UML Distilled This title contains standards and guidelines for creating UML diagrams that are concise and easy to understand.

Core J2EE Patterns Programming WCF Services is the authoritative, bestselling guide to Microsoft's unified platform for developing modern service-oriented applications on Windows. Hailed as the definitive treatment of WCF, this book provides unique insight, rather than documentation, to help you learn the topics and skills you need for building WCF-based applications.
that are maintainable, extensible, and reusable. Author Juval Löwy -- one of the world's top .NET experts -- revised this edition to include the newest productivity-enhancing features of .NET Framework 4 and the Azure AppFabric Service Bus, as well as the latest WCF ideas and techniques. By teaching you the why and the how of WCF programming, Programming WCF Services will help you master WCF and make you a better software engineer. Learn about WCF architecture and essential building blocks, including key concepts such as reliability and transport sessions. Use built-in features such as service hosting, instance and concurrency management, transactions, disconnected queued calls, security, and discovery. Master the Windows Azure AppFabric Service Bus, the most revolutionary piece of the new cloud computing initiative. Increase your productivity and the quality of your WCF services by taking advantage of relevant design options, tips, and best practices in Löwy's ServiceModelEx framework. Discover the rationale behind particular design decisions, and delve into rarely understood aspects of WCF development. "If you choose to learn WCF, you've chosen well. If you choose to learn with the resource and guidance of Juval Löwy, you've done even better there are few people alive today who know WCF as well." --Ron Jacobs, Senior Technical Evangelist for WCF, Microsoft Corporation

The Unified Modeling Language Reference Manual Object-Oriented Design with Applications has long been the essential reference to object-oriented technology, which, in turn, has evolved to join the mainstream of industrial-strength software development. In this third edition--the first revision in 13 years--readers can learn to apply object-oriented methods using new paradigms such as Java, the Unified Modeling Language (UML) 2.0, and .NET. The authors draw upon their rich and varied experience to offer improved methods for object development and numerous examples that tackle the complex problems faced by software engineers, including systems architecture, data acquisition, cryptoanalysis, control systems, and Web development. They illustrate essential concepts, explain the
method, and show successful applications in a variety of fields. You'll also find pragmatic advice on a host of issues, including classification, implementation strategies, and cost-effective project management. New to this new edition are An introduction to the new UML 2.0, from the notation's most fundamental and advanced elements with an emphasis on key changes New domains and contexts A greatly enhanced focus on modeling—as eagerly requested by readers—with five chapters that each delve into one phase of the overall development lifecycle. Fresh approaches to reasoning about complex systems An examination of the conceptual foundation of the widely misunderstood fundamental elements of the object model, such as abstraction, encapsulation, modularity, and hierarchy How to allocate the resources of a team of developers and manage the risks associated with developing complex software systems An appendix on object-oriented programming languages This is the seminal text for anyone who wishes to use object-oriented technology to manage the complexity inherent in many kinds of systems. Sidebars Preface Acknowledgments About the Authors Section I: Concepts Chapter 1: Complexity Chapter 2: The Object Model Chapter 3: Classes and Objects Chapter 4: Classification Section II: Method Chapter 5: Notation Chapter 6: Process Chapter 7: Pragmatics Chapter 8: System Architecture: Satellite-Based Navigation Chapter 9: Control System: Traffic Management Chapter 10: Artificial Intelligence: Cryptanalysis Chapter 11: Data Acquisition: Weather Monitoring Station Chapter 12: Web Application: Vacation Tracking System Appendix A: Object-Oriented Programming Languages Appendix B: Further Reading Notes Glossary Classified Bibliography Index

