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Although leading-edge software development practice has advanced rapidly in recent years, common practice hasn't. Many programs are still buggy, late, and over budget, and many fail to satisfy the needs of their users. Researchers in both the software industry and academia, however, have discovered effective practices that eliminate most of the programming problems that have been prevalent since the 1970s. Because these practices aren't often reported outside the pages of highly specialized technical journals, however, most programming organizations aren't yet using them today. Studies have found that it typically takes 5 to 15 years or more for a research development to make its way into commercial practice (Raghaven and Choud 1989, Rogers 1995, Parnas 1999). This handbook shortens the process, making key discoveries available to the average programmer now.

Who Should Read This Book?



The research and programming experience collected in this handbook will help you to create higher-quality software and to do your work more quickly and with fewer problems. This book will give you insight into why you've had problems in the past and will show you how to avoid problems in the future. The programming practices described here will help you keep big projects under control and help you maintain and modify software successfully as the demands of your projects change.

Experienced Programmers

This handbook serves experienced programmers who want a comprehensive, easy-to-use guide to software development. Because this book focuses on construction, the most familiar part of the software life cycle, it makes powerful software development techniques easier to learn for self-taught programmers as well as to programmers with formal training.

**What do you think of this book?
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