

Read Book The Elements Of UML™ 2 0 Style

The Elements Of UML™ 2 0 Style

Salary surveys worldwide regularly place software architect in the top 10 best jobs, yet no real guide exists to help developers become architects. Until now. This book provides the first comprehensive overview of software architecture's many aspects. Aspiring and existing architects alike will examine architectural characteristics, architectural patterns, component determination, diagramming and presenting architecture, evolutionary architecture, and many other topics. Mark Richards and Neal Ford—hands-on practitioners who have taught software architecture classes professionally for years—focus on architecture principles that apply

Read Book The Elements Of UML™ 2 0 Style

across all technology stacks. You'll explore software architecture in a modern light, taking into account all the innovations of the past decade. This book examines: Architecture patterns: The technical basis for many architectural decisions Components: Identification, coupling, cohesion, partitioning, and granularity Soft skills: Effective team management, meetings, negotiation, presentations, and more Modernity: Engineering practices and operational approaches that have changed radically in the past few years Architecture as an engineering discipline: Repeatable results, metrics, and concrete valuations that add rigor to software architecture Concise and easy-to-understand guidelines and standards for creating UML 2.0 diagrams.

Read Book The Elements Of UML™ 2 0 Style

Describes Agile Modeling Driven Design (AMDD) and Test-Driven Design (TDD) approaches, database refactoring, database encapsulation strategies, and tools that support evolutionary techniques Agile software developers often use object and relational database (RDB) technology together and as a result must overcome the impedance mismatch The author covers techniques for mapping objects to RDBs and for implementing concurrency control, referential integrity, shared business logic, security access control, reports, and XML An agile foundation describes fundamental skills that all agile software developers require, particularly Agile DBAs Includes object modeling, UML data modeling, data normalization, class normalization, and how to deal with legacy databases

Read Book The Elements Of UML™ 2 0 Style

Scott W. Ambler is author of Agile Modeling (0471202827), a contributing editor with Software Development (www.sdmagazine.com), and a featured speaker at software conferences worldwide

The design and analysis of efficient data structures has long been recognized as a key component of the Computer Science curriculum.

Goodrich, Tomassia and Goldwasser's approach to this classic topic is based on the object-oriented paradigm as the framework of choice for the design of data structures. For each ADT presented in the text, the authors provide an associated Java interface. Concrete data structures realizing the ADTs are provided as Java classes implementing the interfaces. The Java code implementing fundamental data structures in this book is organized in

Read Book The Elements Of UML™ 2 0 Style

a single Java package, net.datastructures. This package forms a coherent library of data structures and algorithms in Java specifically designed for educational purposes in a way that is complimentary with the Java Collections Framework.

Data Structures and Algorithms in Java

A Brief Guide to the Systems Modeling Language

Fast Track UML 2.0

Design Patterns Java Workbook

A Brief Guide to the Standard Object Modeling Language

ActionScript 3.0 Design Patterns

Topological UML Modeling

Until the late 1980s, information processing was associated with large mainframe computers and

Read Book The Elements Of UML™ 2 0 Style

huge tape drives. During the 1990s, this trend shifted toward information processing with personal computers, or PCs. The trend toward miniaturization continues and in the future the majority of information processing systems will be small mobile computers, many of which will be embedded into larger products and interfaced to the physical environment. Hence, these kinds of systems are called embedded systems. Embedded systems together with their physical environment are called cyber-physical systems. Examples include systems such as transportation and fabrication equipment. It is expected that the total market volume of embedded systems will be

Read Book The Elements Of UML™ 2 0 Style

significantly larger than that of traditional information processing systems such as PCs and mainframes. Embedded systems share a number of common characteristics. For example, they must be dependable, efficient, meet real-time constraints and require customized user interfaces (instead of generic keyboard and mouse interfaces). Therefore, it makes sense to consider common principles of embedded system design. Embedded System Design starts with an introduction into the area and a survey of specification models and languages for embedded and cyber-physical systems. It provides a brief overview of hardware devices used

Read Book The Elements Of UML™ 2 0 Style

for such systems and presents the essentials of system software for embedded systems, like real-time operating systems. The book also discusses evaluation and validation techniques for embedded systems. Furthermore, the book presents an overview of techniques for mapping applications to execution platforms. Due to the importance of resource efficiency, the book also contains a selected set of optimization techniques for embedded systems, including special compilation techniques. The book closes with a brief survey on testing. Embedded System Design can be used as a text book for courses on embedded systems and as a source which provides pointers to relevant

Read Book The Elements Of UML™ 2 0 Style

material in the area for PhD students and teachers. It assumes a basic knowledge of information processing hardware and software. Courseware related to this book is available at <http://ls12-www.cs.tu-dortmund.de/~marwedel>.