Managing Software Requirements The need to handle increasingly larger data volumes is one factor driving the adoption of a new class of nonrelational “NoSQL” databases. Advocates of NoSQL databases claim they can be used to build systems that are more performant, scale better, and are easier to program. NoSQL Distilled is a concise but thorough introduction to this rapidly emerging technology. Pramod J. Sadalage and
Martin Fowler explain how NoSQL databases work and the ways that they may be a superior alternative to a traditional RDBMS. The authors provide a fast-paced guide to the concepts you need to know in order to evaluate whether NoSQL databases are right for your needs and, if so, which technologies you should explore further. The first part of the book concentrates on core concepts, including schemaless data models, aggregates, new distribution models, the CAP theorem, and map-reduce. In the second part, the authors explore architectural and design issues associated with implementing NoSQL. They also present realistic use cases that demonstrate NoSQL databases at work and feature representative examples using Riak, MongoDB, Cassandra, and Neo4j. In addition, by drawing on Pramod Sadalage’s pioneering work, NoSQL Distilled shows how to implement evolutionary design with schema migration: an essential technique for applying NoSQL databases. The book concludes by describing how NoSQL is ushering in a new age of Polyglot Persistence, where multiple data-storage worlds coexist, and architects can choose the technology best optimized for each type of data access.

APPLYING UML & PATTERNS 3RD EDITION For nearly ten years, the Unified Modeling Language (UML) has been the industry standard for visualizing, specifying, constructing, and documenting the artifacts of a software-intensive system. As the de facto standard modeling language, the UML facilitates communication and reduces confusion among project stakeholders. The recent standardization of UML 2.0 has further extended the language's scope and viability. Its inherent expressiveness allows users to model everything from enterprise information systems and distributed Web-based applications to real-time embedded systems. In this eagerly anticipated revision of the best-selling and definitive guide to the use of the UML, the creators of the language provide a tutorial to its core aspects in a two-color format designed to facilitate learning. Starting with an overview of the UML, the book explains the language gradually by introducing a few concepts and notations in each chapter. It
also illustrates the application of the UML to complex modeling problems across a variety of application domains. The in-depth coverage and example-driven approach that made the first edition of The Unified Modeling Language User Guide an indispensable resource remain unchanged. However, content has been thoroughly updated to reflect changes to notation and usage required by UML 2.0. Highlights include: A new chapter on components and internal structure, including significant new capabilities for building encapsulated designs New details and updated coverage of provided and required interfaces, collaborations, and UML profiles Additions and changes to discussions of sequence diagrams, activity diagrams, and more Coverage of many other changes introduced by the UML 2.0 specification With this essential guide, you will quickly get up to speed on the latest features of the industry standard modeling language and be able to apply them to your next software project.

UML 2 and the Unified Process Few books on Ordinary Differential Equations (ODEs) have the elegant geometric insight of this one, which puts emphasis on the qualitative and geometric properties of ODEs and their solutions, rather than on routine presentation of algorithms. From the reviews: "Professor Arnold has expanded his classic book to include new material on exponential growth, predator-prey, the pendulum, impulse response, symmetry groups and group actions, perturbation and bifurcation." --SIAM REVIEW

UML 2.0 in a Nutshell This text provides an accessible and concise introduction to those systems analysis techniques most widely used within the business environment.

Software Engineering with Ada A guide to using UML describes major UML diagrams, their creation, and how to decipher them.

NoSQL Distilled This book covers the essential knowledge and skills needed by a student who is specializing in software
engineering. Readers will learn principles of object orientation, software development, software modeling, software design, requirements analysis, and testing. The use of the Unified Modelling Language to develop software is taught in depth. Many concepts are illustrated using complete examples, with code written in Java.

Design Patterns Explained "If you are a serious user of UML, there is no other book quite like this one. I have been involved with the UML specification process for some time, but I still found myself learning things while reading through this book—especially on the changes and new capabilities that have come with UML." - Ed Seidewitz, Chief Architect, IntelliData Technologies Corporation

The latest version of the Unified Modeling Language—UML 2.0—has increased its capabilities as the standard notation for modeling software-intensive systems. Like most standards documents, however, the official UML specification is difficult to read and navigate. In addition, UML 2.0 is far more complex than previous versions, making a thorough reference book more essential than ever. In this significantly updated and expanded edition of the definitive reference to the standard, James Rumbaugh, Ivar Jacobson, and Grady Booch—the UML's creators—clearly and completely describe UML concepts, including major revisions to sequence diagrams, activity models, state machines, components, internal structure of classes and components, and profiles. Whether you are capturing requirements, developing software architectures, designing implementations, or trying to understand existing systems, this is the book for you. Highlights include: Alphabetical dictionary of articles covering every UML concept Integrated summary of UML concepts by diagram type Two-color diagrams with extensive annotations in blue Thorough coverage of both semantics and notation, separated in each article for easy reference Further explanations of concepts whose meaning or purpose is obscure in the original specifications Discussion sections offering usage advice and additional insight into tricky concepts Notation summary, with references to individual articles An enhanced online index available on the
book’s web site allowing readers to quickly and easily search the entire text for specific topics. The result is an indispensable resource for anyone who needs to understand the inner workings of the industry standard modeling language.

