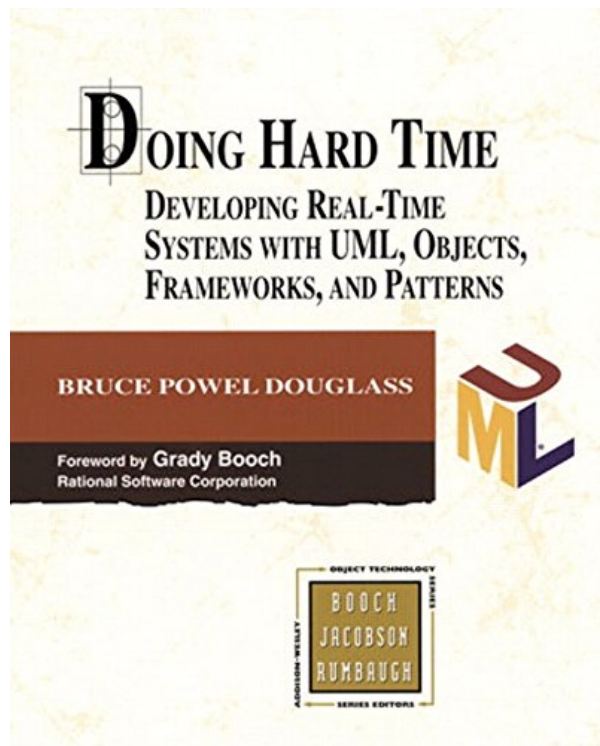
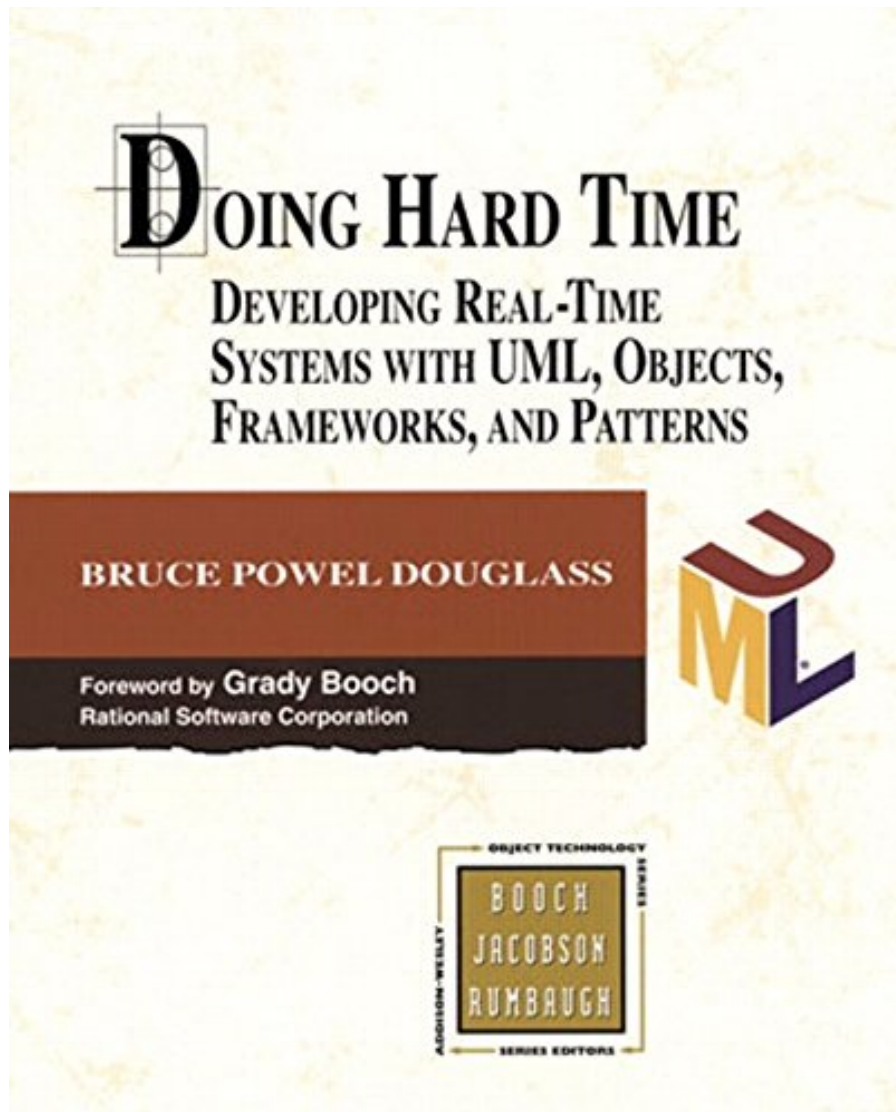


DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS



DOWNLOAD EBOOK : DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS PDF





Click link bellow and free register to download ebook:

DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS

[DOWNLOAD FROM OUR ONLINE LIBRARY](#)

DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS PDF

In checking out Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass, currently you could not additionally do traditionally. In this contemporary period, device as well as computer system will assist you so much. This is the time for you to open the gadget and stay in this site. It is the ideal doing. You can see the link to download this Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass here, can't you? Merely click the web link as well as make a deal to download it. You could reach purchase guide [Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass](#) by on-line and all set to download and install. It is extremely different with the old-fashioned method by going to the book shop around your city.

Amazon.com Review

Doing Hard Time: Developing Real-Time Systems with UML, Objects, Frameworks, and Patterns provides an excellent guide to using today's cutting-edge software-engineering techniques to develop software for embedded systems.

Author Bruce Powel Douglass begins by championing the advantages of objects for embedded development and then shows off basic UML document types. Next he addresses the difficulties of writing embedded systems (which are used in hospitals, aircraft, nuclear power plants, and other life-or-death environments). He looks at the restricted resources of embedded hardware and design issues regarding memory management and event handling.

The book expertly discusses the difference between the reliability and safety of software. (It describes the use of a number of patterns that can be used to provide safe operation in the event of single-point failure of a system.)

Rapid Object-Oriented Process for Embedded Systems (ROPES) finds its way to the heart of the text, a development process tailored to real-time software. Besides an introduction to iterative software development, the author walks the reader through the steps required for analysis, design, and eventual implementation of real-time software. The samples (which include several medical devices and a small air traffic control system) are exceptionally rich in detail and often use advanced aspects of UML notation.

Later sections concentrate on the latest in pattern design for embedded software used to manage threads and schedulability. The book closes with a tour of dynamic modeling, real-time frameworks--specifically, the I-Logix Rhapsody Object Execution Framework (OXF)--and details of the Rhapsody modeling tool. In all, Doing Hard Time delivers real technical expertise for any potential embedded software developer in a thorough and digestible format. --Richard Dragan

From the Back Cover

"This book will almost certainly become a seminal work in this field...the one book everyone will want to have both as a tutorial and as a reference."

--Larry McAlister, Senior Systems Architect, ENSCO, Inc.

The global demand for real-time and embedded systems is growing rapidly. With this increased demand comes an urgent need for more programmers in this realm; yet making the transition to real-time systems development or learning to build these applications is by no means simple. Real-time system designs must be written to meet hard and unforgiving requirements. It is a pursuit that requires a unique set of skills. Clearly, real-time systems development is a formidable task, and developers face many unique challenges as they attempt to do "hard time."

Doing Hard Time is written to facilitate the daunting process of developing real-time systems. It presents an embedded systems programming methodology that has been proven successful in practice. The process outlined in this book allows application developers to apply practical techniques--gathered from the mainstream areas of object-oriented software development--to meet the demanding qualifications of real-time programming.