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

Read Book The Elements Of UML™ 2 0 Style

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.

Data Modeling Essentials, Third Edition, covers the basics of data

Read Book The Elements Of UML™ 2 0 Style

modeling while focusing on developing a facility in techniques, rather than a simple familiarization with "the rules". In order to enable students to apply the basics of data modeling to real models, the book addresses the realities of developing systems in real-world situations by assessing the merits of a variety of possible solutions as well as using language and diagramming methods that represent industry practice. This revised edition has been given significantly expanded coverage and reorganized for greater reader comprehension even as it retains its distinctive hallmarks of readability and usefulness. Beginning with the basics, the book provides a

Read Book The Elements Of UML™ 2 0 Style

thorough grounding in theory before guiding the reader through the various stages of applied data modeling and database design. Later chapters address advanced subjects, including business rules, data warehousing, enterprise-wide modeling and data management. It includes an entirely new section discussing the development of logical and physical modeling, along with new material describing a powerful technique for model verification. It also provides an excellent resource for additional lectures and exercises. This text is the ideal reference for data modelers, data architects, database designers, DBAs, and systems analysts, as well as undergraduate

Read Book The Elements Of UML™ 2 0 Style

and graduate-level students looking for a real-world perspective. Thorough coverage of the fundamentals and relevant theory. Recognition and support for the creative side of the process. Expanded coverage of applied data modeling includes new chapters on logical and physical database design. New material describing a powerful technique for model verification. Unique coverage of the practical and human aspects of modeling, such as working with business specialists, managing change, and resolving conflict. UML, the Universal Modeling Language, was the first programming language designed to fulfill the requirement for

Read Book The Elements Of UML™ 2 0 Style

"universality." However, it is a software-specific language, and does not support the needs of engineers designing from the broader systems-based perspective. Therefore, SysML was created. It has been steadily gaining popularity, and many companies, especially in the heavily-regulated Defense, Automotive, Aerospace, Medical Device and Telecomms industries, are already using SysML, or are planning to switch over to it in the near future. However, little information is currently available on the market regarding SysML. Its use is just on the crest of becoming a widespread phenomenon, and so thousands of software engineers are now

Read Book The Elements Of UML™ 2 0 Style

*beginning to look for training and resources. This book will serve as the one-stop, definitive guide that provide an introduction to SysML, and instruction on how to implement it, for all these new users. *SysML is the latest emerging programming language--250,000 estimated software systems engineers are using it in the US alone! *The first available book on SysML in English *Insider information! The author is a member of the SysML working group and has written sections of the specification *Special focus comparing SysML and UML, and explaining how both can work together*

OCUP 2 Certification Guide
Learning UML 2.0

Read Book The Elements Of UML™ 2 0 Style

*An Object-Oriented Approach
Fundamentals of Software
Architecture*

Patterns in Java

The Object Primer

*Effective Strategies for the Agile
Software Developer*

***This workbook approach
deepens understanding,
builds confidence, and
strengthens readers' skills.
It covers all five categories
of design pattern intent:
interfaces, responsibility,
construction, operations,
and extensions.***

***Systems Analysis and
Design: An Object-Oriented
Approach with UML, Sixth***

Read Book The Elements Of UML™ 2 0 Style

Edition helps students develop the core skills required to plan, design, analyze, and implement information systems. Offering a practical hands-on approach to the subject, this textbook is designed to keep students focused on doing SAD, rather than simply reading about it. Each chapter describes a specific part of the SAD process, providing clear instructions, a detailed example, and practice exercises. Students are guided through the topics in the same order as

Read Book The Elements Of UML™ 2 0 Style

professional analysts working on a typical real-world project. Now in its sixth edition, this edition has been carefully updated to reflect current methods and practices in SAD and prepare students for their future roles as systems analysts. Every essential area of systems analysis and design is clearly and thoroughly covered, from project management, to analysis and design modeling, to construction, installation, and operations. The textbook includes access to a range of

Read Book The Elements Of UML™ 2 0 Style

teaching and learning resources, and a running case study of a fictitious healthcare company that shows students how SAD concepts are applied in real-life scenarios.