Fundamentals of Information Systems uses friendly, easy-to-understand For Dummies style to help readers learn to model systems with the latest version of UML, the modeling language used by companies throughout the world to develop blueprints for complex computer systems. Guides programmers, architects, and business analysts through applying UML to design large, complex enterprise applications that enable scalability, security, and robust execution. Illustrates concepts with mini-cases from different business domains and provides practical advice and examples. Covers critical topics for users of UML, including object modeling, case modeling, advanced dynamic and functional modeling, and component and deployment modeling.

Learning UML 2.0: Designing Software Architectures will teach you how to design any software architecture in a systematic, predictable, repeatable, and cost-effective way. This book introduces a practical methodology for architecture design that any professional software engineer can use, provides structured methods supported by reusable chunks of design knowledge, and includes rich case studies that demonstrate how to use the methods. Using realistic examples, you’ll master the powerful new version of the proven Attribute-Driven Design (ADD) 3.0 method and will learn how to use it to address key drivers, including quality attributes, such as modifiability, usability, and availability, along with functional requirements and architectural concerns. Drawing on their extensive experience, Humberto Cervantes and Rick Kazman guide you through crafting practical designs that support the full software life cycle, from requirements to maintenance and evolution. You’ll learn how to successfully integrate design in your organizational context, and how to design systems that will be built with agile methods. Comprehensive coverage includes understanding what.
architecture design involves, and where it fits in the full software development life cycle Mastering core design concepts, principles, and processes Understanding how to perform the steps of the ADD method Scaling design and analysis up or down, including design for pre-sale processes or lightweight architecture reviews Recognizing and optimizing critical relationships between analysis and design Utilizing proven, reusable design primitives and adapting them to specific problems and contexts Solving design problems in new domains, such as cloud, mobile, or big data

Head First Object-Oriented Analysis and Design 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

UML 2 For Dummies Explains how to leverage Java’s architecture and mechanisms to design enterprise applications and considers code modularity, nonduplication, network efficiency,
maintainability, and reusability.

The Unified Modeling Language User Guide A classic treatise that defined the field of applied demand analysis, Consumer Demand in the United States: Prices, Income, and Consumption Behavior is now fully updated and expanded for a new generation. Consumption expenditures by households in the United States account for about 70% of America’s GDP. The primary focus in this book is on how households adjust these expenditures in response to changes in price and income. Econometric estimates of price and income elasticities are obtained for an exhaustive array of goods and services using data from surveys conducted by the Bureau of Labor Statistics, providing a better understanding of consumer demand. Practical models for forecasting future price and income elasticities are also demonstrated. Fully revised with over a dozen new chapters and appendices, the book revisits the original Taylor-Houthakker models while examining new material as well, such as the use of quantile regression and the stationarity of consumer preference. It also explores the emerging connection between neuroscience and consumer behavior, integrating the economic literature on demand theory with psychology literature. The most comprehensive treatment of the topic to date, this volume will be an essential resource for any researcher, student or professional economist working on consumer behavior or demand theory, as well as investors and policymakers concerned with the impact of economic fluctuations.

Systems Analysis and Design in a Changing World Provides complete coverage of the Ada language and Ada programming in general by recognized authorities in Ada software engineering. Demonstrates the power and performance of Ada in the management of large-scale object-oriented systems, and shows how to use Ada features such as generics, packages, and tasking.

