Software design implies the optimal use of different available software resources. For it, the knowledge of operating systems and the way these manage resources must be expanded. This book presents an approach based on Linux operating system, including issues such as kernel per se, units use and construction, different types of them, debugging techniques, as well as time management, interruptions, DMA (direct memory access), different buses and peripherals. In the respective chapters, a theoretical introduction to the present issue can be found, together with practical code examples allowing a deeper knowledge to face software establishment that interacts with the system in the most efficient way in relation to the quoted aspects. Such introductions take for granted some previous knowledge of Linux operating system, reason why this book is aimed at readers with some experience on it, as well as some previous knowledge of language C and computer architecture.

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