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

Read Book The Elements Of UML™ 2 0 Style

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

Read Book The Elements Of UML™ 2 0 Style

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

Read Book The Elements Of UML™ 2 0 Style

thinking about efficient object-oriented software design using the UML--in a convenient format that will be essential to anyone who designs software professionally.

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

Read Book The Elements Of UML™ 2 0 Style

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

Read Book The Elements Of UML™ 2 0 Style

(Chapter 14 Project Management) and agile methodologies (Chapter 16 Methodologies).

An Object-Oriented Approach with UML

Java in Two Semesters

The Systems Modeling Language

The Elements of Java(TM) Style

An Engineering Approach

UML for Java Programmers

Use Case Driven Object

Modeling with UML Theory and Practice

The author of *Developing Applications with Visual Basic and UML* (Addison-Wesley, 2000), a consultant on object-

Read Book The Elements Of UML™ 2 0 Style

oriented distributed systems, presents a large-scale application to explain the lifecycle of building robust Java applications with the Unified Modeling Language using Rational's Software's Unified Plan. Reed also makes a short detour into his Synergy Process. Appends material on the Unified Plan and the BEA WebLogic application server. Assumes programmers' knowledge of Java and a willingness to evolve past a cavalier attitude toward project planning.

Business Process Modeling Notation (BPMN) is a standard, graphical modeling representation for business processes. It provides an easy to use, flow-charting notation that is independent of the implementation environment. An underlying rigor supports the notation-facilitating the translation of business level models into executable models that BPM Suites and workflow engines can

Read Book The Elements Of UML™ 2 0 Style

understand. Over recent years, BPMN has been widely adopted by Business Process Management (BPM) related products-both the Business Process Analysis and Modeling tool vendors and the BPM Suites. This book is for business users and process modeling practitioners alike. Part I provides an easily understood introduction to the key components of BPMN (put forward in a user-friendly fashion). Starting off with simple models, it progresses into more sophisticated patterns. Exercises help cement comprehension and understanding (with answers available online). Part II provides a detailed and authoritative reference on the precise semantics and capabilities of the standard.

"This is the best book on patterns since the Gang of Four's DesignPatterns. The book manages to be a resource for three of the most important trends in professional

Read Book The Elements Of UML™ 2 0 Style

programming: Patterns, Java, and UML." —Larry O'Brien, Founding Editor, Software Development Magazine Since the release of Design Patterns in 1994, patterns have become one of the most important new technologies contributing to software design and development. In this volume Mark Grand presents 41 design patterns that help you create more elegant and reusable designs. He revisits the 23 "Gang of Four" design patterns from the perspective of a Java programmer and introduces many new patterns specifically for Java. Each pattern comes with the complete Java source code and is diagrammed using UML. Patterns in Java, Volume 1 gives you: 11 Behavioral Patterns, 9 Structural Patterns, 7 Concurrency Patterns, 6 Creational Patterns, 5 Fundamental Design Patterns, and 3 Partitioning Patterns Real-world case studies that illustrate when and how to use

Read Book The Elements Of UML™ 2 0 Style

the patterns Introduction to UML with examples that demonstrate how to express patterns using UML The CD-ROM contains: Java source code for the 41 design patterns Trial versions of Together/J Whiteboard Edition from ObjectInternational (www.togetherj.com); Rational Rose 98 from Rational Software (www.rational.com); System Architect from Popkin Software (www.popkin.com); and OptimizeIt from Intuitive Systems, Inc.

A Practical Guide to SysML: The Systems Modeling Language is a comprehensive guide to SysML for systems and software engineers. It provides an advanced and practical resource for modeling systems with SysML. The source describes the modeling language and offers information about employing SysML in transitioning an organization or project to model-based systems engineering. The book also

Read Book The Elements Of UML™ 2 0 Style

presents various examples to help readers understand the OMG Systems Modeling Professional (OCSMP) Certification Program. The text is organized into four parts. The first part provides an overview of systems engineering. It explains the model-based approach by comparing it with the document-based approach and providing the modeling principles. The overview of SysML is also discussed. The second part of the book covers a comprehensive description of the language. It discusses the main concepts of model organization, parametrics, blocks, use cases, interactions, requirements, allocations, and profiles. The third part presents examples that illustrate how SysML supports different model-based procedures. The last part discusses how to transition and deploy SysML into an organization or project. It explains the integration of SysML into a systems

Read Book The Elements Of UML™ 2 0 Style

development environment. Furthermore, it describes the category of data that are exchanged between a SysML tool and other types of tools, and the types of exchange mechanisms that can be used. It also covers the criteria that must be considered when selecting a SysML.

