Start by marking "The Little Book of Semaphores: The Ins and Outs of Concurrency Control and Common Mistakes" as Want to Read: Want to Read saving… Want to Read. OS textbooks present a standard set of problems with a standard set of solutions, but most students don’t get a good understanding of the material or the ability to solve similar problems. The Little Book of Semaphores is a textbook that introduces the principles of synchronization for concurrent programming. In most computer science curricula, synchronization is a module in an Operating Systems class. OS textbooks present a standard set of problems with a standard set of solutions, but most students don’t get a good understanding of the material or the ability to solve similar problems. The Little Book of Semaphores and also the implementation of synchronization primitives in x86 Assembly Language, POSIX, and Python. The students who took the class helped me find errors in the first edition and several of them contributed solutions that were better than mine. At the end of the semester, I asked each of them to write a new, original problem (preferably). Jouni Leppävaara helped clarify the origins of semaphores. Christoph Bartoschek found an error in a solution to the exclusive dance problem. Eus found a typo in Chapter 3. iv Preface. Tak-Shing Chan found an out-of-bounds error in counter mutex.c. Roman V. Kiseliyev made several suggestions for improving the appearance.