

Uml Certification Guide

OCUP 2 Certification Guide: 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, 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 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 exam material, sample questions and exercises, warnings, tips, and points to remember throughout. Requirements engineering tasks have become increasingly complex. In order to ensure a high level of knowledge and competency among requirements engineers, the International Requirements Engineering Board (IREB) developed a standardized qualification called the Certified Professional for Requirements Engineering (CPRE). The certification defines the practical skills of a requirements engineer on various training levels. This book is designed for self-study and covers the curriculum for the Certified Professional for Requirements Engineering Foundation Level exam as defined by the IREB. The 2nd edition has been thoroughly revised and is aligned with the curriculum Version 2.2 of the IREB. In addition, some minor corrections to the 1st edition have been included. About IREB: The mission of the IREB is to contribute to the standardization of further education in the fields of business analysis and requirements engineering by providing syllabi and examinations, thereby achieving a higher level of applied requirements engineering. The IRE Board is comprised of a balanced mix of independent, internationally recognized experts in the fields of economy, consulting, research, and science. The IREB is a non-profit corporation. For more information visit www.certified-re.com.

"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

Write your first code in Java using simple, step-by-step examples that model real-world objects and events, making learning easy. With this book you'll be able to pick up the concepts without fuss. Java for Absolute Beginners teaches Java development in language anyone can understand, giving you the best possible start. You'll see clear code descriptions and layout so that you can get your code running as soon as possible. After reading this book, you'll come away with the basics to get started writing programs in Java. Author Luliana Cosmina focuses on practical knowledge and getting up to speed quickly—all the bits and pieces a novice needs to get started programming in Java. First, you'll discover how Java is executed, what type of language it is, and what it is good for. With the theory out of the way, you'll install Java, choose an editor such as IntelliJ IDEA, and write your first simple Java program. Along the way you'll compile and execute this program so it can run on any platform that supports Java. As part of this tutorial you'll see how to write high-quality code by following conventions and respecting well-known programming principles, making your projects more professional and efficient. Finally, alongside the core features of Java, you'll learn skills in some of the newest and most exciting features of the language: Generics, Lambda expressions, modular organization, local-variable type inference, and local variable syntax for Lambda expressions. Java for Absolute Beginners gives you all you need to start your Java 9+ programming journey. No experience necessary. What You'll Learn Use data types, operators, and the new Stream API Install and use a build tool such as Gradle Build interactive Java applications with JavaFX Exchange data using the new JSON APIs Play with images using multi-resolution APIs Use the publish-subscribe framework Who This Book Is For Those who are new to programming and who want to start with Java.

Fundamental and Intermediate Exams

UML 2.0 in a Nutshell

System Engineering Analysis, Design, and Development

Java for Absolute Beginners

Practical Object-Oriented Analysis and Design

Learning UML

A Programmer's Guide to Java Certification

*UML, the Universal Modeling Language, was the first programming language designed to fulfill the requirement for "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 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*

Overviews the process of building and compiling executable UML models for software development. The book focuses on the BridgePoint tool suite and object action language developed by Project Technology. The authors discuss identifying system requirements, diagramming classes and attributes, constraints on the class diagram, ways of building sets of communicating statechart diagrams, and model verification. Annotation copyrighted by Book News, Inc., Portland, OR.

Use case analysis is a methodology for defining the outward features of a software system from the user's point of view. Applying Use Cases, Second Edition, offers a clear and practical introduction to this cutting-edge software development technique. Using numerous realistic examples and a detailed case study, you are guided through the application of use case analysis in the development of software systems. This new edition has been updated and expanded to reflect the Unified Modeling Language (UML) version 1.3. It also includes more complex and precise examples, descriptions of the pros and cons of various use case documentation techniques, and discussions on how other modeling approaches relate to use cases. Applying Use Cases, Second Edition, walks you through the software development process, demonstrating how use cases apply to project inception, requirements and risk analysis, system architecture, scheduling, review and testing, and documentation. Key topics include: Identifying use cases and describing actors Writing the flow of events, including basic and alternative paths Reviewing use cases for completeness and correctness Diagramming use cases with activity diagrams and sequence diagrams Incorporating user interface description and data description documents Testing architectural patterns and designs with use cases Applying use cases to project planning, prototyping, and estimating Identifying and diagramming analysis classes from use cases Applying use cases to user guides, test cases, and training material An entire section of the book is devoted to identifying common mistakes and describing their solutions. Also featured is a handy collection of documentation templates and an abbreviated guide to UML notation. You will come away from this book with a solid understanding of use cases, along with the skills you need to put use case analysis to work.