Software and systems engineers, programmers, IT practitioners, experts, and non-experts will find this book useful.

*The authoritative guide for understanding and applying SysML *Authored by the foremost experts on the language

*Language description, examples, and quick reference guide included

Embedded System Design

Systems Analysis and Design

Developing Efficient Objects for

Embedded Systems

Theory and Practice

Developing Applications with Java and

UML

Read Book The Elements Of UML™ 2 0 Style

Best Practices and Design Strategies
Object Oriented Programming Techniques

Explains how to leverage Java's architecture and mechanisms to design enterprise applications and considers code modularity, nonduplication, network efficiency, maintainability, and reusability.

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.

This practical new book provides much-needed, practical, hands-on

Read Book The Elements Of UML™ 2 0 Style

experience capturing analysis and design in UML. It holds the hands of engineers making the difficult leap from developing in C to the higher-level and more robust Unified Modeling Language, thereby supporting professional development for engineers looking to broaden their skill-sets in order to become more saleable in the job market. It provides a laboratory environment through a series of progressively more complex exercises that act as building blocks, illustrating the various aspects of UML and its application to real-time and embedded systems. With its focus on gaining proficiency, it goes a

Read Book The Elements Of UML™ 2 0 Style

significant step beyond basic UML overviews, providing both comprehensive methodology and the best level of supporting exercises available on the market. Each exercise has a matching solution which is thoroughly explained step-by-step in the back of the book. The techniques used to solve these problems come from the author's decades of experience designing and constructing real-time systems. After the exercises have been successfully completed, the book will act as a desk reference for engineers, reminding them of how many of the problems they face in their designs can be solved. Tutorial

Read Book The Elements Of UML™ 2 0 Style

style text with keen focus on in-depth presentation and solution of real-world example problems
Highly popular, respected and experienced author
Diagramming and process are important topics in today's software development world, as the UML diagramming language has come to be almost universally accepted. Yet process is necessary; by themselves, diagrams are of little use. Use Case Driven Object Modeling with UML - Theory and Practice combines the notation of UML with a lightweight but effective process - the ICONIX process - for designing and developing software systems.

Read Book The Elements Of UML™ 2 0 Style

ICONIX has developed a growing following over the years. Sitting between the free-for-all of Extreme Programming and overly rigid processes such as RUP, ICONIX offers just enough structure to be successful.

UML 2.0 in a Nutshell

UML Distilled

Agile Database Techniques

Java Design

Domain-Specific Modeling

Effective Model-Based Systems

Engineering

Sustainable Software

Development Patterns and Best

Practices with C++ 17

This comprehensive guide has been fully revised to cover UML

Read Book The Elements Of UML™ 2 0 Style

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.

Now that ActionScript is reengineered from top to bottom as a true object-oriented programming (OOP) language, reusable design patterns are an ideal way to solve common problems in Flash and Flex applications. If you're an experienced Flash or Flex

Read Book The Elements Of UML™ 2 0 Style

developer ready to tackle sophisticated programming techniques with ActionScript 3.0, this hands-on introduction to design patterns is the book you need. ActionScript 3.0 Design Patterns takes you step by step through the process, first by explaining how design patterns provide a clear road map for structuring code that actually makes OOP languages easier to learn and use. You then learn about various types of design patterns and construct small abstract examples before trying your hand at building full-fledged working applications outlined in the book. Topics in

Read Book The Elements Of UML™ 2 0 Style

ActionScript 3.0 Design Patterns include: Key features of ActionScript 3.0 and why it became an OOP language OOP characteristics, such as classes, abstraction, inheritance, and polymorphism The benefits of using design patterns Creational patterns, including Factory and Singleton patterns Structural patterns, including Decorator, Adapter, and Composite patterns Behavioral patterns, including Command, Observer, Strategy, and State patterns Multiple design patterns, including Model-View-Controller and Symmetric Proxy designs During the course of the book,

Read Book The Elements Of UML™ 2 0 Style

you'll work with examples of increasing complexity, such as an e-business application with service options that users can select, an interface for selecting a class of products and individual products in each class, an action game application, a video record and playback application, and many more. Whether you're coming to Flash and Flex from Java or C++, or have experience with ActionScript 2.0, ActionScript 3.0 Design Patterns will have you constructing truly elegant solutions for your Flash and Flex applications in no time.

