Software Evolution and Maintenance

Description: Provides students and engineers with the fundamental developments and common practices of software evolution and maintenance.

Software Evolution and Maintenance: A Practitioner’s Approach introduces readers to a set of well-rounded educational materials, covering the fundamental developments in software evolution and common maintenance practices in the industry. Each chapter gives a clear understanding of a particular topic in software evolution, and discusses the main ideas with detailed examples. The authors first explain the basic concepts and then drill deeper into the important aspects of software evolution. While designed as a text in an undergraduate course in software evolution and maintenance, the book is also a great resource for software engineers, information technology professionals, and graduate students in software engineering.

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

Software Evolution and Maintenance: A Practitioner’s Approach equips readers with a solid understanding of the laws of software engineering, evolution and maintenance models, reengineering techniques, legacy information systems, impact analysis, refactoring, program comprehension, and reuse.

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Contents:

Preface xiii
List of Figures xvii
List of Tables xxi
1 Basic Concepts and Preliminaries 1
1.1 Evolution Versus Maintenance, 1
1.1.1 Software Evolution, 3
1.1.2 Software Maintenance, 4
1.2 Software Evolution Models and Processes, 6
1.3 Reengineering, 9
1.4 Legacy Systems, 11
1.5 Impact Analysis, 12
1.6 Refactoring, 13
References, 219
Exercises, 221

6 Impact Analysis 223
6.1 General Idea, 223
6.2 Impact Analysis Process, 225
6.2.1 Identifying the SIS, 228
6.2.2 Analysis of Traceability Graph, 229
6.2.3 Identifying the Candidate Impact Set, 231
6.3 Dependency-Based Impact Analysis, 234
6.3.1 Call Graph, 234
6.3.2 Program Dependency Graph, 235
6.4 Ripple Effect, 238
6.4.1 Computing Ripple Effect, 238
6.5 Change Propagation Model, 242
6.5.1 Recall and Precision of Change Propagation Heuristics, 243
6.5.2 Heuristics for Change Propagation, 245
6.5.3 Empirical Studies, 246
6.6 Summary, 247

Literature Review, 248
References, 249
Exercises, 253

7 Refactoring 255
7.1 General Idea, 255
7.2 Activities in a Refactoring Process, 258
7.2.1 Identify What to Refactor, 258
7.2.2 Determine Which Refactorings Should be Applied, 259
7.2.3 Ensure that Refactoring Preserves the Behavior of the Software, 261
7.2.4 Apply the Refactorings to the Chosen Entities, 262
7.2.5 Evaluate the Impacts of the Refactorings on Quality, 263
7.2.6 Maintain Consistency of Software Artifacts, 265
7.3 Formalisms for Refactoring, 265
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