"OCUP Certification Guide: UML 2.5 Foundational Exam: Preparing for the OMG Certified UML 2.5 Professional Foundational 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, along with a new certification program for practitioners to enhance their current or future career opportunities. There are three exam levels, Foundation, Intermediate, and Advanced. This exam, 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 book will explain the material in the Foundation exam, and includes many practice questions for the candidate, such as sample problems similar to those found on the exam, and detailed explanations of why correct answers are correct and why wrong answers are wrong. Written to prepare candidates for the UML 2.5 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 exam material, sample questions and exercises, warnings, tips, and sidebars throughout"

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

Requirements Engineering Fundamentals

Fundamentals of Object-oriented Design in UML

UML 2 and the Unified Process

A Brief Guide to the Standard Object Modeling Language

The Rails Way

UML in Practice

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 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 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

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).

This new book is the definitive primer for UML, and starts with the foundational concepts of object-orientation in order to provide the proper context for explaining UML.

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

Uml 2.5 Foundational Exam; Preparing for the Ocup 2

SysML Distilled

Understanding System Development with UML 2.0

Systems Analysis and Design

Business Process Management – Fundamental Level

UML 2.0 Pocket Reference

A Study Guide for the Certified Professional for Requirements Engineering Exam – Foundation Level – Ireb Compliant

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.

Database Management System Multiple Choice Questions and Answers (MCQs) PDF: Quiz & Practice Tests with Answer Key (DBMS Quick Study Guide & Terminology Notes to Review) includes revision guide for problem solving with 600 solved MCQs. "Database Management System MCQ" book with answers PDF covers basic concepts, theory and analytical assessment tests. "Database Management System Quiz" PDF book helps to practice test questions from exam prep notes. Database management system quick study guide provides 600 verbal, quantitative, and analytical reasoning past question papers, solved MCQs. Database Management System Multiple Choice Questions and Answers PDF download, a book to practice quiz questions and answers on chapters: Modeling, entity relationship model, database concepts and architecture, database design methodology and UML diagrams, database management systems, disk storage, file structures and hashing, entity relationship modeling, file indexing structures, functional dependencies and normalization, introduction to SQL programming techniques, query processing and optimization algorithms,

relational algebra and calculus, relational data model and database constraints, relational database design, algorithms dependencies, schema definition, constraints, queries and views tests for college and university revision guide. Database Management System Quiz Questions and Answers PDF download with free sample book covers beginner's questions, exam's workbook, and certification exam prep with answer key. Database management system MCQs book PDF, a quick study guide from textbook study notes covers exam practice quiz questions. Database Systems practice tests PDF covers problem solving in self-assessment workbook from computer science textbook chapters as: Chapter 1: Data Modeling: Entity Relationship Model MCQs Chapter 2: Database Concepts and Architecture MCQs Chapter 3: Database Design Methodology and UML Diagrams MCQs Chapter 4: Database Management Systems MCQs Chapter 5: Disk Storage, File Structures and Hashing MCQs Chapter 6: Entity Relationship Modeling MCQs Chapter 7: File Indexing Structures MCQs Chapter 8: Functional Dependencies and Normalization MCQs Chapter 9: Introduction to SQL Programming Techniques MCQs Chapter 10: Query Processing and Optimization Algorithms MCQs Chapter 11: Relational Algebra and Calculus MCQs Chapter 12: Relational Data Model and Database Constraints MCQs Chapter 13: Relational Database Design: Algorithms Dependencies MCQs Chapter 14: Schema Definition, Constraints, Queries and Views MCQs Solve "Data Modeling: Entity Relationship Model MCQ" PDF book with answers, chapter 1 to practice test questions: Introduction to data modeling, ER diagrams, ERM types constraints, conceptual data models, entity types, sets, attributes and keys, relational database management system, relationship types, sets and roles, UML class diagrams, and weak entity types. Solve "Database Concepts and Architecture MCQ" PDF book with answers, chapter 2 to practice test questions: Client server architecture, data independence, data models and schemas, data models categories, database management interfaces, database management languages, database management system classification, database management systems, database system environment, relational database management system, relational database schemas, schemas instances and database state, and three schema architecture. Solve "Database Design Methodology and UML Diagrams MCQ" PDF book with answers, chapter 3 to practice test questions: Conceptual database design, UML class diagrams, unified modeling language diagrams, database management interfaces, information system life cycle, and state chart diagrams. Solve "Database Management Systems MCQ" PDF book with answers, chapter 4 to practice test questions: Introduction to DBMS, database management system advantages, advantages of DBMS, data abstraction, data independence, database applications history, database approach characteristics, and DBMS end users. Solve "Disk Storage, File Structures and Hashing MCQ" PDF book with answers, chapter 5 to practice test questions: Introduction to disk storage, database management systems, disk file records, file organizations, hashing techniques, ordered records, and secondary storage devices. Solve "Entity Relationship Modeling MCQ" PDF book with answers, chapter 6 to practice test questions: Data abstraction, EER model concepts, generalization and specialization, knowledge representation and ontology, union types, ontology and semantic web, specialization and generalization, subclass, and superclass. Solve "File Indexing Structures MCQ" PDF book with answers, chapter 7 to practice test questions: Multilevel indexes, b trees indexing, single level order indexes, and types of indexes. Solve