OCUP 2 Certification Guide:

Read Book The Elements Of UML™ 2 0 Style

Preparing for the OMG Certified UML 2.5 Professional 2 Foundation Exam both teaches UML® 2.5 and prepares candidates to become certified. UML® (Unified Modeling Language) is the most popular graphical language used by software analysts, designers, and developers to model, visualize, communicate, test, and document systems under development. UML® 2.5 has recently been released, and with it a new certification program for practitioners to enhance their current or future career opportunities. There are three exam levels: Foundation,

Read Book The Elements Of UML™ 2 0 Style

Intermediate, and Advanced. The exam covered in this book, Foundation, is a prerequisite for the higher levels. Author Michael Jesse Chonoles is a lead participant in the current OCUP 2 program—not only in writing and reviewing all the questions, but also in designing the goals of the program. This book distills his experience in modeling, mentoring, and training. Because UML® is a sophisticated language, with 13 diagram types, capable of modeling any type of modern software system, it takes users some time to become proficient. This effective resource will

Read Book The Elements Of UML™ 2 0 Style

explain the material in the Foundation exam and includes many practice questions for the candidate, including sample problems similar to those found in the exam, and detailed explanations of why correct answers are correct and why wrong answers are wrong. Written to prepare candidates for the OCUP 2 Foundation level exam while they learn UML® Illustrated with UML® diagrams to clarify every concept and technique Offers hints for studying and test-taking based on the specific nature and structure of the Foundation Level exam Includes practice

Read Book The Elements Of UML™ 2 0 Style

exam material, sample questions and exercises, warnings, tips, and points to remember throughout 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

Read Book The Elements Of UML™ 2 0 Style

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.

Read Book The Elements Of UML™ 2 0 Style

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

Read Book The Elements Of UML™ 2 0 Style

*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
Enabling Full Code Generation
Modernizing IBM i Applications
from the Database up to the
User Interface and Everything in
Between
A Catalog of Reusable Design*

Read Book The Elements Of UML™ 2 0 Style

*Patterns Illustrated with UML
Object-Oriented Software
Engineering Using UML,
Patterns, and Java: Pearson New
International Edition*

*The Unified Modeling Language
Reference Manual*

Real-time UML

*Real Time UML Workshop for
Embedded Systems*

***"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***

Read Book The Elements Of UML™ 2 0 Style

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

Read Book The Elements Of UML™ 2 0 Style

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,

Read Book The Elements Of UML™ 2 0 Style

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

Read Book The Elements Of UML™ 2 0 Style

***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.***

***A systematic approach to
striving for perfection in
Java "TM" enterprise
software! -- Principles and***

Read Book The Elements Of UML™ 2 0 Style

best-practice patterns for the key design and implementation problems facing enterprise developers. -- Effective integration of UML, object-oriented development, Java "TM," and your software development processes. -- Identifies behavioral and structural modeling techniques that deliver exceptional value. Drawing upon the experiences of hundreds of developers he has trained or worked with, Kirk Knoernschild offers a systematic guide to solving today's complex problems of

Read Book The Elements Of UML™ 2 0 Style

Java-based enterprise application design and implementation.

Knoernschild focuses on both technology and process, offering a phased approach to integrating UML, object-oriented development, and Java "TM" throughout the entire development lifecycle.

Knoernschild begins by reintroducing objects and object-oriented design, presenting key concepts such as polymorphism and inheritance in terms of several powerful principles and patterns that inform the

Read Book The Elements Of UML™ 2 0 Style

entire book. Next, he introduces the UML: how it evolved, the problems it helps to solve, and how various UML constructs can be mapped to Java.

Knoernschild shows how to structure UML diagrams to more easily identify the problem being solved, introduces best practices that any software development process should promote, and shows how the UML fits with these best practices. He reviews the external considerations that impact how companies really use the UML, Java "TM," and

Read Book The Elements Of UML™ 2 0 Style

object-based techniques, presenting a pragmatic, phased approach to integrating them with the least pain and the greatest effectiveness. The book concludes with in-depth coverage of behavioral and structural modeling, again emphasizing the principles and patterns associated with long-term success. For every Java "TM" enterprise developer, architect, analyst, and project manager. Execution speed and memory size are paramount in the development of real-

Read Book The Elements Of UML™ 2 0 Style

time systems. "Real-Time UML" presents the fundamental concepts of the UML and real-time systems together. By learning how object technology and the UML effectively address the unique requirements of embedded real-time systems, the reader will be able to apply the full benefits of object technology in a new discipline--embedded systems programming. * Examples are easy to understand; diagrams aren't overly busy. * Written in user-friendly style author is known for. * Condensed,

