# Object Oriented Software Engineering Using Uml Patterns And Java Pearson New International Edition

Covers four main areas: the re-use of software; tools and practices that software developers must use; GUI library utilization; and event-driven systems. Java applets are used to enhance the concept of conceptual material through animation and interaction.

"This book explores applications and approaches to object-oriented software design"--

Addresses critical software engineering issues, showing how an object - oriented approach can provide much improved solutions over other methods. Designed as a technology tool.

Object-Oriented Design and Programming with C++: Your Hands-On Guide to C++ Programming, with Special Emphasis on Design, Testing, and Reuse provides a list of software engineering principles to guide the software development process. This book presents the fundamentals of the C++ language. Organized into two parts encompassing 10 chapters, this book begins with an overview of C++ and describes object-oriented programming and the history of C++. This text then introduces classes, polymorphism, inheritance, and overloading. Other chapters consider the C++ preprocessor and organization of class libraries. This book discusses as well the scope rules, separate compilation, class libraries, and their organization, exceptions, browsers, and exception handling. The final chapter deals with the design of a moderately complex system that provides file system stimulation. This book is a valuable resource for readers who are reasonably familiar with the C programming language and want to understand the issues in object-oriented programming using C++.

This book shows us how to use UML and apply it in object-oriented software development. Part 1 of the book guides the reader step-by-step through the development process while part 2 explains the basics of UML in detail.

"This book consists of a series of high-level discussions on technical and managerial issues related to object-oriented development"--Provided by publisher.

This book is intended for Graduate and Post-graduate students in Computer Science and Engineering, Information Technology for the purpose of Object Oriented System Analysis and Design. This book covers details of UML (Unified Modeling Language) which is used to model software intensive systems.

The object-oriented paradigm supplements traditional software engineering by providing solutions to common problems such as modularity and reusability. Objects can be written for a specific purpose acting as an encapsulated black-box API that can work with other components by forming a complex system. This book provides a comprehensive overview of the many facets of the object-oriented paradigm and how it applies to software engineering. Starting with an in-depth look at objects, the book naturally progresses through the software engineering life cycle and shows how object-oriented concepts enhance each step. Furthermore, it is designed as a roadmap with each chapter, preparing the reader with the skills necessary to advance the project.This book should be used by anyone interested in learning about object-oriented software engineering, including students and seasoned developers. Without overwhelming the reader, this book hopes to provide enough information for the reader to understand the concepts and apply them in their everyday work. After learning about the fundamentals of the object-oriented paradigm and the software engineering life cycle, the reader is introduced to more advanced topics such as web engineering, cloud computing, agile development, and big data. In recent years, these fields have been rapidly growing as many are beginning to realize the benefits of developing on a highly scalable, automated deployment system. Combined with the speed and effectiveness of agile development, legacy systems are beginning to make the transition to a more adaptive environment.Core Features: 1. Provides a thorough exploration of the object-oriented paradigm. 2. Provides a detailed look at each step of the software engineering life cycle. 3. Provides supporting examples and documents. 4. Provides a detailed look at emerging technology and standards in object-oriented software engineering.

With this book, software engineers, project managers, and tool builders will be able to better understand the role of analysis and design in the object-oriented (OO) software development process. This book presents a minimum set of notions and shows the reader how to use these notions for OO software construction. The emphasis is on development principles and implementation.

Software -- Software Engineering.

"This thoroughly updated text teaches students or industry R & D practitioners to successfully negotiate the terrain for building and maintaining large, complex software systems. The authors introduce the basic skills needed for a developer to apply software engineering techniques. Next, they focus on methods and technologies that enable developers to specify, design, and implement complex systems. Finally, the authors show how to support the system changes throughout the software life cycle."--BOOK JACKET.Title Summary field provided by Blackwell North America, Inc. All Rights Reserved

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.

This is a textbook for a course in object-oriented software engineering at advanced undergraduate and graduate levels, as well as for software engineers. It contains more than 120 exercises of diverse complexity. The book discusses fundamental concepts and terminology on object-oriented software development, assuming little background on software engineering, and emphasizes design and maintenance rather than programming. It also presents up-to-date and easily understood methodologies and puts forward a software life cycle model which explicitly encourages reusability during software development and maintenance.

