychological study is applied to historical periods and personalities. "Psychoanalytic Pioneers "will be an important addition to the libraries of psychoanalysts, psychologists, psychiatrists, sociologists, historians, and anyone interested in the influence of psychoanalysis in our lives.

The Robert C. Martin Clean Code Collection consists of two bestselling eBooks: Clean Code: A Handbook of Agile Software Craftmanship The Clean Coder: A Code of Conduct for Professional Programmers In Clean Code, legendary software expert Robert C. Martin has teamed up with his colleagues from Object Mentor to distill their best agile practice of cleaning code “on the fly” into a book that will instill within you the values of a software craftsman and make you a better programmer--but only if you work at it. You will be challenged to think about what’s right about that code and what’s wrong with it. More important, you will be challenged to reassess your professional values and your commitment to your craft. In The Clean Coder, Martin introduces the disciplines, techniques, tools, and practices of true software craftsmanship. This book is packed with practical advice--about everything from estimating and coding to refactoring and testing. It covers much more than technique: It is about attitude. Martin shows how to approach software development with honor, self-respect, and pride; work well and work clean; communicate and estimate faithfully; face difficult decisions with clarity and honesty; and understand that deep knowledge comes with a responsibility to act. Readers of this collection will come away understanding How to tell the difference between good and bad code How to write good code and

how to transform bad code into good code How to create good names, good functions, good objects, and good classes How to format code for maximum readability How to implement complete error handling without obscuring code logic How to unit test and practice test-driven development What it means to behave as a true software craftsman How to deal with conflict, tight schedules, and unreasonable managers How to get into the flow of coding and get past writer's block How to handle unrelenting pressure and avoid burnout How to combine enduring attitudes with new development paradigms How to manage your time and avoid blind alleys, marshes, bogs, and swamps How to foster environments where programmers and teams can thrive When to say "No"--and how to say it When to say "Yes"--and what yes really means

BLURB: Puddles and poohs can be funny, but not when you step in them! The family has a problem; a new pup is messing things up! Their little girl is learning to use her potty but the pet puppy is not. Will the clean little kitten come to the rescue?A gently humorous picture book for two to five year olds with themes of toilet training and pet care.THEMES: pet care, cleanliness, toilet training, friendship, pets, familyREVIEW: "A tale of friendship, determination and lots of patience! What a wonderful way to recount to children the funny side of toilet training - even for puppies."Adrienne T. O'Connell, teacher, B.A., Grad. Dip. Ed., has taught children from indigenous classrooms in the wilds of the outback to multicultural suburban classrooms in a big city.JUV039170 JUVENILE FICTION / Health & Daily Living / Toilet TrainingJUV002190 JUVENILE FICTION / Animals / PetsJUV002070 JUVENILE FICTION / Animals / DogsJUV002050 JUVENILE FICTION / Animals / CatsJUV013000 JUVENILE FICTION / Family / General JUV019000 JUVENILE FICTION / Humorous StoriesJUV009120 JUVENILE FICTION / Concepts / BodyJUV023000 JUVENILE FICTION / Lifestyles / City & Town Life

A DARK ANCIENT ENEMY LIES WITHIN A GATEWAY BETWEEN EXISTENCES— WAITING TO BE INVITED INTO THE MATERIAL WORLD Since the beginning, mankind has asked whether we exist after death. Through the ages, we have developed our beliefs from religious sources and those who claim that they have been in contact with the dead. To date, we still have no real scientific evidence to suggest that there is an afterlife. Until recently, no genuine or serious scientific research has been undertaken. Damien Driscoll always had a profound interest in the afterlife—ever since an event that occurred during his childhood. After his mother's funeral, the young boy was confronted by an apparition of his dead mother. Years later, Damien became a renowned anaesthetist based at St. Bartholomew's Hospital in London. He eagerly agreed to become involved in a research project involving near-death-experience phenomena. He interviewed several patients who had NDEs and, with the help of the hospital, managed to gain a research grant. The ultimate plan was to raise the profile of the hospital. During his research, he discovered that two of his patients (during their near-death experiences) were confronted by the ghost of a troubled girl seeking help to right a wrong. This opened up a dangerous mystery involving events from the hospital's grim past. This is the story of a man in pursuit of the truth, which will have serious implications for him and the whole of mankind.