Read Book The Elements Of UML™ 2 0 Style

***distilled presentation of the
UML Superstructure
document will get you up to
speed with UML 2.0.***

***An Improved Approach for
Domain Modeling and
Software Development
Featuring JavaFX***

***BPMN Modeling and
Reference Guide***

***The Elements of UML(TM)
2.0 Style***

Core J2EE Patterns

***Modeling, Analysis, Design
Clean C++***

***This easy-to-follow
textbook teaches Java
programming from first
principles, as well as***

Read Book The Elements Of UML™ 2 0 Style

covering design and testing methodologies. The text is divided into two parts. Each part supports a one-semester module, the first part addressing fundamental programming concepts, and the second part building on this foundation, teaching the skills required to develop more advanced applications. This fully updated and greatly enhanced fourth edition covers the key developments introduced in Java 8, including

Read Book The Elements Of UML™ 2 0 Style

material on JavaFX, lambda expressions and the Stream API. Topics and features: begins by introducing fundamental programming concepts such as declaration of variables, control structures, methods and arrays; goes on to cover the fundamental object-oriented concepts of classes and objects, inheritance and polymorphism; uses JavaFX throughout for constructing event-driven graphical interfaces; includes

Read Book The Elements Of UML™ 2 0 Style

advanced topics such as interfaces and lambda expressions, generics, collection classes and exceptions; explains file-handling techniques, packages, multi-threaded programs, socket programming, remote database access and processing collections using streams; includes self-test questions and programming exercises at the end of each chapter, as well as two illuminating case studies; provides

Read Book The Elements Of UML™ 2 0 Style

additional resources at its associated website (simply go to springer.com and search for "Java in Two Semesters"), including a guide on how to install and use the NetBeans™ Java IDE. Offering a gentle introduction to the field, assuming no prior knowledge of the subject, Java in Two Semesters is the ideal companion to undergraduate modules in software development or programming.

UML is an industry

Read Book The Elements Of UML™ 2 0 Style

standard specification for modelling, visualizing, and documenting software projects. This title covers all aspects of the UML including the use of the UML, diagramming notation, the object constraint language (OCL), and profiles.

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

Read Book The Elements Of UML™ 2 0 Style

*published in 2000,
Illustrates rules of
Java code-writing with
parallel examples of
correct and incorrect
usage.*

Embedded Systems

*Foundations of Cyber-
Physical Systems*

*Preparing for the OMG
Certified UML 2.5*

Professional 2

Foundation Exam

Object-oriented

*Programming Featuring
Graphical Applications
in Java*

UML 2 Toolkit

Systems Engineering with

Read Book The Elements Of UML™ 2.0 Style

SysML/UML

Agile Model-Driven Development with UML 2.0 Objects, UML, and Process

Write maintainable, extensible, and durable software with modern C++. This book is a must for every developer, software architect, or team leader who is interested in good C++ code, and thus also wants to save development costs. If you want to teach yourself about writing clean C++, Clean C++ is exactly what you need. It is written to help C++ developers of all skill levels and shows by example how to write understandable, flexible, maintainable, and efficient C++ code. Even if you are a seasoned C++ developer, there are nuggets

Read Book The Elements Of UML™ 2 0 Style

and data points in this book that you will find useful in your work. If you don't take care with your code, you can produce a large, messy, and unmaintainable beast in any programming language. However, C++ projects in particular are prone to be messy and tend to slip into bad habits. Lots of C++ code that is written today looks as if it was written in the 1980s. It seems that C++ developers have been forgotten by those who preach Software Craftsmanship and Clean Code principles. The Web is full of bad, but apparently very fast and highly optimized C++ code examples, with cruel syntax that completely ignores elementary principles of good design and well-written code. This book will explain how to avoid this scenario and how

Read Book The Elements Of UML™ 2 0 Style

to get the most out of your C++ code. You'll find your coding becomes more efficient and, importantly, more fun. What You'll Learn Gain sound principles and rules for clean coding in C++ Carry out test driven development (TDD) Discover C++ design patterns and idioms Apply these design patterns Who This Book Is For Any C++ developer and software engineer with an interest in producing better code.