Bruce Douglass offers ideas that are up-to-date with the latest concepts and trends in programming. By using the industry standard Unified Modeling Language (UML), as well as the best practices from object technology, he guides you through the intricacies and specifics of real-time systems development. Important topics such as schedulability, behavioral patterns, and real-time frameworks are demystified, empowering you to become a more effective real-time programmer.

The accompanying CD-ROM holds substantial value for the reader. It contains models from the book, as well as two applications that are extremely useful in the development of real-time and embedded systems. The first application, a UML-compliant design automation tool called Rhapsody (produced by I-Logix), captures analysis and design of systems and generates full behavioral code for those models with intrinsic model-level debug capabilities. The second application, TimeWiz, can analyze the timing and performance of systems and determine the schedulability of actions in multitasking systems.

0201498375B04062001

About the Author

Bruce Powel Douglass is the Chief Evangelist for i-Logix, a leading producer of tools for real-time systems development. He contributed to the original specification of the UML and to the UML 2.0 as one of the co-chairs of the Object Management Group's Real-Time Analysis and Design Working Group. Bruce consults for a number of companies and organizations, including NASA, on building large-scale, real-time, safety-critical systems. He is the author of seven other books, including Real-Time Design Patterns (Addison-Wesley, 2003) and Doing Hard Time (Addison-Wesley, 1999).

DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS PDF

[Download: DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS PDF](#)

Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass. Give us 5 minutes and we will certainly reveal you the most effective book to read today. This is it, the Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass that will certainly be your ideal option for better reading book. Your five times will not invest thrown away by reading this website. You can take the book as a source to make much better principle. Referring the books Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass that can be located with your requirements is sometime challenging. However here, this is so very easy. You could locate the best point of book Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass that you could check out.

By reviewing *Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass*, you can understand the understanding as well as things even more, not only about what you obtain from individuals to individuals. Reserve Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass will certainly be a lot more relied on. As this Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass, it will really give you the great idea to be successful. It is not just for you to be success in particular life; you can be effective in everything. The success can be begun by knowing the fundamental knowledge and also do actions.

From the combo of expertise and actions, somebody can boost their skill and ability. It will lead them to live and also work better. This is why, the pupils, workers, and even companies ought to have reading behavior for publications. Any type of book Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass will certainly offer particular knowledge to take all perks. This is just what this Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass informs you. It will include more expertise of you to life as well as function far better. [Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass](#), Try it as well as verify it.

DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS PDF

"This book will almost certainly become a seminal work in this field...the one book everyone will want to have both as a tutorial and as a reference." --Larry McAlister, Senior Systems Architect, ENSCO, Inc. The global demand for real-time and embedded systems is growing rapidly. With this increased demand comes an urgent need for more programmers in this realm; yet making the transition to real-time systems development or learning to build these applications is by no means simple. Real-time system designs must be written to meet hard and unforgiving requirements. It is a pursuit that requires a unique set of skills. Clearly, real-time systems development is a formidable task, and developers face many unique challenges as they attempt to do "hard time." Doing Hard Time is written to facilitate the daunting process of developing real-time systems. It presents an embedded systems programming methodology that has been proven successful in practice. The process outlined in this book allows application developers to apply practical techniques--garnered from the mainstream areas of object-oriented software development--to meet the demanding qualifications of real-time programming. Bruce Douglass offers ideas that are up-to-date with the latest concepts and trends in programming. By using the industry standard Unified Modeling Language (UML), as well as the best practices from object technology, he guides you through the intricacies and specifics of real-time systems development. Important topics such as schedulability, behavioral patterns, and real-time frameworks are demystified, empowering you to become a more effective real-time programmer. The accompanying CD-ROM holds substantial value for the reader. It contains models from the book, as well as two applications that are extremely useful in the development of real-time and embedded systems. The first application, a UML-compliant design automation tool called Rhapsody (produced by I-Logix), captures analysis and design of systems and generates full behavioral code for those models with intrinsic model-level debug capabilities. The second application, TimeWiz, can analyze the timing and performance of systems and determine the schedulability of actions in multitasking systems. 0201498375B04062001