"Functional Dependencies and Normalization MCQ" PDF book with answers, chapter 8 to practice test questions: Functional dependencies, normalization, database normalization of relations, equivalence of sets of functional dependency, first normal form, second normal form, and relation schemas design. Solve "Introduction to SQL Programming Techniques MCQ" PDF book with answers, chapter 9 to practice test questions: Embedded and dynamic SQL, database programming, and impedance mismatch. Solve "Query Processing and Optimization Algorithms MCQ" PDF book with answers, chapter 10 to practice test questions: Introduction to query processing, and external sorting algorithms. Solve "Relational Algebra and Calculus MCQ" PDF book with answers, chapter 11 to practice test questions: Relational algebra operations and set theory, binary relational operation, join and division, division operation, domain relational calculus, project operation, query graphs notations, query trees notations, relational operations, safe expressions, select and project, and tuple relational calculus. Solve "Relational Data Model and Database Constraints MCQ" PDF book with answers, chapter 12 to practice test questions: Relational database management system, relational database schemas, relational model concepts, relational model constraints, database constraints, and relational schemas. Solve "Relational Database Design: Algorithms Dependencies MCQ" PDF book with answers, chapter 13 to practice test questions: Relational decompositions, dependencies and normal forms, and join dependencies. Solve "Schema Definition, Constraints, Queries and Views MCQ" PDF book with answers, chapter 14 to practice test questions: Schemas statements in SQL, constraints in SQL, SQL data definition, and types.

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

Fundamentals of Object-Oriented Design in UML shows aspiring and experienced programmers alike how to apply design concepts, the UML, and the best practices in OO development to improve both their code and their success rates with object-based projects.

A Desktop Seminar from Craig Larman

The Unified Modeling Language User Guide

Ocup Certification Guide

The Art of Modeling Software Systems Demonstrated through Worked Examples and Solutions

OCUP 2 Certification Guide

Systems Engineering with SysML/UML

A Practical Guide to SysML

OCEB 2 Certification Guide, Second Edition has been updated to cover the new version 2 of the BPMN standard and delivers expert insight into BPM from one of the developers of the OCEB Fundamental exam, offering full coverage of the fundamental exam material for both the business and technical tracks to further certification. The first study guide prepares candidates to take—and pass—the OCEB Fundamental exam, explaining and building on basic concepts, focusing on key areas, and testing knowledge of all critical topics with sample questions and detailed answers. Suitable for practitioners, and those newer to the field, this book provides a solid grounding in business process management based on the authors' own extensive BPM consulting experiences. Completely updated, with the latest material needed to pass the OCEB-2 and BPMN Certification includes sample test questions in each chapter, with answers in the appendix Expert authors provide a solid overview of business process management (BPM)

OCUP 2 Certification Guide: 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, 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 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 exam material, sample questions and exercises, warnings, tips, and points to remember throughout