Pattern Hatching Upon completion of an object-oriented design,
you are faced with a troubling question: "Is it good, bad, or somewhere in between?" Seasoned experts often answer this question by subjecting the design to a subconscious list of guidelines based on their years of experience. Experienced developer Arthur J. Riel has captured this elusive, subconscious list, and in doing so, has provided a set of metrics that help determine the quality of object-oriented models. Object-Oriented Design Heuristics offers insight into object-oriented design improvement. The more than sixty guidelines presented in this book are language-independent and allow you to rate the integrity of a software design. The heuristics are not written as hard and fast rules; they are meant to serve as warning mechanisms which allow the flexibility of ignoring the heuristic as necessary. This tutorial-based approach, born out of the author's extensive experience developing software, teaching thousands of students, and critiquing designs in a variety of domains, allows you to apply the guidelines in a personalized manner. The heuristics cover important topics ranging from classes and objects (with emphasis on their relationships including association, uses, containment, and both single and multiple inheritance) to physical object-oriented design. You will gain an understanding of the synergy that exists between design heuristics and the popular concept of design patterns; heuristics can highlight a problem in one facet of a design while patterns can provide the solution. Programmers of all levels will find value in this book. The newcomer will discover a fast track to understanding the concepts of object-oriented programming. At the same time, experienced programmers seeking to strengthen their object-oriented development efforts will appreciate the insightful analysis. In short, with Object-Oriented Design Heuristics as your guide, you have the tools to become a better software developer. 020163385XB04062001

Programming WCF Services More than 300,000 developers have benefited from past editions of UML Distilled. This third edition is the best resource for quick, no-nonsense insights into understanding and using UML 2.0 and prior versions of the UML.
Some readers will want to quickly get up to speed with the UML 2.0 and learn the essentials of the UML. Others will use this book as a handy, quick reference to the most common parts of the UML. The author delivers on both of these promises in a short, concise, and focused presentation. This book describes all the major UML diagram types, what they're used for, and the basic notation involved in creating and deciphering them. These diagrams include class, sequence, object, package, deployment, use case, state machine, activity, communication, composite structure, component, interaction overview, and timing diagrams. The examples are clear and the explanations cut to the fundamental design logic. Includes a quick reference to the most useful parts of the UML notation and a useful summary of diagram types that were added to the UML 2.0. If you are like most developers, you don't have time to keep up with all the new innovations in software engineering. This new edition of Fowler's classic work gets you acquainted with some of the best thinking about efficient object-oriented software design using the UML—in a convenient format that will be essential to anyone who designs software professionally.

Ordinary Differential Equations This comprehensive guide has been fully revised to cover UML 2.0, today's standard method for modelling software systems. Filled with concise information, it's been crafted to help IT professionals read, create, and understand system artefacts expressed using UML. Includes an example-rich tutorial for those who need familiarizing with the system.

Object-oriented Design Heuristics Larman covers how to investigate requirements, create solutions and then translate designs into code, showing developers how to make practical use of the most significant recent developments. A summary of UML notation is included.

Mastering Enterprise JavaBeans Combining the latest research and most current coverage available into a succinct nine
chapters, FUNDAMENTALS OF INFORMATION SYSTEMS, 8E equips students with a solid understanding of the core principles of IS and how it is practiced. The streamlined 560-page eighth edition features a wealth of new examples, figures, references, and cases as it covers the latest developments from the field--and highlights their impact on the rapidly changing role of today's IS professional. In addition to a stronger career emphasis, the text includes expanded coverage of mobile solutions, energy and environmental concerns, the increased use of cloud computing across the globe, and two cases per chapter. Learning firsthand how information systems can increase profits and reduce costs, students explore new information on e-commerce and enterprise systems, artificial intelligence, virtual reality, green computing, and other issues reshaping the industry. The text introduces the challenges and risks of computer crimes, hacking, and cyberterrorism. It also presents some of the most current research on virtual communities, global IS work solutions, and social networking. No matter where students' career paths may lead, FUNDAMENTALS OF INFORMATION SYSTEMS, 8E and its resources can help them maximize their success as employees, decision makers, and business leaders. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