- Sales Rank: #1283530 in Books
- Published on: 1999-05-21
- Original language: English
- Number of items: 1
- Dimensions: 9.54" h x 1.67" w x 7.64" l, 3.19 pounds
- Binding: Hardcover
- 749 pages

Amazon.com Review

Doing Hard Time: Developing Real-Time Systems with UML, Objects, Frameworks, and Patterns provides an excellent guide to using today's cutting-edge software-engineering techniques to develop software for embedded systems.

Author Bruce Powel Douglass begins by championing the advantages of objects for embedded development and then shows off basic UML document types. Next he addresses the difficulties of writing embedded systems (which are used in hospitals, aircraft, nuclear power plants, and other life-or-death environments).

He looks at the restricted resources of embedded hardware and design issues regarding memory management and event handling.

The book expertly discusses the difference between the reliability and safety of software. (It describes the use of a number of patterns that can be used to provide safe operation in the event of single-point failure of a system.)

Rapid Object-Oriented Process for Embedded Systems (ROPES) finds its way to the heart of the text, a development process tailored to real-time software. Besides an introduction to iterative software development, the author walks the reader through the steps required for analysis, design, and eventual implementation of real-time software. The samples (which include several medical devices and a small air traffic control system) are exceptionally rich in detail and often use advanced aspects of UML notation.

Later sections concentrate on the latest in pattern design for embedded software used to manage threads and schedulability. The book closes with a tour of dynamic modeling, real-time frameworks--specifically, the I-Logix Rhapsody Object Execution Framework (OXF)--and details of the Rhapsody modeling tool. In all, *Doing Hard Time* delivers real technical expertise for any potential embedded software developer in a thorough and digestible format. --Richard Dragan

From the Back Cover

"This book will almost certainly become a seminal work in this field...the one book everyone will want to have both as a tutorial and as a reference."

--Larry McAlister, Senior Systems Architect, ENSCO, Inc.

The global demand for real-time and embedded systems is growing rapidly. With this increased demand comes an urgent need for more programmers in this realm; yet making the transition to real-time systems development or learning to build these applications is by no means simple. Real-time system designs must be written to meet hard and unforgiving requirements. It is a pursuit that requires a unique set of skills. Clearly, real-time systems development is a formidable task, and developers face many unique challenges as they attempt to do "hard time."

Doing Hard Time is written to facilitate the daunting process of developing real-time systems. It presents an embedded systems programming methodology that has been proven successful in practice. The process outlined in this book allows application developers to apply practical techniques--gathered from the mainstream areas of object-oriented software development--to meet the demanding qualifications of real-time programming.

Bruce Douglass offers ideas that are up-to-date with the latest concepts and trends in programming. By using the industry standard Unified Modeling Language (UML), as well as the best practices from object technology, he guides you through the intricacies and specifics of real-time systems development. Important topics such as schedulability, behavioral patterns, and real-time frameworks are demystified, empowering you to become a more effective real-time programmer.

The accompanying CD-ROM holds substantial value for the reader. It contains models from the book, as well as two applications that are extremely useful in the development of real-time and embedded systems. The first application, a UML-compliant design automation tool called Rhapsody (produced by I-Logix), captures analysis and design of systems and generates full behavioral code for those models with intrinsic model-level debug capabilities. The second application, TimeWiz, can analyze the timing and performance of systems and determine the schedulability of actions in multitasking systems.

About the Author

Bruce Powel Douglass is the Chief Evangelist for i-Logix, a leading producer of tools for real-time systems development. He contributed to the original specification of the UML and to the UML 2.0 as one of the co-chairs of the Object Management Group's Real-Time Analysis and Design Working Group. Bruce consults for a number of companies and organizations, including NASA, on building large-scale, real-time, safety-critical systems. He is the author of seven other books, including Real-Time Design Patterns (Addison-Wesley, 2003) and Doing Hard Time (Addison-Wesley, 1999).

