

20th ANNIVERSARY EDITION



The Pragmatic Programmer



your journey to mastery

DAVID THOMAS
ANDREW HUNT



The Pragmatic Programmer: your journey to mastery, 20th Anniversary Edition

Table of Contents

Cover

Title Page

Copyright Page

Table of Contents

Foreword

Preface to the Second Edition

- How the Book Is Organized

- Whats in a Name?

- Source Code and Other Resources

- Send Us Feedback

- Second Edition Acknowledgments

From the Preface to the First Edition

- Who Should Read This Book?

- What Makes a Pragmatic Programmer?

- Individual Pragmatists, Large Teams

- Its a Continuous Process

1. A Pragmatic Philosophy

- Topic 1. It's Your Life

- Topic 2. The Cat Ate My Source Code

- Topic 3. Software Entropy

Table of Contents

Topic 4. Stone Soup and Boiled Frogs

Topic 5. Good-Enough Software

Topic 6. Your Knowledge Portfolio

Topic 7. Communicate!

2. A Pragmatic Approach

Topic 8. The Essence of Good Design

Topic 9. DRYThe Evils of Duplication

Topic 10. Orthogonality

Topic 11. Reversibility

Topic 12. Tracer Bullets

Topic 13. Prototypes and Post-it Notes

Topic 14. Domain Languages

Topic 15. Estimating

3. The Basic Tools

Topic 16. The Power of Plain Text

Topic 17. Shell Games

Topic 18. Power Editing

Topic 19. Version Control

Topic 20. Debugging

Topic 21. Text Manipulation

Topic 22. Engineering Daybooks

4. Pragmatic Paranoia

Topic 23. Design by Contract

Topic 24. Dead Programs Tell No Lies

Topic 25. Assertive Programming

Topic 26. How to Balance Resources

Table of Contents

Topic 27. Don't Outrun Your Headlights

5. Bend, or Break

Topic 28. Decoupling

Topic 29. Juggling the Real World

Topic 30. Transforming Programming

Topic 31. Inheritance Tax

Topic 32. Configuration

6. Concurrency

Topic 33. Breaking Temporal Coupling

Topic 34. Shared State Is Incorrect State

Topic 35. Actors and Processes

Topic 36. Blackboards

7. While You Are Coding

Topic 37. Listen to Your Lizard Brain

Topic 38. Programming by Coincidence

Topic 39. Algorithm Speed

Topic 40. Refactoring

Topic 41. Test to Code

Topic 42. Property-Based Testing

Topic 43. Stay Safe Out There

Topic 44. Naming Things

8. Before the Project

Topic 45. The Requirements Pit

Topic 46. Solving Impossible Puzzles

Topic 47. Working Together

Topic 48. The Essence of Agility

Table of Contents

9. Pragmatic Projects

Topic 49. Pragmatic Teams

Topic 50. Coconuts Don't Cut It

Topic 51. Pragmatic Starter Kit

Topic 52. Delight Your Users

Topic 53. Pride and Prejudice

10. Postface

A1. Bibliography

A2. Possible Answers to the Exercises

Index