Shows how to bring unprecedented levels of professionalism and discipline to agile development - and thereby write far more effective, successful software

"After many decades - and even more methodologies - software projects are still failing. Why? Managers see software development as a production line. Companies don't know how to manage software projects and hire good developers. Many developers still behave like factory workers, providing terrible service to their employers and clients. Agile was a big step forward, but not enough. What's missing? The right mindset - for both developers and their employers. As developers worldwide are recognizing, the right mindset is craftsmanship ... Mancuso explains what craftsmanship means to the developer and his or her organization, and shows how to live it every day in your real-world development environment. Mancuso shows how software craftsmanship fits with and helps you improve upon best-practice technical disciplines such as agile and lean, taking all your development projects to the next level. You'll learn how to change the disastrous perception that software developers are the same as factory workers, and that software projects can be run like factories. By placing greater professionalism, technical excellence, and customer satisfaction at the heart of what you do, you won't just deliver more value to everyone involved: you'll be happier and more fulfilled doing it"--Publisher's description.

Looks at the principles and clean code, includes case studies showcasing the practices of writing clean code, and contains a list of heuristics and "smells" accumulated from the process of writing clean code.

Communications * Standard Dictionary is a comprehensive compilation of terms and definitions used in communications and related fields. Communications is defined as the branch of science and technology concerned with the process of representing, transferring, and interpreting the meaning as signed to data by and among persons, places, or machines. Communication is defined as the transfer of information between a source (trans mitter, light source) and a sink (receiver, photodetector) over one or more chan nels in accordance with a protocol, and in a manner suitable for interpretation or comprehension by the receiver; or as a method or means of conveying informa tion of any kind from one person or place to another. In short, communications is a branch of science and technology, whereas com munication pertains to the actual transfer of information. Thus, the word com munication should be used as a modifier, as in communication center, communi cation deception, and communication line, just as in the field of electronics one speaks of electronic devices and electronic circuits.

This comprehensive, pragmatic tutorial on Agile Development and eXtreme programming, written by one of the founding fathers of Agile Development: Teaches software developers and project managers how to get projects done on time, and on budget using the power of Agile Development; Uses real-world case studies to show how to of plan, test, refactor, and pair program using eXtreme programming; Contains a wealth of reusable C++ and Java code; Focuses on solving customer oriented systems problems using UML and Design Patterns.

Presents practical advice on the disciplines, techniques, tools, and practices of computer programming and how to approach software development with a sense of pride, honor, and self-respect.

Users can dramatically improve the design, performance, and manageability of object-oriented code without altering its interfaces or behavior. "Refactoring" shows users exactly how to spot the best opportunities for refactoring and exactly how to do it, step by step.

With the award-winning book Agile Software Development: Principles, Patterns, and Practices, Robert C. Martin helped bring Agile principles to tens of thousands of Java and C++ programmers. Now .NET programmers have a definitive guide to agile methods with this completely updated volume from Robert C. Martin and Micah Martin, Agile Principles, Patterns, and Practices in C#. This book presents a series of case studies illustrating the fundamentals of Agile development and Agile design, and moves quickly from UML models to real C# code. The introductory chapters lay out the basics of the agile movement, while the later chapters show proven techniques in action. The book includes many source code examples that are also available for download from the authors' Web site. Readers will come away from this book understanding Agile principles, and the fourteen practices of Extreme Programming Spiking, splitting, velocity, and planning iterations and releases Test-driven development, test-first design, and acceptance testing Refactoring with unit testing Pair programming Agile design and

design smells The five types of UML diagrams and how to use them effectively Object-oriented package design and design patterns How to put all of it together for a real-world project Whether you are a C# programmer or a Visual Basic or Java programmer learning C#, a software development manager, or a business analyst, Agile Principles, Patterns, and Practices in C# is the first book you should read to understand agile software and how it applies to programming in the .NET Framework.

