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3.7 Summary and conclusions; 4. Fundamental concepts and documentation issues; 4.1 Introduction and objectives; 4.2 How we document domain architectures; 4.3 Characteristics of ISO 9126 and its relationship with domain architectures; 4.4 Documenting high-level artefacts; 4.5 Goals and core processes; 4.6 System context; 4.7 Stakeholders and viewpoints; 4.7.1 Documenting viewpoints; 4.8 Documenting requirements; 4.9 Defining and documenting use cases; 4.10 Summary and conclusions; Appendix 4.1: A critical look at use cases
PART II Domain architectures (meta models)5. Management Information Systems (MIS); 5.1 Introduction and objectives; 5.2 Background and history; 5.3 Motivational examples; 5.3.1 Simple Digital Watch (SDW); 5.3.2 Instrumentation and control systems; 5.4 General applicability; 5.5 Goals, processes and activities; 5.6 Context diagram and system decomposition; 5.7 Stakeholders, viewpoints and requirements; 5.8 UML classes; 5.9 Use cases; 5.10 Specializations of MIS systems; 5.10.1 Example: Noise control engineering; 5.11 Using MIS systems with other systems; 5.12 Summary and conclusions
6. Process Control Systems (PCS)6.1 Introduction and objectives; 6.2 Background and history; 6.3 Motivational examples; 6.3.1 Simple water level control; 6.3.2 Bioreactor; 6.3.3 Barrier options; 6.4 Reference models for Process Control Systems; 6.4.1 Basic components and variables; 6.4.2 Control engineering fundamentals; 6.5 General applicability; 6.6 Goals, processes and activities; 6.7 Context diagram and system decomposition; 6.7.1 Decomposition strategies; 6.8 Stakeholders, viewpoints and requirements; 6.8.1 Input and output variable completeness; 6.8.2 Robustness criteria; 6.8.3 Timing 6.8.4 Human-Computer Interface (HCI) criteria

Sommario/riassunto

Domain Architectures is a comprehensive catalog of the domain architectures essential to software developers using object-oriented technology and UML to solve real-life problems. Providing a unique top-down view of systems, the book also provides quick access to landmarks and references to domain architectures. The ability to describe applications, in terms of the properties they share, offers software designers a vast new landscape for implementing software reuse. The ideal professional's handbook.Helps readers reduce trial and error and increase productivity by reusing tried a