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

The popular Unified Modeling Language (UML) is both a language and notation developed by the Object Management Group (OMG) used to design and create specifications for software systems. With the recent release of version 2.0 UML, the OMG has started the OMG-Certified UML Professional Program to provide an objective measure of UML knowledge. As a certified UML professional a developer has an important credential to present to employers and clients. Certification also benefits companies looking for skilled UML practitioners by giving them a basis for making hiring and promotion decisions. UML 2 Certification Guide is the only official study guide to passing the new UML exams. This book systematically covers all of the topics covered in the exams, and has been carefully reviewed by the OMG. The book begins by assuming only a basic knowledge of UML and then progresses far enough to allow a reader to pass both the fundamental and the intermediate level exams. Along the way the book also covers topics that are not in introductory books on UML but that are necessary to pass the exams. Tim Weilkiens is considered one of the top ten experts on UML, and both authors have extensive experience training developers to successfully take the exams. The official certification resource Assumes a basic knowledge of UML so that you can focus immediately on the exams Written by two authors known for their skill as trainers, consultants, and developers Developed systematically to enable you to master all exam topics—without exception Covers the use of UML for applications, as required by the exams, both inside and outside of the realm of software development Includes a practice exam, glossary, list of books, and website information

UML 2 For Dummies

Database Management System MCQs

APPLYING UML & PATTERNS 3RD EDITION

The Systems Modeling Language

A Foundation for Model-driven Architecture

UML Syntax and Usage

OCA Java SE 8 Programmer I Certification Guide

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

*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 the tools 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 the process of modeling with UML so that you can successfully deliver a software product or information management system. 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 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™ 2 Platform, Standard Edition, Version 1.4.1, and links to the Web sites for vendors of UML 2 tools.*

Globe-trotting travelers have long resorted to handy, pocket-size dictionaries as an aid to communicating across the language barrier. Dan Pilone's UML 2.0 Pocket Reference is just such an aid for on-the-go developers who need to converse in the Unified Modeling Language (UML). Use this book to decipher the many UML diagrams you'll encounter on the path to delivering a modern software system. Updated to cover the very latest in UML, you'll find coverage of the following UML 2.0 diagram types: Class diagrams Component diagrams Sequence diagrams* Communication diagrams* Timing diagrams* Interaction Overview diagrams* Package diagrams* Deployment diagrams* Use case diagrams Composite structure diagrams* Activity diagrams* Statechart diagrams* * New or expanded coverage in this edition Also new in this edition is coverage of UML's Object Constraint Language (OCL). Using OCL, you can specify more narrowly the functionality described in a given diagram by recording limits that are the result of business rules and other factors. The UML 2.0 Pocket Reference travels well to meetings and fits nicely into your laptop bag. It's near impossible to memorize all aspects of UML, and with this book along, you won't have to.*

Summary OCP Java SE 7 Programmer II Certification Guide is a concise, focused study guide that prepares you to pass the OCP Java SE 7 Programmer II exam (1Z0-804) the first time you take it. The book systematically guides you through each exam objective, teaching and reinforcing the Java skills you need through examples, exercises, and cleverly constructed visual aids. In every chapter you'll find questions just like the ones you'll face in the real exam. Exam tips, diagrams, and review notes structure the learning process for easy retention.

Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book The OCP Java 7 certification tells potential employers that you've mastered the language skills you need to design and build professional-quality Java software. Passing the OCP isn't just about knowing your Java, though. You have to also know what to expect on the exam and how to beat the built-in tricks and traps. OCP Java SE 7 Programmer II Certification Guide is a comprehensive, focused study guide that prepares you to pass the OCP exam the first time you take it. It systematically guides you through each exam objective, reinforcing the Java skills you need through examples, exercises, and cleverly constructed visual aids. In every chapter you'll find questions just like the ones you'll face on the real exam. Tips, diagrams, and review notes give structure to the learning process to improve your retention. Designed for readers with intermediate-level Java skills. What's Inside 100% coverage of the OCP Java SE 7 Programmer II exam (1Z0-804) Flowcharts, UML diagrams, and other visual aids Hands-on coding exercises Focuses on passing the exam, not the Java language itself About the Author Mala Gupta has been training programmers to pass Java certification exams since 2006. She holds the OCP Java SE 7 Programmer, SCWCD, and SCJP certifications and is the author of OCA Java SE 7 Programmer I Certification Guide (Manning 2013). Table of Contents Java class design Advanced class design Object-oriented design principles Generics and collections String processing Exceptions and assertions

Java I/O fundamentals Java file I/O (NIO.2) Building database applications with JDBC Threads Concurrency Localization Bonus online chapter - Mock exam

Fast Track UML 2.0

A Brief Guide to the Systems Modeling Language

Prepare for the 1Z0-804 exam

UML and Object-Oriented Design Foundations

Preparing for the OMG Certified UML 2.5 Professional 2 Foundation Exam

A Comprehensive Primer

IBM Rational Unified Process Reference and Certification Guide

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.