Scrum is the most popular approach to Agile software development. It's been around for more than 20 years, and it's used by tens of millions of practitioners. Even so, by some estimates, over 70% of Scrum adoptions fall flat and get stuck. Developers find themselves using "Zombie Scrum" processes that look like Scrum from a distance, but are slow, lifeless, and joyless instead. Zombie Scrum Survival Guide doesn't just reveal why this happens: it shows how to supercharge your Scrum outcomes, and have more fun along the way. Writing for all individuals, teams, and organizations who want to achieve more with Scrum, this guide combines theoretical foundations with practical approaches, exercises, and facilitation techniques for making progress in widely diverse situations, and engaging everyone in the organization to get more out of Scrum. You'll find specific guidance for building what the user needs, shipping faster, improving continuously, self-organizing your teams, and more. Drawing on extensive experience empowering developers, the authors also introduce powerful Liberating Structures patterns for enriching group interactions, so Scrum makes development more effective and fulfilling for everyone involved.

In Clean Craftsmanship , the legendary Robert C. Martin ("Uncle Bob") has written every programmer's definitive guide to working well. Martin brings together the disciplines, standards, and ethics you need to deliver robust, effective code quickly and productively, and be proud of all the software you write -- every single day. Martin, the best-selling author of The Clean Coder , begins with a pragmatic, technical, and prescriptive guide to five foundational disciplines of software craftsmanship: test-driven development, refactoring, simple design, collaborative programming (pairing), and acceptance tests. Next, he moves up to standards -- outlining the baseline expectations the world has of software developers, illuminating how those often differ from their own perspectives, and helping you repair the mismatch. Finally, he turns to the ethics of the programming profession, describing ten fundamental promises all software developers should make to their colleagues, their users, and above all, themselves . With Martin's guidance and advice, you can consistently write code that builds trust instead of undermining it -- trust among your users and throughout a society that depends on software for its very survival.

Get more out of your legacy systems: more performance, functionality, reliability, and manageability Is your code easy to change? Can you get nearly instantaneous feedback when you do change it? Do you understand it? If the answer to any of these questions is no, you have legacy code, and it is draining time and money away from your development efforts. In this book, Michael Feathers offers start-to-finish strategies for working more effectively with large, untested legacy code bases. This book draws on material Michael created for his renowned Object Mentor seminars: techniques Michael has used in mentoring to help hundreds of developers, technical managers, and testers bring their legacy systems under control. The topics covered include Understanding the mechanics of software change: adding features, fixing bugs, improving design, optimizing performance Getting legacy code into a test harness Writing tests that protect you against introducing new problems Techniques that can be used with any language or platform—with examples in Java, C++, C, and C# Accurately identifying where code changes need to be made Coping with legacy systems that aren't object-oriented Handling applications that don't seem to have any structure This book also includes a catalog of twenty-four dependency-breaking techniques that help you work with program elements in isolation and make safer changes.

This unique book synthesizes the ongoing long-term community ecology studies of fish, amphibians, reptiles, birds, and mammals. The studies have been conducted from deserts to rainforests as well as in terrestrial, freshwater, and marine habitats and provide valuable insight that can be obtained only through persistent, diligent, and year-after-year investigation. Long-Term Studies of Vertebrate Communities is ideal for faculty, researchers, graduate students, and undergraduates in vertebrate biology, ecology, and evolutionary biology, including ecology, natural history, and systematics. Provides unique perspectives of community stability and variation Details the influence of natural and other perturbations on community structure Includes synopses by well-known authors Presents results from a broad range of vertebrate taxa Studies were conducted at different latitudes and in different habitats

Practical Software Architecture Solutions from the Legendary Robert C. Martin (“Uncle Bob”) By applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin (“Uncle Bob”) reveals those rules and helps you apply them. Martin’s Clean Architecture doesn’t merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you’ve come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you’ll face–the ones that will make or break your projects. Learn what software architects need to achieve–and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what’s critically important and what’s merely a “detail” Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager–and for every programmer who must execute someone else’s designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.