SysML Distilled The Object-Oriented Thought Process Third Edition Matt Weisfeld An introduction to object-oriented concepts for developers looking to master modern application practices. Object-oriented programming (OOP) is the foundation of modern programming languages, including C++, Java, C#, and Visual Basic .NET. By designing with objects rather than treating the code and data as separate entities, OOP allows objects to fully utilize other objects' services as well as inherit their functionality. OOP promotes code portability and reuse, but requires a shift in thinking to be fully understood. Before jumping into the world of object-oriented programming languages, you must first master The Object-Oriented Thought Process. Written by a developer for developers who want to make the leap to object-oriented
technologies as well as managers who simply want to understand what they are managing. The Object-Oriented Thought Process provides a solution-oriented approach to object-oriented programming. Readers will learn to understand object-oriented design with inheritance or composition, object aggregation and association, and the difference between interfaces and implementations. Readers will also become more efficient and better thinkers in terms of object-oriented development. This revised edition focuses on interoperability across various technologies, primarily using XML as the communication mechanism. A more detailed focus is placed on how business objects operate over networks, including client/server architectures and web services. “Programmers who aim to create high quality software—as all programmers should—must learn the varied subtleties of the familiar yet not so familiar beasts called objects and classes. Doing so entails careful study of books such as Matt Weisfeld’s The Object-Oriented Thought Process.” –Bill McCarty, author of Java Distributed Objects, and Object-Oriented Design in Java Matt Weisfeld is an associate professor in business and technology at Cuyahoga Community College in Cleveland, Ohio. He has more than 20 years of experience as a professional software developer, project manager, and corporate trainer using C++, Smalltalk, .NET, and Java. He holds a BS in systems analysis, an MS in computer science, and an MBA in project management. Weisfeld has published many articles in major computer trade magazines and professional journals.

Fowler Provides information on analyzing, designing, and writing object-oriented software.

Object-Oriented Software Engineering Using UML, Patterns, and Java: Pearson New International Edition Design patterns, which express relationships between recurring problems and proven solutions, have become immensely popular in the world of software development. More and more software developers are recognizing the supreme usefulness of design patterns and how they ease the design and delivery of software applications. This
book builds upon the information presented in the seminal work in this field, Design Patterns: Elements of Reusable Object-Oriented Software, and gives software professionals the information they need to recognize and write their own patterns. Pattern Hatching, written by one of the co-authors of Design Patterns, truly helps the software professional apply one of the most popular concepts in software development.

Applying UML and Patterns Training Course "This book isn't just another introduction to use cases. The authors have used their wealth of experience to produce an excellent and insightful collection of detailed examples, explanations, and advice on how to work with use cases." –Maria Ericsson The toughest challenge in building a software system that meets the needs of your audience lies in clearly understanding the problems that the system must solve. Advanced Use Case Modeling presents a framework for discovering, identifying, and modeling the problem that the software system will ultimately solve. Software developers often employ use cases to specify what should be performed by the system they're constructing. Although use case-driven analysis, design, and testing of software systems has become increasingly popular, little has been written on the role of use cases in the complete software cycle. This book fills that need by describing how to create use case models for complex software development projects, using practical examples to explain conceptual information. The authors extend the work of software visionary Ivar Jacobson, using the Unified Modeling Language (UML) as the notation to describe the book's models. Aimed primarily at software professionals, Advanced Use Case Modeling also includes information that relates use case technique to business processes. This book presents a process for creating and maintaining use case models in a framework that can be fully customized for your organization. The authors, pioneers in the application of use cases in software development, bring their extensive experience to cover topics such as: A process model for applying a use case model How to keep your use case modeling effort on track Tips and pitfalls in use case
modeling How to organize your use case model for large-system development Similarities between Advanced Use Case Modeling and the Rational Unified Process framework Effect of use cases on user interface design Guidelines for quality use case modeling

The Object-Oriented Thought Process For courses in Software Engineering, Software Development, or Object-Oriented Design and Analysis at the Junior/Senior or Graduate level. This text can also be utilized in short technical courses or in short, intensive management courses. Shows students how to use both the principles of software engineering and the practices of various object-oriented tools, processes, and products. Using a step-by-step case study to illustrate the concepts and topics in each chapter, Bruegge and Dutoit emphasize learning object-oriented software engineer through practical experience: students can apply the techniques learned in class by implementing a real-world software project. The third edition addresses new trends, in particular agile project management (Chapter 14 Project Management) and agile methodologies (Chapter 16 Methodologies).

