

1. Record Nr.	UNINA9910830572803321
Autore	Unhelkar Bhuvan
Titolo	Verification and validation for quality of UML 2.0 models [[electronic resource] /] / Bhuvan Unhelkar
Pubbl/distr/stampa	Hoboken, NJ, : John Wiley, 2005
ISBN	1-280-27751-3 9786610277513 0-470-25222-7 0-471-73432-2 0-471-73431-4
Descrizione fisica	1 online resource (312 p.)
Collana	Wiley Series in Systems Engineering and Management ; ; v.42
Disciplina	005.1/4 005.12
Soggetti	Computer software - Verification Computer software - Quality control UML (Computer science)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	VERIFICATION AND VALIDATION FOR QUALITY OF UML 2.0 MODELS; Contents; Figures; Foreword; Preface; Acknowledgments; Glossary of Acronyms and Terms; Author Profile; 1 The Quality Strategy for UML; Chapter Summary; 1.1 Modeling and Quality; 1.1.1 The Modeling Advantage; 1.1.2 Modeling Caveats; 1.1.3 Context of Model Quality; 1.1.4 Model Quality; 1.2 Positioning UML for Modeling; 1.3 Quality Aspects of UML; 1.4 Understanding Modeling Spaces in Software; 1.5 Modeling Spaces and UML; 1.5.1 Importance of UML Diagrams to Respective Models; 1.5.2 List of UML Diagrams 1.5.3 UML Diagrams and Modeling Spaces1.5.4 Model of Problem Space (MOPS); 1.5.5 Model of Solution Space (MOSS); 1.5.6 Model of Background Space (MOBS); 1.6 Verification and Validation; 1.6.1 Quality Models-Syntax; 1.6.2 Quality Models-Semantics; 1.6.3 Quality Models- Aesthetics; 1.6.4 Quality Techniques and V&V Checks; 1.7 Quality Checks and Skills Levels; 1.8 Levels of Quality Checks to UML Diagrams; 1.8.1 Syntax Checks and UML Elements (Focus on Correctness); 1.8.2

Semantic Checks and UML Diagrams (Focus on Completeness and Consistency)

1.8.3 Aesthetic Checks and UML Models (Focus on Symmetry and Consistency) 1.9 Model-Driven Architecture (MDA) and Quality; 1.10 Prototyping and Modeling Spaces; Discussion Topics; References; 2 Nature and Basics of UML Diagrams; Chapter Summary; 2.1 The Nature of UML Diagrams; 2.1.1 Elasticity of UML; 2.1.2 Structural versus Behavioral Nature of UML Diagrams; 2.1.3 Static versus Dynamic Nature of UML Diagrams; 2.2 Use Case Diagrams; 2.2.1 Nature of Use Case Diagrams; 2.2.2 Putting Together a Use Case Diagram; 2.3 Activity Diagrams; 2.3.1 Nature of Activity Diagrams 2.3.2 Putting Together an Activity Diagram 2.3.3 Specifications in an Activity Diagram; 2.4 Class Diagrams; 2.4.1 Nature of Class Diagrams; 2.4.2 Putting Together a Class Diagram; 2.4.3 Specification of a Class; 2.5 Sequence Diagrams; 2.5.1 Nature of Sequence Diagrams; 2.5.2 Putting Together a Sequence Diagram; 2.5.3 Specifications of a Sequence Diagram; 2.6 Communication Diagrams; 2.6.1 Nature of Communication Diagrams; 2.6.2 Putting Together a Communication Diagram; 2.7 Interaction Overview Diagrams; 2.7.1 Nature of Interaction Overview Diagrams 2.7.2 Putting Together an Interaction Overview Diagram 2.8 Object Diagrams; 2.8.1 Nature of Object Diagrams; 2.8.2 Putting Together an Object Diagram; 2.9 State Machine Diagrams; 2.9.1 Nature of State Machine Diagrams; 2.9.2 Putting Together a State Machine Diagram; 2.10 Composite Structure Diagrams; 2.10.1 Nature of Composite Structure Diagrams; 2.10.2 Putting Together a Composite Structure Diagram; 2.11 Component Diagrams; 2.11.1 Nature of Component Diagrams; 2.11.2 Putting Together a Component Diagram; 2.11.3 Specifications of a Component Diagram; 2.12 Deployment Diagrams 2.12.1 Nature of Deployment Diagrams

Sommario/riassunto

A practical approach to enhancing quality in software models using UML Version 2.0" Despite its increasing usage, many companies are not taking the best advantage of UML and, occasionally, individuals have experienced frustration in applying its standards. Perhaps this is because they have not yet read this book!" -From the Foreword by Prof. Brian Henderson-Sellers This book presents a practical checklist approach to enhancing the quality of software models created with the Unified Modeling Language (UML) Version 2.0. The foundation for quality is set by the discussion on th
