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# Operating Systems

THIRD EDITION

The first edition of Deitel's *Operating Systems* rapidly became the world's best-selling operating systems text. The up-to-the-minute new edition of this classic is superbly researched and cited, comprehensive, informative, challenging and entertaining.

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*Operating Systems, 3/e* introduces four types of informative and engaging feature boxes: **Biographical Notes** on Edsger Dijkstra, Linus Torvalds, David Cutler and 14 others; **Mini Case Studies** on 17 operating systems of current and historic interest; **Operating Systems Thinking** features on key concepts, including performance, caching, heuristics, ethical systems design, lazy allocation and 29 others; and 10 delightful **Anecdotes**, each with a "Lesson to the operating systems designer."

Case studies are the hallmark of *Operating Systems, 3/e*. **Major OS Case Studies:** Linux 2.6 (94 pp.) and Windows XP (106 pp.); **Mini Case Studies:** CTSS, Multics, UNIX Systems, Atlas, MS-DOS, Supercomputers, OpenBSD, User-Mode Linux (UML), OS/2, Symbian, Mach, VM, Macintosh, BSD/UNIX, IBM Mainframe OSs, Real-Time OSs and Distributed OSs.

*Operating Systems, 3/e* includes extensive pedagogic features

- Two-color design/thought-provoking anecdotes
- Chapter outlines/recommended readings/bibliography
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- 900+ exercises/ancillaries for academic and professional use
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- 300+ illustrations/figures
- Extensive index/2374 citations/Internet & Web resources
- 1800+ term glossary/key terms sections in each chapter
- Concurrent programming with Java (optional)
- Reviewed by distinguished academics and professionals

#### Contents:

Introduction to Operating Systems, Hardware & Software Concepts, Process Concepts, Thread Concepts, Asynchronous Concurrent Execution, Concurrent Programming, Deadlock and Indefinite Postponement, Processor Scheduling, Real Memory Organization and Management, Virtual Memory Organization, Virtual Memory Management, Disk Performance Optimization (and RAID), File and Database Systems, Performance and Processor Design, Multiprocessor Management, Introduction to Networking, Distributed Systems and Web Services, Security, Case Study: Linux and Case Study: Windows XP.

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