Widely considered one of the best practical guides to programming, Steve McConnell's original CODE COMPLETE has been helping developers write better software for more than a decade. Now this classic book has been fully updated and revised with leading-edge practices—and hundreds of new code samples—illustrating the art and science of software construction. Capturing the body of knowledge available from research, academia, and everyday commercial practice, McConnell synthesizes the most effective techniques and must-know principles into clear, pragmatic guidance. No matter what your experience level, development environment, or project size, this book will inform and stimulate your thinking—and help you build the highest quality code. Discover the timeless techniques and strategies that help you: Design for minimum complexity and maximum creativity Reap the benefits of collaborative development Apply defensive programming techniques to reduce and flush out errors Exploit opportunities to refactor—or evolve—code, and do it safely Use construction practices that are right-weight for your project Debug problems quickly and effectively Resolve critical construction issues early and correctly Build quality into the beginning, middle, and end of your project

Extreme Programming is the most exciting revolution to hit the software engineering industry in the last decade. But what exactly is XP? And how do you XP? Simply put, XP is about playing to win. If you are serious about becoming an agile organization, decreasing your time to market, keeping your development team happy, and improving the overall quality of your software, then XP is for you. Extreme Programming in Practice provides a candid, refreshing, insiders view of how an XP project works. The artifacts presented in this book are real, the user stories are real, and the anecdotes are real. The book represents all-access, uncensored XP. The authors have chosen example over explanation, so that you can personalize the tenets of XP and put them into practice on your next development project. The book is supported with sample code and test examples. You can learn how to emphasize planning in your project; deliver multiple iterations of your project (each with increasing business value); gather customer feedback as you build; and test the integrity of your code without halting your development efforts. The authors also provide a handy summary of more than a dozen lessons learned i

The Java Virtual Machine (JVM) is the underlying technology behind Java's most distinctive features including size, security and cross-platform delivery. This guide shows programmers how to write programs for the Java Virtual Machine.

This new book from Steve McConnell, author of the software industry classic Code Complete, distills hundreds of companies'-worth of hard-won insights into an easy-to-read guide to the proven, modern Agile practices that work best. In this comprehensive yet accessible overview for software leaders, Steve McConnell presents an impactful, action-oriented prescription--covering the practical considerations needed to ensure you reap the full benefits of effective Agile: Adopt the individual Agile tools suited to your specific organization Create high-performing, autonomous teams that are truly business-focused Understand the ground truth of Scrum and diagnose your teams' issues Improve coherence of requirements in an iterative environment Test more effectively, and improve quality Lead your organization through real-world constraints including multi-site teams, large projects, industry regulations, and the need for predictability Whether you are a C-level executive, vice president, director, manager, technical leader, or coach, this no-nonsense reference seamlessly threads together traditional approaches, early Agile approaches, modern Agile approaches, and the principles and context that underlie them all--creating an invaluable resource for you, your teams, and your organization.

Agile Values and Principles for a New Generation “In the journey to all things Agile, Uncle Bob has been there, done that, and has the both the t-shirt and the scars to show for it. This delightful book is part history, part personal stories, and all wisdom. If you want to understand what Agile is and how it came to be, this is the book for you.” –Grady Booch “Bob’s frustration colors every sentence of Clean Agile, but it’s a justified frustration. What is in the world of Agile development is nothing compared to what could be. This book is Bob’s perspective on what to focus on to get to that ‘what could be.’ And he’s been there, so it’s worth listening.” –Kent Beck “It’s good to read Uncle Bob’s take on Agile. Whether just beginning, or a seasoned Agilista, you would do well to read this book. I agree with almost all of it. It’s just some of the parts make me realize my own shortcomings, dammit. It made me double-check our code coverage (85.09%).” –Jon Kern Nearly twenty years after the Agile Manifesto was first presented, the legendary Robert C. Martin (“Uncle Bob”) reintroduces Agile values and principles for a new generation–programmers and nonprogrammers alike. Martin, author of Clean Code and other highly influential software development guides, was there at Agile’s founding. Now, in Clean Agile: Back to Basics, he strips away misunderstandings and distractions that over the years have made it harder to use Agile than was originally intended. Martin describes what Agile is in no uncertain terms: a small discipline that helps small teams manage small projects . . . with huge implications because every big project is comprised of many small projects. Drawing on his fifty years’ experience with projects of every conceivable type, he shows how Agile can help you bring true professionalism to software development. Get back to the basics–what Agile is, was, and should always be Understand the origins, and proper practice, of SCRUM Master essential business-facing Agile practices, from small releases and acceptance tests to whole-team communication Explore Agile team members’ relationships with each other, and with their product Rediscover indispensable Agile technical practices: TDD, refactoring, simple design, and pair programming Understand the central roles values and craftsmanship play in your Agile team’s success If you want Agile’s true benefits, there are no shortcuts: You need to do Agile right. Clean Agile: Back to Basics will show you how, whether you’re a developer, tester, manager, project manager, or customer. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Tap into the wisdom of experts to learn what every programmer should know, no matter what language you use. With the 97 short and extremely useful tips for programmers in this book, you'll expand your skills by adopting new approaches to old problems, learning appropriate best practices, and honing your craft through sound advice. With