Object-Oriented Software Engineering Using UML, Patterns, and Java

Venturing beyond C++ programming, this text shows how to engineer software products using object-oriented principles. It covers gathering requirements, specifying objects, object verification, defining relations between objects, translating object design into code, object testing, and software maintenance.

An indispensable resource for anyone working with Eiffel, this up-to-date guide provides full coverage of the most recent version of the language, focusing on Eiffel's practical use in the development of large, mission-critical software systems. In addition to a comprehensive description of Eiffel's syntax and semantics, you will find in-depth information on style guides, analysis and design, design patterns, and validation and testing. Descriptions and comparisons of available compilers and libraries will help you decide which Eiffel tools best fit your development needs. The book even includes an Eiffel resource guide. The book's most notable feature is its three large-scale case studies that demonstrate Eiffel in action, illustrating implementation techniques and showcasing Eiffel's power and effectiveness in three different realms: the MIS world, the embedded systems/telecommunications world, and the numeric world. By reading this book, you will not only obtain a knowledge of the mechanics of Eiffel programming, but you will also come away with an understanding of Eiffel's role in the field of object-oriented technology and a sense of the language's strong potential in large software development. 0201633817B04062001

Examines object-oriented methods, practices, terminology, and concepts

For professionals involved in large software development projects with thousands or even millions of lines of code, this best-selling guide offers complete coverage of both classic Software Lifecycle -- requirements, specifications, design, implementation, testing, and maintenance -- and the latest Object-Oriented design approaches. Important new issues, such as object patterns and software architecture, are also included.

Based on Objectory which is the first commercially avilable comprehensive object-orientd process for developing large scale industrial systems.

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).

Project-Based Software Engineering is the first book to provide hands-on process and practice in software engineering essentials for the beginner. The book presents steps through the software development life cycle and two running case studies that develop as the steps are presented. Running parallel to the process presentation and case studies, the book supports a semester-long software development project. This book focuses on object-oriented software development, and supports the conceptualization, analysis, design and implementation of an object-oriented project. It is mostly language-independent, with necessary code examples in Java. A subset of UML is used, with the notation explained as needed to support the readers' work. Two running case studies a video game and a library check out system show the development of a software project. Both have sample deliverables and thus provide the reader with examples of the type of work readers are to create. This book is appropriate for readers looking to gain experience in project analysis, design implementation, and testing.

This comprehensive and well-written book presents the fundamentals of object-oriented software engineering and discusses the recent technological developments in the field. It focuses on object-oriented software engineering in the context of an overall effort to present object-oriented concepts, techniques and models that can be applied in software estimation, analysis, design, testing and quality improvement. It applies unified modelling language notations to a series of examples with a real-life case study. The example-oriented approach followed in this book will help the readers in understanding and applying the concepts of object-oriented software engineering quickly and easily in various application domains. This book is designed for the undergraduate and postgraduate students of computer science and engineering, computer applications, and information technology. KEY FEATURES : Provides the foundation and important concepts of object-oriented paradigm. Presents traditional and object-oriented software development life cycle models with a special focus on Rational Unified Process model. Addresses important issues of improving software quality and measuring various object-oriented constructs using object-oriented metrics. Presents numerous diagrams to illustrate object-oriented software engineering models and concepts. Includes a large number of solved examples, chapter-end review questions and multiple choice questions along with their answers.

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.

Object-Oriented Software Engineering: An Agile Unified Methodology by David Kung presents a step-by-step methodology that integrates modeling and design, UML, patterns, test-driven development, quality assurance, configuration management, and agile principles throughout the life cycle. The overall approach is casual and easy to follow, with many practical examples that show the theory at work. The author uses his experiences as well as real-world stories to help the reader understand software design principles, patterns, and other software engineering concepts. The book also provides stimulating exercises that go far beyond the type of question that can be answered by simply copying portions of the text.

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 short, intensive management courses. This textbook shows how to use both the principles of software engineering as well as 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, this book emphasizes practical experience: participants can apply the techniques learned in class by implementing a real-world software project.