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 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.

Summary OCA Java SE 8 Programmer I Certification Guide prepares you for the 1Z0-808 with complete coverage of the exam. You'll explore important Java topics as you systematically learn what's required to successfully pass the test. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book To earn the OCA Java SE 8 Programmer I Certification, you have to know your Java inside and out, and to pass the exam you need to understand the test itself. This book cracks open the questions, exercises, and expectations you'll face on the OCA exam so you'll be ready and confident on test day. OCA Java SE 8 Programmer I Certification Guide prepares Java developers for the 1Z0-808 with thorough coverage of Java topics typically found on the exam. Each chapter starts with a list of exam objectives mapped to section numbers, followed by sample questions and exercises that reinforce key concepts. You'll learn techniques and concepts in multiple ways, including memorable analogies, diagrams, flowcharts, and lots of well-commented code. You'll also get the scoop on common exam mistakes and ways to avoid traps and pitfalls. What's Inside Covers all exam topics Hands-on coding exercises Flowcharts, UML diagrams, and other visual aids How to avoid built-in traps and pitfalls Complete coverage of the OCA Java SE 8 Programmer I exam (1Z0-808) About the Reader Written for developers with a working knowledge of Java who want to earn the OCA Java SE 8 Programmer I Certification. About the Author Mala Gupta is a Java coach and trainer who holds multiple Java certifications. Since 2006 she has been actively supporting Java certification as a path to career advancement. Table of Contents Introduction Java basics Working with Java data types Methods and encapsulation Selected classes from the Java API and arrays Flow control Working with inheritance Exception handling Full mock exam

Executable UML

Object-Oriented Analysis and Design

UML Weekend Crash Course

A Practical Guide

Applying Use Cases

OCP Java SE 7 Programmer II Certification Guide

UML 2 Certification Guide

The expert guide to building Ruby on Rails applications Ruby on Rails strips complexity from the development process, enabling professional developers to focus on what matters most: delivering business value. Now, for the first time, there's a comprehensive, authoritative guide to building production-quality software with Rails. Pioneering Rails developer Obie Fernandez and a team of experts illuminate the entire Rails API, along with the Ruby idioms, design approaches, libraries, and plug-ins that make Rails so valuable. Drawing on their unsurpassed experience, they address the real challenges development teams face, showing how to use Rails' tools and best practices to maximize productivity and build polished applications users will enjoy. Using detailed code examples, Obie systematically covers Rails' key capabilities and subsystems. He presents advanced programming techniques, introduces open source libraries that facilitate easy Rails adoption, and offers important insights into testing and production deployment. Dive deep into the Rails codebase together, discovering why Rails behaves as it does—and how to make it behave the way you want it to. This book will help you Increase your productivity as a web developer Realize the overall joy of programming with Ruby on Rails Learn what's new in Rails 2.0 Drive design and protect long-term maintainability with TestUnit andRSpec Understand and manage complex program flow in Rails controllers Leverage Rails' support for designing REST-compliant APIs Master sophisticated Rails routing concepts and techniques Examine and troubleshoot Rails routing Make the most of ActiveRecord object-relational mapping Utilize Ajax within your Rails applications Incorporate logins and authentication into your application Extend Rails with the best third-party plug-ins and write your own Integrate email services into your applications with ActionMailer Choose the right Rails production configurations Streamline deployment with Capistrano

Covering the breadth of a large topic, this book provides a thorough grounding in object-oriented concepts, the software development process, UML and multi-tier technologies. After covering some basic ground work underpinning OO software projects, the book follows the steps of a typical development project (Requirements Capture - Design - Specification & Test), showing how an abstract problem is taken through to a concrete solution. The book is programming language agnostic - so code is kept to a minimum to avoid detail and deviation into implementation minutiae. A single case study running through the text provides a realistic example showing development from an initial proposal through to a finished system. Key artifacts such as the requirements document and detailed designs are included. For each aspect of the case study, there is an exercise for the reader to produce similar documents for a different system.

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.