Essentials of Software Engineering

UML for Java Programmers The practice of enterprise application development has benefited from the emergence of many new enabling technologies. Multi-tiered object-oriented platforms, such as Java and .NET, have become commonplace. These new tools and technologies are capable of building powerful applications, but they are not easily implemented. Common failures in enterprise applications often occur because their developers do not understand the architectural lessons that experienced object developers have learned. Patterns of Enterprise Application Architecture is written in direct response to the stiff challenges that face enterprise application developers. The author, noted object-oriented designer Martin Fowler, noticed that despite changes in technology--from Smalltalk to CORBA to Java to .NET--the same basic design ideas can be adapted and
applied to solve common problems. With the help of an expert group of contributors, Martin distills over forty recurring solutions into patterns. The result is an indispensable handbook of solutions that are applicable to any enterprise application platform. This book is actually two books in one. The first section is a short tutorial on developing enterprise applications, which you can read from start to finish to understand the scope of the book's lessons. The next section, the bulk of the book, is a detailed reference to the patterns themselves. Each pattern provides usage and implementation information, as well as detailed code examples in Java or C#. The entire book is also richly illustrated with UML diagrams to further explain the concepts. Armed with this book, you will have the knowledge necessary to make important architectural decisions about building an enterprise application and the proven patterns for use when building them. The topics covered include: Dividing an enterprise application into layers · The major approaches to organizing business logic · An in-depth treatment of mapping between objects and relational databases · Using Model-View-Controller to organize a Web presentation · Handling concurrency for data that spans multiple transactions · Designing distributed object interfaces

UML Distilled The Systems Modeling Language (SysML) extends UML with powerful systems engineering capabilities for modeling a wider spectrum of systems and capturing all aspects of a system's design. SysML Distilled is the first clear, concise guide for everyone who wants to start creating effective SysML models. (Drawing on his pioneering experience at Lockheed Martin and NASA, Lenny Delligatti illuminates SysML's core components and provides practical advice to help you create good models and good designs. Delligatti begins with an easy-to-understand overview of Model-Based Systems Engineering (MBSE) and an explanation of how SysML enables effective system specification, analysis, design, optimization, verification, and validation. Next, he shows how to use all nine types of SysML diagrams, even if you have no previous experience with modeling languages. A
case study running through the text demonstrates the use of SysML in modeling a complex, real-world sociotechnical system. Modeled after Martin Fowler’s classic UML Distilled, Delligatti's indispensable guide quickly teaches you what you need to know to get started and helps you deepen your knowledge incrementally as the need arises. Like SysML itself, the book is method independent and is designed to support whatever processes, procedures, and tools you already use. Coverage includes Why SysML was created and the business case for using it Quickly putting SysML to practical use What to know before you start a SysML modeling project Essential concepts that apply to all SysML diagrams SysML diagram elements and relationships Diagramming block definitions, internal structures, use cases, activities, interactions, state machines, constraints, requirements, and packages Using allocations to define mappings among elements across a model SysML notation tables, version changes, and sources for more information

Object-Oriented Analysis and Design with Applications Includes more than 30 percent revised material and five new chapters, covering the new 2.1 features such as EJB Timer Service and JMS as well as the latest open source Java solutions The book was developed as part of TheServerSide.com online EJB community, ensuring a built-in audience Demonstrates how to build an EJB system, program with EJB, adopt best practices, and harness advanced EJB concepts and techniques, including transactions, persistence, clustering, integration, and performance optimization Offers practical guidance on when not to use EJB and how to use simpler, less costly open source technologies in place of or in conjunction with EJB

Advanced Use Case Modeling The acclaimed beginner's book on object technology now presents UML 2.0, Agile Modeling, and the latest in object development techniques.