"[The authors] are pioneers. . . . Few in our industry have their breadth of knowledge and experience." —From the Foreword by Dave Thomas, Bedarra Labs Domain-Specific Modeling (DSM) is the latest approach to software development, promising to greatly increase the speed and ease of

Read Book The Elements Of UML™ 2 0 Style

software creation. Early adopters of DSM have been enjoying productivity increases of 500–1000% in production for over a decade. This book introduces DSM and offers examples from various fields to illustrate to experienced developers how DSM can improve software development in their teams. Two authorities in the field explain what DSM is, why it works, and how to successfully create and use a DSM solution to improve productivity and quality. Divided into four parts, the book covers: background and motivation; fundamentals; in-depth examples; and creating DSM solutions. There is an emphasis throughout the book on practical guidelines for implementing DSM, including how to identify the necessary language

Read Book The Elements Of UML™ 2 0 Style

constructs, how to generate full code from models, and how to provide tool support for a new DSM language. The example cases described in the book are available the book's Website, www.dsmbook.com, along with, an evaluation copy of the MetaEdit+ tool (for Windows, Mac OS X, and Linux), which allows readers to examine and try out the modeling languages and code generators. Domain-Specific Modeling is an essential reference for lead developers, software engineers, architects, methodologists, and technical managers who want to learn how to create a DSM solution and successfully put it into practice.

A modern, hands-on approach to doing SAD—in UML! Get the core

Read Book The Elements Of UML™ 2 0 Style

skills you need to actually do systems analysis and design with this highly practical, hands-on approach to SAD using UML! Authors Alan Dennis, Barbara Haley Wixom, and David Tegarden guide you through each part of the SAD process, with clear explanations of what it is and how to implement it, along with detailed examples and exercises that allow you to practice what you've learned. Now updated to include UML Version 2.0 and revised, this Second Edition features a new chapter on the Unified Process, increased coverage of project management, and more examples. Highlights Written in UML: The text takes a contemporary, object-oriented approach using UML. Focus on doing SAD: After presenting the

Read Book The Elements Of UML™ 2 0 Style

how and what of each major technique, the text guides you through practice problems and then invites you to use the technique in a project. Rich examples of both success and failure: Concepts in Action boxes describe how real companies succeeded and failed in performing the activities in the chapters. Project approach: Each chapter focuses on a different step in the Systems Development Life Cycle (SDLC) process. Topics are presented in the order in which they are encountered in a typical project. A running case: This case threaded throughout the text allows you to apply each concept you have learned.

This IBM® Redbooks® publication is focused on melding industry preferred practices with the unique

Read Book The Elements Of UML™ 2 0 Style

needs of the IBM i community and providing a holistic view of modernization. This book covers key trends for application structure, user interface, data access, and the database. Modernization is a broad term when applied to applications. It is more than a single event. It is a sequence of actions. But even more, it is a process of rethinking how to approach the creation and maintenance of applications. There are tangible deliveries when it comes to modernization, the most notable being a modern user interface (UI), such as a web browser or being able to access applications from a mobile device. The UI, however, is only the beginning. There are many more aspects to modernization. Using modern tools and methodologies

Read Book The Elements Of UML™ 2 0 Style

can significantly improve productivity and reduce long-term cost while positioning applications for the next decade. It is time to put the past away. Tools and methodologies have undergone significant transformation, improving functionality, usability, and productivity. This is true of the plethora of IBM tools and the wealth of tools available from many Independent Solution Providers (ISVs). This publication is the result of work that was done by IBM, industry experts, and by representatives from many of the ISV Tool Providers. Some of their tools are referenced in the book. In addition to reviewing technologies based on context, there is an explanation of why modernization is important and a description of the

Read Book The Elements Of UML™ 2 0 Style

business benefits of investing in modernization. This critical information is key for line-of-business executives who want to understand the benefits of a modernization project. This book is appropriate for CIOs, architects, developers, and business leaders. Related information Making the Case for Modernization, IBM Systems Magazine SysML Distilled Systems Analysis and Design with UML Version 2.0 Understanding and Using BPMN A Practical Guide to SysML Data Modeling Essentials UML Bible

The goal of this book is to explore the principle ideas of object-oriented

Read Book The Elements Of UML™ 2 0 Style

programming using the Java programming language. It begins teaching the object-oriented power of Java by relying on textual commands instead of emphasizing the AWT or Swing libraries, providing the reader with a simple, generic introduction to the OO concepts using Java (without the language details getting in the way of the concept presentation). The author provides a thorough introduction to

Read Book The Elements Of UML™ 2 0 Style

the three fundamental concepts of object-oriented programming: Encapsulation, Inheritance, and Polymorphism. The presentation of OO theory is augmented by interleaved examples that illustrate these concepts. Most of these program examples are 2-D graphics programs that provide an intuitive context for the issues that must be addressed when learning OOP. Additionally, since graphics programming is