Object-Oriented Software Engineering is written for both the traditional one-semester and the newer two-semester software engineering curriculum. Part I covers the underlying software engineering theory, while Part II presents the more practical life cycle, workflow by workflow. The text is intended for the substantial object-oriented segment of the software engineering market. It focuses exclusively on object-oriented approaches to the development of large software systems that are the most widely used. Text includes 2 running case studies, expanded coverage of agile processes and open-source development.

Jia (software engineering, DePaul University) helps readers develop skills in designing software, and especially in writing object- oriented programs using Java. The text provides broad coverage of object-oriented technology, including object-oriented modeling using the Unified Modeling Language (UML), object-oriented design using design patterns, and object-oriented programming using Java. This second edition offers expanded coverage of design patterns, enhanced material on UML, and a new introduction to the iterative software development process made popular by extreme programming. Learning features include chapter summaries, exercises, and projects.

This book describes how object-oriented language and object-oriented ideas can be employed throughout the software project. It describes the software engineering process from requirements analysis up to acceptance testing and contains such topics as unit testing, and system design. The book uses the C++ programming language and is intended for both the undergraduate student and the industrial developer. Material on the relationship between object-oriented techniques and prototyping is also included.

This text provides an introduction to the process of software engineering. The revision concentrates on updating the book to reflect the most current trends and innovations in the field. The Universal Modeling Language (UML) has become an industry standard and now permeates this new edition. In this text, it is used for object-oriented analysis and design as well as when diagrams depict objects and their interrelationships. Design patterns, frameworks and software architecture have also become a popular topic in the field of software engineering and are part of a new chapter on reuse, portability, and inoperability. The inoperabilty material includes sections on such hot topics as OLE, COM, and CORBA. Some material from the 3rd edition has been reorganized into a new chapter on planning and estimating, including feature points and COCOMO II. While the text has been updated, the traditonal features which have defined the previous three editions of Schach's book have been retained. These include a balanced coverage of the object-oriented model along with the classical model (as reflected in the title) and an emphasis on metrics. The special considerations of object-oriented life-cycle models, object-oriented analysis, and object-oriented design are also retained in this edition.

This ground-breaking book presents a complete methodology for adaptive programming in any object-oriented programming language. Lieberherr's adaptive method signals a new approach to object-oriented program design that goes beyond object encapsulation and hard-coded navigation paths to achieve more flexible interactions among objects. Programmers using this method work at a higher, schematic level of abstraction; graph notation represents the class structure and a "propagation pattern" language tells how to distribute meaningful methods - including navigation - across the structure. Using this method, programmers can easily adapt and modify programs as they evolve. This book can be used with any object-oriented programming environment, or with the Demeter Tools Version 5.5, a complete, professional software system for creating and maintaining adaptive programs.

Aiming to provide a comprehensive introduction to object-orientation, this book places an emphasis on analysis and design and presents a coherent methodology. It includes a chapter on software engineering and uses a running example to illustrate the concepts of object-orientation.

This book provides a thorough grounding in object-oriented analysis and design, providing authoritative and accessible coverage of object-oriented concepts, the software development process, UML and multi-tier technologies. Using only the most common technologies and methodologies, aligned with a single case study which runs throughout the text, the book provides a broad understanding of the processes used in object-oriented software development, the production of computer programs using object-oriented techniques. Beginning with the basic groundwork underpinning object-oriented software projects, before focusing on practical development issues, this book uses a methodology based on the widely used Rational Unified Process (RUP), and test-driven development using JUnit. The book follows the steps of a typical development project, incorporating requirements capture, design, specification and testing; the running case study shows with remarkable clarity how an abstract problem is taken through to a concrete solution. Regular exercises and online material available on the accompanying website make the book exceptionally useful for self-study. Object-Oriented Analysis and Design is programming language agnostic, ensuring that code is kept to a minimum to avoid detail and deviation into implementation minutiae. Whether you are a student at a university or on a commercial training course, or an experienced software developer moving into object orientation, this book is for you. It provides an easy to understand, practical and motivational description of object-oriented analysis and design.