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Maintenance Models; 3.1 General Idea; 3.2 Reuse-Oriented Model; 3.3 The Staged Model for Closed Source Software; 3.4 The Staged Model for Free, Libre, Open Source Software; 3.5 Change Mini-Cycle Model; 3.6 IEEE/EIA Maintenance Process; 3.7 ISO/IEC 14764 Maintenance Process; 3.8 Software Configuration Management; 3.8.1 Brief History; 3.8.2 SCM Spectrum of Functionality; 3.8.3 SCM Process
3.9 CR Workflow3.10 Summary; Literature Review; References; Exercises; 4 Reengineering; 4.1 General Idea; 4.2 Reengineering Concepts; 4.3 A General Model for Software Reengineering; 4.3.1 Types of Changes; 4.3.2 Software Reengineering Strategies; 4.3.3 Reengineering Variations; 4.4 Reengineering Process; 4.4.1 Reengineering Approaches; 4.4.2 Source Code Reengineering Reference Model; 4.4.3 Phase Reengineering Model; 4.5 Code Reverse Engineering; 4.6 Techniques Used for Reverse Engineering; 4.6.1 Lexical Analysis; 4.6.2 Syntactic Analysis; 4.6.3 Control Flow Analysis; 4.6.4 Data Flow Analysis
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5.5.2 Database First

Sommario/riassunto

Software Evolution and Maintenance: A Practitioner's Approach is an accessible textbook for students and professionals, which collates the advances in software development and provides the most current models and techniques in maintenance.

Explains two maintenance standards: IEEE/EIA 1219 and ISO/IEC14764
Discusses several commercial reverse and domain engineering toolkits
Slides for instructors are available online
Information is based on the IEEE SWEBOK (Software Engineering Body of Knowledge)