Read Book The Elements Of UML™ 2 0 Style

one of the strengths of the Java development environment, the examples produce interesting and unexpected images that engage and motivate the reader. It contains a concise introduction to using Design Patterns particularly the Template Method, Iterator, and Composite design patterns which relate to the graphics examples in the book and uses UML class diagrams to show the static structure of systems and

Read Book The Elements Of UML™ 2 0 Style

sequence diagrams to show object interactions. This book is appropriate for readers who are new to object-oriented (but have experience with a non-object-oriented language) and for programmers who want to learn the graphical elements and capabilities of Java. Topological UML Modeling: An Improved Approach for Domain Modeling and Software Development presents a specification for

Read Book The Elements Of UML™ 2 0 Style

Topological UML® that combines the formalism of the Topological Functioning Model (TFM) mathematical topology with a specified software analysis and design method. The analysis of problem domain and design of desired solutions within software development processes has a major impact on the achieved result - developed software. While there are many tools and different techniques to create detailed

Read Book The Elements Of UML™ 2 0 Style

specifications of the solution, the proper analysis of problem domain functioning is ignored or covered insufficiently. The design of object-oriented software has been led for many years by the Unified Modeling Language (UML®), an approved industry standard modeling notation for visualizing, specifying, constructing, and documenting the artifacts of a software-intensive system, and

Read Book The Elements Of UML™ 2 0 Style

this comprehensive book shines new light on the many advances in the field. Presents an approach to formally define, analyze, and verify functionality of existing processes and desired processes to track incomplete or incorrect functional requirements Describes the path from functional and nonfunctional requirements specification to software design with step-by-step creation and transformation of

Read Book The Elements Of UML™ 2 0 Style

diagrams and models with very early capturing of security requirements for software systems.

Defines all modeling constructs as extensions to UML®, thus creating a new UML® profile which can be implemented in existing UML® modeling tools and toolsets

This textbook presents a proven, mature Model-Based Systems

Engineering (MBSE) methodology that has delivered success in a wide range of system and enterprise programs. The

Read Book The Elements Of UML™ 2 0 Style

authors introduce MBSE as the state of the practice in the vital Systems Engineering discipline that manages complexity and integrates technologies and design approaches to achieve effective, affordable, and balanced system solutions to the needs of a customer organization and its personnel. The book begins with a summary of the background and nature of MBSE. It summarizes the theory behind Object-Oriented

Read Book The Elements Of UML™ 2 0 Style

Design applied to complex system architectures. It then walks through the phases of the MBSE methodology, using system examples to illustrate key points. Subsequent chapters broaden the application of MBSE in Service-Oriented Architectures (SOA), real-time systems, cybersecurity, networked enterprises, system simulations, and prototyping. The vital subject of system and architecture governance completes the

Read Book The Elements Of UML™ 2 0 Style

discussion. The book features exercises at the end of each chapter intended to help readers/students focus on key points, as well as extensive appendices that furnish additional detail in particular areas. The self-contained text is ideal for students in a range of courses in systems architecture and MBSE as well as for practitioners seeking a highly practical presentation of MBSE principles and

Read Book The Elements Of UML™ 2 0 Style

techniques.

Gain the skills to effectively plan software applications and systems using the latest version of UML. UML 2 represents a significant update to the UML specification, from providing more robust mechanisms for modeling workflow and actions to making the modeling language more executable. Now in its second edition, this bestselling book provides you with all

Read Book The Elements Of UML™ 2 0 Style

thetools you'll need for effective modeling with UML 2. The authors get you up to speed by presenting an overview of UML and its main features. You'll then learn how to apply UML to produce effective diagrams as you progress through more advanced topics such as use-case diagrams, classes and their relationships, dynamic diagrams, system architecture, and extending UML. The authors take you through

Read Book The Elements Of UML™ 2 0 Style

the process of modeling with UML so that you can successfully deliver a software product or information managementsystem. With the help of numerous examples and an extensive case study, this book teaches you how to: * Organize, describe, assess, test, and realize use cases * Gain substantial information about a system by using classes * Utilize activity diagrams, state machines, and

Read Book The Elements Of UML™ 2 0 Style

interaction diagrams to handle common issues *

- * Extend UML features for specific environment or domains
- * Use UML as part of a Model Driven Architecture initiative
- * Apply an effective process for using UML

The CD-ROM contains all of the UML models and Java™ code for a complete application, Java™ 2 Platform, Standard Edition, Version 1.4.1, and links to the Web sites for vendors of UML 2 tools.