The Object Primer "One of the great things about the book is the way the authors explain concepts very simply using analogies
rather than programming examples–this has been very inspiring for a product I'm working on: an audio-only introduction to OOP and software development." –Bruce Eckel

"I would expect that readers with a basic understanding of object-oriented programming and design would find this book useful, before approaching design patterns completely. Design Patterns Explained complements the existing design patterns texts and may perform a very useful role, fitting between introductory texts such as UML Distilled and the more advanced patterns books." –James Noble

Leverage the quality and productivity benefits of patterns–without the complexity! Design Patterns Explained, Second Edition is the field's simplest, clearest, most practical introduction to patterns. Using dozens of updated Java examples, it shows programmers and architects exactly how to use patterns to design, develop, and deliver software far more effectively.

You'll start with a complete overview of the fundamental principles of patterns, and the role of object-oriented analysis and design in contemporary software development. Then, using easy-to-understand sample code, Alan Shalloway and James Trott illuminate dozens of today's most useful patterns: their underlying concepts, advantages, tradeoffs, implementation techniques, and pitfalls to avoid. Many patterns are accompanied by UML diagrams. Building on their best-selling First Edition, Shalloway and Trott have thoroughly updated this book to reflect new software design trends, patterns, and implementation techniques. Reflecting extensive reader feedback, they have deepened and clarified coverage throughout, and reorganized content for even greater ease of understanding. New and revamped coverage in this edition includes Better ways to start "thinking in patterns" How design patterns can facilitate agile development using eXtreme Programming and other methods How to use commonality and variability analysis to design application architectures The key role of testing into a patterns-driven development process How to use factories to instantiate and manage objects more effectively The Object-Pool Pattern—a new pattern not identified by the "Gang of Four" New study/practice questions at the end of every chapter Gentle yet
thorough, this book assumes no patterns experience whatsoever. It's the ideal "first book" on patterns, and a perfect complement to Gamma's classic Design Patterns. If you're a programmer or architect who wants the clearest possible understanding of design patterns—or if you've struggled to make them work for you—read this book.

Code Complete "This book manages to convey the practical use of UML 2 in clear and understandable terms with many examples and guidelines. Even for people not working with the Unified Process, the book is still of great use. UML 2 and the Unified Process, Second Edition is a must-read for every UML 2 beginner and a helpful guide and reference for the experienced practitioner." --Roland Leibundgut, Technical Director, Zuehlke Engineering Ltd. "This book is a good starting point for organizations and individuals who are adopting UP and need to understand how to provide visualization of the different aspects needed to satisfy it. " --Eric Naiburg, Market Manager, Desktop Products, IBM Rational Software This thoroughly revised edition provides an indispensable and practical guide to the complex process of object-oriented analysis and design using UML 2. It describes how the process of OO analysis and design fits into the software development lifecycle as defined by the Unified Process (UP). UML 2 and the Unified Process contains a wealth of practical, powerful, and useful techniques that you can apply immediately. As you progress through the text, you will learn OO analysis and design techniques, UML syntax and semantics, and the relevant aspects of the UP. The book provides you with an accurate and succinct summary of both UML and UP from the point of view of the OO analyst and designer. This book provides Chapter roadmaps, detailed diagrams, and margin notes allowing you to focus on your needs Outline summaries for each chapter, making it ideal for revision, and a comprehensive index that can be used as a reference New to this edition: Completely revised and updated for UML 2 syntax Easy to understand explanations of the new UML 2 semantics More real-world examples A new section on the Object Constraint Language (OCL) Introductory
material on the OMG's Model Driven Architecture (MDA) The accompanying website provides A complete example of a simple e-commerce system Open source tools for requirements engineering and use case modeling Industrial-strength UML course materials based on the book

Uml Distilled: A Brief Guide To The Standard Object Modeling Language, 3/E 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.

Refactoring Offers comprehensive coverage of all major modeling viewpoints Provides details of collaboration and class diagrams for filling in the design-level models

Object-oriented Software Engineering Second Edition of the UML video course based on the book Applying UML and Patterns. This VTC will focus on object-oriented analysis and design, not just drawing UML.

Designing Software Architectures Computer Architecture/Software Engineering

The Elements of UML 2.0 Style
An Introduction to Systems Analysis Techniques With its clear introduction to the Unified Modeling Language (UML) 2.0, this tutorial offers a solid understanding of each topic, covering foundational concepts of object-orientation and an introduction to each of the UML diagram types.

UML in Practice 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.

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