** Examples are easy to understand; diagrams aren't overly busy. * Written in user-friendly style author is known for. * Condensed, distilled presentation of the UML Superstructure document will get you up to speed with UML 2.0.*

Multiple Choice Questions and Answers (Quiz & Tests with Answer Keys) (Computer Science Quick Study Guides & Terminology Notes to Review)

Modeling, Analysis, Design

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

Learn to Program the Fundamentals the Java 9+ Way

UML Distilled

Understanding Object-Oriented Programming and the Unified Modeling Language

A Practical Guide Using UML and BPMN

The Only Official RUP® Certification Prep Guide and Compact RUP Reference The IBM® Rational Unified Process® has become the de facto industry-standard process for large-scale enterprise software development. The IBM Certified Solution Designer - IBM Rational Unified Process V7.0 certification provides a powerful way for solutions developers to demonstrate their proficiency with RUP. The first and only official RUP certification guide, this book fully reflects the latest versions of the Rational Unified Process and of the IBM RUP exam. Authored by two leading RUP implementers, it draws on extensive contributions and careful reviews by the IBM RUP process leader and RUP certification manager. This book covers every facet of RUP usage. It has been carefully organized to help you prepare for your exam quickly and efficiently—and to provide a handy, compact reference you can rely on for years to come. Coverage includes A full section on RUP exam preparation and a 52-question practice exam Core RUP concepts, the new RUP process architecture, and key principles of business-driven development RUP's architecture-centric approach to iterative development: practical issues and scenarios Patterns for successful RUP project implementation (anti-patterns) to avoid The Unified Method Architecture (UMA): basic content and process elements RUP content disciplines, in depth: Business Modeling, Requirements, Analysis and Design, Implementation, Test, Deployment, Project Management, Change and Configuration Management, and Environment Essential RUP work products, roles, and tasks RUP phases, activities, and milestones RUP tailoring and tools for your organization—including introductions to IBM Rational Method Composer (RMC) and MyRUP

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

ABOUT THE TECHNOLOGY What it is: UML (Unified Modeling Language) is a graphical modeling language used to specify, visualize, construct, and document applications and software systems, which are implemented with components and object-oriented programming languages, such as Java, C++, and Visual Basic. UML incorporates the object-oriented community's consensus on core modeling concepts and provides a standard way for developers to communicate the details of system design and development. In addition to object-oriented modeling of applications, UML is also used for business-process modeling, data modeling, and XML modeling. Purpose of modeling: Models for software systems are as important as having a blueprint for a large building, or an outline for a book. Good models enhance communication among project teams and assure architectural soundness. The more complex the software system, the more important it is to have models that accurately describe the system and can be understood by everyone. UML helps provide this via a standard for graphical diagrams. Just like an architect can understand the notations on any blueprint, UML enables software engineers and business managers to understand the design of any software system, even if the original designers have long left the company. Organization behind it: Object Management Group (OMG) (www.omg.org). (UML Resource Page at OMG Web site is www.omg.org/uml.) The OMG produces and maintains the UML standard, an internationally recognized standard. The OMG is an open membership, not-for-profit consortium that produces and maintains computer industry specifications for interoperable enterprise applications. Its membership roster (about 800) includes just about every large company in the computer industry and hundreds of smaller ones. Most of the companies that shape enterprise and Internet computing are represented on the OMG's Board of Directors. Companies that contributed to the UML Standard: Realizing that UML would be strategic to their business, the following companies contributed their ideas to the first UML standard: Digital Equipment Corp, HP, i-Logix, IntelliCorp, IBM, ICON Computing, MCI, Microsoft, Oracle, Rational Rose, TI, and Unisys. Companies that use UML: It is safe to say that all Fortune 1000 companies are currently using UML, or are moving toward UML to model and design their applications and systems. This includes companies from all vertical industries, from Coca Cola to Warner Brothers, from CVS Pharmacy to Lockheed Martin Aerospace. You name the company - if they have an IT department, they are using UML.