contributions from some of the most experienced and respected practitioners in the industry--including Michael Feathers, Pete Goodliffe, Diomidis Spinellis, Cay Horstmann, Verity Stob, and many more--this book contains practical knowledge and principles that you can apply to all kinds of projects. A few of the 97 things you should know: "Code in the Language of the Domain" by Dan North "Write Tests for People" by Gerard Meszaros "Convenience Is Not an -ility" by Gregor Hohpe "Know Your IDE" by Heinz Kabutz "A Message to the Future" by Linda Rising "The Boy Scout Rule" by Robert C. Martin (Uncle Bob) "Beware the Share" by Udi Dahan

The physical properties of ultrasound, particularly its highly directional beam behaviour, and its complex interactions with human tissues, have led to its becoming a vitally important tool in both investigative and interventional medicine, and one that still has much exciting potential. This new edition of a well-received book treats the phenomenon of ultrasound in the context of medical and biological applications, systematically discussing fundamental physical principles and concepts. Rather than focusing on earlier treatments, based largely on the simplifications of geometrical acoustics, this book examines concepts of wave acoustics, introducing them in the very first chapter. Practical implications of these concepts are explored, first the generation and nature of acoustic fields, and then their formal descriptions and measurement. Real tissues attenuate and scatter ultrasound in ways that have interesting relationships to their physical chemistry, and the book includes coverage of these topics. Physical Principles of Medical Ultrasonics also includes critical accounts and discussions of the wide variety of diagnostic and investigative applications of ultrasound that are now becoming available in medicine and biology. The book also encompasses the biophysics of ultrasound, its practical applications to therapeutic and surgical objectives, and its implications in questions of hazards to both patient and operator.

Since 2003 climate change and overuse of water resources have emerged as major challenges for the environmental legal system. The second edition of Australian Environmental Law addresses these issues. It remains a principles-based text on environmental law and policy which examines Australia's environmental system from a doctrinal and instrumental perspective. Relevant legislation and case law have been updated throughout and the book has been restructured to reflect ever-increasing levels of social, political and academic interest in sustainable development and environmental planning. The chapters on ecologically sustainable development and the instruments of environmental law have been rewritten, restructured and relocated, and a new chapter on the emerging challenges for environmental law has been added, including discussion of climate change and water resources management.

ABAP developers, are you looking to clean up your code? Then pick up this official companion to the Clean ABAP GitHub repository. This book is brimming with best practices, straight from the experts, to help you write effective ABAP code. Start by learning when to apply each clean ABAP practice. Then, dive into detailed code examples and explanations for using classes, methods, names, variables, internal tables, and more. From writing code to troubleshooting and testing, this is your complete style guide! In this book, you'll learn about: a. Clean ABAP Concepts What is clean ABAP and why is it important to write clean code? Understand clean ABAP concepts with insight from the experts, including special considerations for legacy code and performance. b. Best Practices Walk through the what, why, and how behind clean ABAP best practices. Learn to improve your code, including using classes and interfaces appropriately, handling method design and control flow, designing and running unit tests, and much more. c. Practical Examples See clean ABAP practices in action! Improve your understanding of how to write effective code. Use detailed examples for each best practice that demonstrate the difference between clean and messy code. Highlights include: 1) Classes and interfaces 2) Methods 3) Names 4) Variables and literals 5) Internal tables 6) Control flow 7) Comments 8) Formatting 9) Error handling 10) Unit testing 11) Packages