

Software Engineering: A Methodical Approach

By Elvis Foster



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This text provides a comprehensive, but concise introduction to software engineering. It adopts a methodical approach to solving software engineering problems proven over several years of teaching, with outstanding results.

The book covers concepts, principles, design, construction, implementation, and management issues of software systems. Each chapter is organized systematically into brief, reader-friendly sections, with itemization of the important points to be remembered. Diagrams and illustrations also sum up the salient points to enhance learning. Additionally, the book includes a number of the author's original methodologies that add clarity and creativity to the software engineering experience, while making a novel contribution to the discipline.

Upholding his aim for brevity, comprehensive coverage, and relevance, Foster's practical and methodical discussion style gets straight to the salient issues, and avoids unnecessary fluff as well as an overkill of theoretical calculations.

What you'll learn

- The main activities of the software development life cycle (SDLC)
- How to conceptualize, research, design, construct, implement, and manage top quality software systems
- · How to evaluate the impact of software systems on organizations
- The nature, importance, and scope of software engineering as opposed to programming

Who this book is for

This book is best suited for students who are pursuing a course in software engineering. Practicing software engineers who need a quick reference on various aspects of the field will also find this text useful.

Table of Contents

Part I: Fundamentals

Chapter 01: Introduction to Software Engineering Chapter 02: The Role of the Software Engineer

Part II: Software Investigation and Analysis

Chapter 03: Project Selection and Initial System Requirement

Chapter 04: The Requirements Specification

Chapter 05: Information Gathering

Chapter 06: Communicating via Diagrams

Chapter 07: Decision Models for System Logic

Chapter 08: Project Management Aids

Part III: Software Design

Chapter 09: Overview of Software Design

Chapter 10: Database Design

Chapter 11: User Interface Design

Chapter 12: Operations Design

Chapter 13: Other Design Considerations

Part IV: Software Development

Chapter 14: Software Development Issues

Chapter 15: Human Resource Management

Chapter 16: Software Economics

Part V: Software Implementation and Management

Chapter 17: Software Implementation Issues

Chapter 18: Software Management

Chapter 19: Organizing for Effective Management

Part VI: Final Preparations

Chapter 20: Sample Exercises and Examination Questions

Part VI: Appendices

Appendix 01: Sample Examination Questions and Case Studies

Appendix 02: Overview of Fundamental Object-Oriented Methodologies

Appendix 03: Object-Oriented Information Engineering

Appendix 04: Basic Guidelines for Object-Oriented Methodologies

Appendix 05: Categorizing Objects

Appendix 06: Specifying Object Behavior

Appendix 07: Tools for Object-Oriented Methodologies

Appendix 08: Project Proposal for a Generic Inventory Management System

Appendix 09: Requirements Specification for a Generic Inventory Management System

Appendix 10: Design Specification for a Generic Inventory Management System

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Chapter 01: Introduction to Software Engineering Chapter 02: The Role of the Software Engineer **Part II: Software Investigation and Analysis** Chapter 03: Project Selection and Initial System Requirement Chapter 04: The Requirements Specification Chapter 05: Information Gathering Chapter 06: Communicating via Diagrams Chapter 07: Decision Models for System Logic Chapter 08: Project Management Aids **Part III: Software Design** Chapter 09: Overview of Software Design Chapter 10: Database Design

Chapter 11: User Interface Design Chapter 12: Operations Design Chapter 13: Other Design Considerations **Part IV: Software Development** Chapter 14: Software Development Issues Chapter 15: Human Resource Management Chapter 16: Software Economics **Part V: Software Implementation and Management** Chapter 17: Software Implementation Issues Chapter 18: Software Management Chapter 19: Organizing for Effective Management **Part VI: Final Preparations** Chapter 20: Sample Exercises and Examination Questions **Part VI: Appendices** Appendix 01: Sample Examination Questions and Case Studies Appendix 02: Overview of Fundamental Object-Oriented Methodologies Appendix 03: Object-Oriented Information Engineering Appendix 04: Basic Guidelines for Object-Oriented Methodologies Appendix 05: Categorizing Objects Appendix 06: Specifying Object Behavior Appendix 07: Tools for Object-Oriented Methodologies Appendix 08: Project Proposal for a Generic Inventory Management System Appendix 09: Requirements Specification for a Generic Inventory Management System Appendix 10: Design Specification for a Generic Inventory Management System

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Editorial Review

About the Author

Elvis C. Foster is Associate Professor of Computer Science at Keene State College, New Hampshire. He holds a Bachelor of Science (BSc) in Computer Science and Electronics, as well as a Doctor of Philosophy (PhD) in Computer Science (specializing in strategic information systems and database systems) from University of the West Indies, Mona Jamaica. Dr. Foster has over 25 years of combined experience as a software engineer, database expert, information technology executive and consultant, and computer science educator. He has had the favorable experience of being involved with the design and/or development of software systems for various medium-sized and large organizations, including the central bank of his own country. He has lectured at the tertiary level in three different countries, including the United States, where he now resides. He has produced many outstanding computer science and information technology professionals. Many of them have excelled at graduate school; others have gone straight to industry after their first degree; the thorough grounding acquired often serves them well, whether it be in leading software engineering enterprises around the world, or in other chosen vocations. His textbooks draw from that experience.

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