Praise for the first edition: "This excellent text will be useful to every system engineer (SE) regardless of the domain. It covers ALL relevant SE material and does so in a very clear, methodical fashion. The breadth and depth of the author's presentation of SE principles and practices is outstanding." Philip Allen This textbook presents a comprehensive, step-by-step guide to System Engineering analysis, design, and development via an integrated set of concepts, principles, practices, and methodologies. The methods presented in this text apply to any type of human system -- small, medium, and large organizational systems and system development projects delivering engineered systems or services across multiple business sectors such as medical, transportation, financial, educational, governmental, aerospace and defense, utilities, political, and charity, among others. Provides a common focal point for "bridging the gap" between and unifying System Users, System Acquirers, multi-discipline System Engineering, and Project, Functional, and Executive Management education, knowledge, and decision-making for developing systems, products, or services Each chapter provides definitions of key terms, guiding principles, examples, author's notes, real-world examples, and exercises, which highlight and reinforce key SE&D concepts and practices Addresses concepts employed in Model-Based Systems Engineering (MBSE), Model-Driven Design (MDD), Unified Modeling Language (UMLTM) / Systems Modeling Language (SysMLTM), and Agile/Spiral/V-Model Development such as user needs, stories, and use cases analysis; specification development; system architecture development; User-Centric System Design (UCSD); interface definition & control; system integration & test; and Verification & Validation (V&V) Highlights/introduces a new 21st Century Systems Engineering & Development (SE&D) paradigm that is easy to understand and implement. Provides practices that are critical staging points for technical decision making such as Technical Strategy Development; Life Cycle requirements; Phases, Modes, & States; SE Process; Requirements Derivation; System Architecture Development, User-Centric System Design (UCSD); Engineering Standards, Coordinate Systems, and Conventions; et al. Thoroughly illustrated, with end-of-chapter exercises and numerous case studies and examples, Systems Engineering Analysis, Design, and Development, Second Edition is a primary textbook for multi-discipline, engineering, system analysis, and project management undergraduate/graduate level students and a valuable reference for professionals.

An Object-Oriented Approach with UML

Applying UML and Patterns Training Course

UML 2 Toolkit

Solution Designer (RUP)

Learning UML 2.0

OCEB 2 Certification Guide

Concepts, Principles, and Practices

Modeling Enterprise Architecture with TOGAF explains everything you need to know to effectively model enterprise architecture with The Open Group Architecture Framework (TOGAF), the leading EA standard. This solution-focused reference presents key techniques and illustrates model enterprise architecture. This book describes the TOGAF standard and its structure, from the architecture transformation method to governance, and presents enterprise architecture modeling practices with plenty of examples of TOGAF deliverables in the context of a case study. As the world grows and growing quickly, enterprise architecture is delicate to manage across all its dimensions. Focusing on the architecture transformation method, TOGAF provides a wide framework, which covers the repository, governance, and a set of recognized best practices. The examples provided are realized using the open source Modelio tool, which includes extensions for TOGAF. Includes intuitive summaries of the complex TOGAF standard to let you effectively model enterprise architecture Uses practical examples to illustrate ways to adapt TOGAF to the needs of your organization

Examples with Modelio, a free modeling tool, letting you exercise TOGAF modeling immediately using a dedicated tool Combines existing modeling standards with TOGAF

Explore the fundamental concepts behind modern, object-oriented software design best practices. Learn how to work with UML to approach software development more efficiently. In this comprehensive book, instructor Károly Nyisztor helps to familiarize you with the fundamental concepts of UML and analysis. He introduces each concept using simple terms, avoiding confusing jargon. He focuses on the practical application, using hands-on examples you can use for reference and practice. Throughout the book, Károly walks you through several examples to familiarize yourself with UML. Plus, he walks you through a case study to review all the steps of designing a real software system from start to finish. Topics include: - Understanding software development methodologies - Choosing the right methodology: Waterfall vs. Agile - Fundamental object-orientation principles and concepts. After completing this book, you'll be able to understand the inner workings of object-oriented software systems. You will communicate easily and effectively with other developers using object-orientation terms and UML. Author Károly Nyisztor is a veteran mobile developer and instructor. He has built several successful iOS apps and games--most of which were featured by Apple--and is the founder at LEAKKA, a software development, and tech consulting company. He's worked with companies such as Apple, Microsoft, and Zen Studios. Currently, he spends most of his days as a professional software engineer and IT architect. In addition, he teaches object-oriented software design, iOS, Swift, Objective-C, and UML. As an instructor, he aims to share his 20+ years of software development experience with students throughout the world. He's passionate about helping people reveal hidden talents, and guide them into the world of startups and programming. You can find his courses and books on all major platforms including Amazon, Lynda, LinkedIn Learning, Pluralsight, Udemy, and YouTube.

Covers basic terminology and concepts of object oriented programming. Contains programming exercises and illustrations.

Modeling Enterprise Architecture with TOGAF