Operating Systems Design And Implementation: Design And Implementation
**Synopsis**

Operating Systems Design and Implementation

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**Customer Reviews**

Many people who are commenting on the book by Tanenbaum are people who are writing after the year 2000. Operating system developed has had a long history since 1970 when Unix was developed. After that there was no significant movement on the Unix like systems (of course Microsoft and Apple were working) on their own OS but there were not Unix like. Tanenbaum wrote a Unix like System in 1987 which shares the File management, Process Management, Device Management and Memory management with Unix. He called it as MINIX OS. After that rest is History, Linus Torvalds wrote the Linux kernel. Even though Linux today has advanced a lot due to the Networking code, ACPI, SMB, Device drivers, please should examine Linux 0.01 written first by Linus. That code also consisted of only 20,000 lines and was very similar to MINIX (Not in design but in Code size). So do not blame the Author if he is not writing an advanced OS for you to study. Those have millions of lines of code. What MINIX shows us is a reliable and stable OS that is good study material for better OS's. If you want to understand nuts and bolts of OS study this book and write the code. You will be a master of Operating system. Atleast it is not those books who dig into a LOT OF THEORY like Different types of OS and explaining the theoretical aspects but do nothing of implementation. This book does the implementation. ***** Stars.

This book is written by Tanenbaum, the main guy behind Minix, which is what Linux was based on. It provides good overviews for basic OS concepts like memory management, file systems,
processes, etc. The concepts in this book are intimately tied to examples of the Minix OS, which is a good thing. To those who would rather see examples from Linux: Minix is a compact and modular OS, which is why it's a good choice for examples. The book contains the entire source code at the back for easy reference. Yes, the OS is that small. That's a good thing when you're trying to figure out how virtual memory works or what have you. You'd be lost trying to learn this stuff from Linux. Above everything else, the code is ***well-commented*** compared to Linux, a major plus. You won't find any "/* major hack */" comments, either. ;) Minix leaves out all the crap that Microsoft and Linux throw into the kernel that make it unstable in the first place. Learn about the bells and whistles later when you can do the basics. I encountered two instances where the book wasn't updated to reflect changes in the OS, which were annoying to deal with. Also, I found a spelling or punctuation error about every ten pages, which was annoying for such a pricey book. Overall, however, the book is extremely usable and understandable. It's easy to pick up concepts from this text.

This book does a very good job at walking the reader through the various functions of MINIX, but it does not go into the specifics very well. In short, it is a good technical book, but it is not one I recommend for an introduction to Operating Systems, since it glazes over many things. So while I had a good grasp of how MINIX operates, I had little knowledge on how to add more to the OS, or how to write my own OS. While MINIX was a good choice for the text, as MINIX is an operating system written to be understood, I just think the authors could gone much more in detail. A strong grasp of C is also required, so make sure you know your stuff before reading this book.

I found the book to be a good read and didn't tire me unlike some other technical books. Tanenbaum's mastery of the subject is evident and he interweaves practical examples throughout the text that really help understand the concepts he is explaining. The book is thorough and informative, and it helped me to understand some of the details that weren't discussed in class.

This is review for me as I have been through two courses in Operating Systems, but I would say this book would be a great introductory text for the uninitiated. It is well written and accessible, and there is source code to follow along with that demonstrates key concepts.

Tanenbaum has been a hero of mine since I first bought one of his books back ~1980. This edition of his OS book also includes his very functional, very workable precursor to Linux, eminently
suitable for experimentation. I highly recommend *anything* by this gifted author. (I just hope his classes are half as good.)

This is the ONLY book that contains actual code for OS. Another choice to learn the code is "OS Concepts" by Silberschatz and Galvin, but the codes are much shorter. Many people prefer "Modern OS" (book by the same author) to this book, due to the short amount of actual text. "Modern OS" certainly have goes deeper and has better logical flow, but it doesn't contain actual code. On the other hand, "OS Design and Imp" has shallow treatment, but show actual code. It is shallower, but it still contains all essential materials (thread, memory, file system, I/O, deadlock, and security) VERY good textbook to learn both theory and implementation together!

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