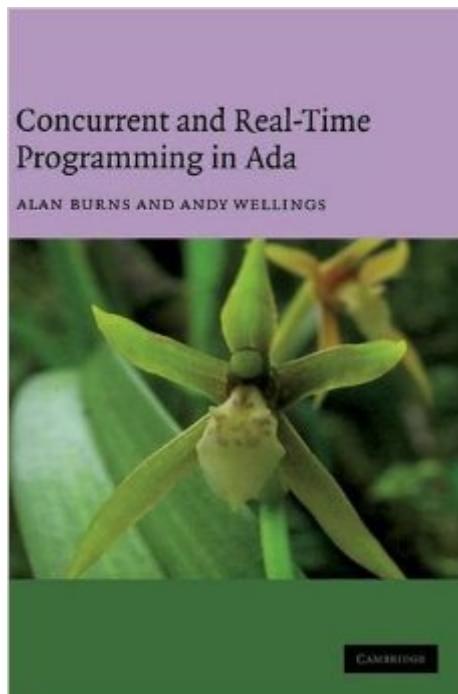


The book was found

Concurrent And Real-Time Programming In Ada



Synopsis

Ada is the only ISO-standard, object-oriented, concurrent, real-time programming language. It is intended for use in large, long-lived applications where reliability and efficiency are essential, particularly real-time and embedded systems. In this book, Alan Burns and Andy Wellings give a thorough, self-contained account of how the Ada tasking model can be used to construct a wide range of concurrent and real-time systems. This is the only book that focuses on an in-depth discussion of the Ada tasking model. Following on from the authors' earlier title Concurrency in Ada, this book brings the discussion up to date to include the new Ada 2005 language and the recent advances in real-time programming techniques. It will be of value to software professionals and advanced students of programming alike: indeed every Ada programmer will find it essential reading and a primary reference work that will sit alongside the language reference manual.

Book Information

Hardcover: 476 pages

Publisher: Cambridge University Press; 3rd edition (July 16, 2007)

Language: English

ISBN-10: 0521866979

ISBN-13: 978-0521866972

Product Dimensions: 6.8 x 1.1 x 9.7 inches

Shipping Weight: 2.1 pounds (View shipping rates and policies)

Average Customer Review: 4.8 out of 5 starsÂ See all reviewsÂ (6 customer reviews)

Best Sellers Rank: #139,379 in Books (See Top 100 in Books) #5 inÂ Books > Computers & Technology > Programming > Languages & Tools > Ada #157 inÂ Books > Textbooks > Computer Science > Software Design & Engineering #355 inÂ Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Software Development

Customer Reviews

Fully harnessing multi-core processors requires concurrent programming, yet most mainstream languages have little support or do so with poor portability. Well-written concurrent Ada programs can be extremely portable and support multi-core and multiple processors automatically. This book explores, in-depth, the concurrent programming ("tasking") part of the Ada language. The authors then show how the concurrent programming facilities of Ada are augmented by the language to support real-time programming. These standard real-time facilities are state-of-the-art, extending, for example, beyond the POSIX real-time facilities in their expressive power. The book first

establishes the necessary foundation for understanding concurrent programming by explaining the possible problems (e.g., deadlocks and race conditions) and highlighting some of the mechanisms traditionally used in concurrent programming, such as semaphores and message-passing. The tasking part of Ada is then covered in full detail, necessarily including interactions with some other parts of the language, such as exceptions, but also including interactions with the Ada object-oriented language facilities. The implementations of a number of reusable concurrency abstractions serve to illustrate the use of the tasking features. The authors next lay another foundation, this time for scheduling in real-time systems, and show how Ada directly supports the common approaches. Both fixed-priority and dynamic-priority dispatching are supported by Ada and these are covered in detail. Ada 2005 also defines a number of time-related abstractions, such as a monotonic clock and timing events, and these are also covered completely.

[Download to continue reading...](#)

DOS: Programming Success in a Day: Beginners guide to fast, easy and efficient learning of DOS programming (DOS, ADA, Programming, DOS Programming, ADA ... LINUX, RPG, ADA Programming, Android, JAVA) Concurrent and Real-Time Programming in Ada Real Time Systems and Programming Languages: Ada 95, Real-Time Java and Real-Time C/POSIX (3rd Edition) VBScript: Programming Success in a Day: Beginner's Guide to Fast, Easy and Efficient Learning of VBScript Programming (VBScript, ADA, ASP.NET, C#, ADA ... ASP.NET Programming, Programming, C++, C) ASP.NET: Programming success in a day: Beginners guide to fast, easy and efficient learning of ASP.NET programming (ASP.NET, ASP.NET Programming, ASP.NET ... ADA, Web Programming, Programming) Programming #8:C Programming Success in a Day & Android Programming In a Day! (C Programming, C++programming, C++ programming language, Android , Android Programming, Android Games) Programming #57: C++ Programming Professional Made Easy & Android Programming in a Day (C++ Programming, C++ Language, C++for beginners, C++, Programming ... Programming, Android, C, C Programming) ADA: Programming Success in a Day: Beginners Guide to Fast, Easy, and Efficient Learning of ADA Programming Programming #45: Python Programming Professional Made Easy & Android Programming In a Day! (Python Programming, Python Language, Python for beginners, ... Programming Languages, Android Programming) R Programming: Learn R Programming In A DAY! - The Ultimate Crash Course to Learning the Basics of R Programming Language In No Time (R, R Programming, ... Course, R Programming Development Book 1) Rationale for the Design of the Ada Programming Language (The Ada Companion Series) Real Estate: Learn to Succeed the First Time: Real Estate Basics, Home Buying, Real Estate Investment & House Flipping (Real Estate income, investing, Rental

Property) C#: Programming Success in a Day: Beginners guide to fast, easy and efficient learning of C# programming (C#, C# Programming, C++ Programming, C++, C, C Programming, C# Language, C# Guide, C# Coding) FORTRAN Programming success in a day:Beginners guide to fast, easy and efficient learning of FORTRAN programming (Fortran, Css, C++, C, C programming, ... Programming, MYSQL, SQL Programming) Prolog Programming; Success in a Day: Beginners Guide to Fast, Easy and Efficient Learning of Prolog Programming (Prolog, Prolog Programming, Prolog Logic, ... Programming, Programming Code, Java) Parallel Programming: Success in a Day: Beginners' Guide to Fast, Easy, and Efficient Learning of Parallel Programming (Parallel Programming, Programming, ... C++ Programming, Multiprocessor, MPI) Programming: Computer Programming for Beginners: Learn the Basics of Java, SQL & C++ - 3. Edition (Coding, C Programming, Java Programming, SQL Programming, JavaScript, Python, PHP) Raspberry Pi 2: Raspberry Pi 2 Programming Made Easy (Raspberry Pi, Android Programming, Programming, Linux, Unix, C Programming, C+ Programming) Android: Programming in a Day! The Power Guide for Beginners In Android App Programming (Android, Android Programming, App Development, Android App Development, ... App Programming, Rails, Ruby Programming) The ADA Practical Guide to Associateships: Success Strategies for Dentist-owners and Prospective Associates (The ADA Practical Guide Series)

[Dmca](#)