Most helpful customer reviews

73 of 82 people found the following review helpful.

Hard Times "Doing Hard Times"

By Arthur Schwarz

The book appears to be a testament to "why I am good" rather than a description of the topic at hand. Editorially, figures don't match text, grammar is expansive and lacks understandability, it is difficult to determine whether words used are used in their English or technical sense, and the use of words requiring dictionary lookup is laudable in grade schools somewhat suspect in a book of this caliber (try 'reify'). Technically little scholarship is shown. The section titles are good, the author often strays from them. For analysis of embedded systems, trivial results are stated and no attention is given to their derivation nor to analysis or references to analysis. Little attention is paid topics beyond their brief statement. Much time is wasted on examples which show the authors work engagements but which do not illustrate the point at hand. Critical topics (for embedded systems) need greater attention and technical analysis rather than restating obvious results and hand-waving (tasking, inter-task message passing, event disposition, etc). The employment of statecharts in situations that it is unsuited to is difficult to understand. The placement and analysis of statecharts within the context of UML, and the technical and organizational difficulties and advantages of statecharts within the context of UML need some discussion.

The obvious needs discussion and scholarly treatment, analytical results, including mathematical formulas, and not restatement and explanation by (generally poor) example.

A terrible, terrible book which needs scholarship for it's improvement. Full of pointless examples and lack of technical discussion.

14 of 15 people found the following review helpful.

A must read for anyone working in real-time embedded

By A Customer

Wow! And I thought Real-Time UML was good! Doing Hard Time is everything Real-Time UML is plus so much more. I really liked the easy-to-read but in-depth coverage of the "hard stuff" of real-time and embedded systems.

What's special about this book: The coverage of safety critical systems is unparalleled -- safety explained in terms of design patterns and key concepts and how to do this using object methods. The development process in Chapter 4 on ROPES shows how to effectively apply UML to think about, design and construct real-time systems. Chapter 11 explains the difficult concepts of timeliness and gives ways to guarantee schedulability. I've looked at other books on that topic and they're filled with really ugly math which makes for a difficult read. This book explains those concepts in an easy going way. The chapters on behavioral patterns covers "design patterns" for wiring together state machines to solve commonly occurring behavioral

issues. I also really liked the chapter on real-time frameworks; it really clarified a number of things that confused me.

This book has information that is either not available elsewhere or, if it is, is very hard to track down and is very opaque read. I've read a lot of books in this genre -- and this is clearly the best. I can hardly wait to apply it on my current project.

16 of 20 people found the following review helpful.

Every embedded SW developer should have this one

By Leon

The structure of this book is described well in the Amazon's review (by Richard Dragan), so I will not dwell on that.

The size of the book is somewhat daunting (750 pages), however, reading it proved to be easy and even entertaining. This was due to the use of clear language, illustrative examples and due to inclusion of humorous remarks and anecdotes, which broke the otherwise inevitable tediousness of reading a technical book.

"Doing Hard Time" is written in such a way that it allows for two "modes" of reading. A sequential mode, i.e. reading from cover to cover - this is especially good if you trying to familiarize yourself with the field of RT. A "multi-threaded" mode, whereby you use this book as a reference material and consult only those chapters that are of particular interest to you at that instance of time. I also reckon that reading this book will help to prevent much frustration of trying to reinvent the wheel.

In the good tradition of the OO methodologies, some re-use has been accomplished from Douglass's previous book ("Real-Time UML"). However, each of the topics dealt with in the "RT UML" has been significantly expanded and new chapters have been added to this book. Even if you have "RT UML", I still suggest "Doing Hard Time" - it's "bigger and better", especially if you can get it on the Amazon's special (40% off!). All in all, I wholeheartedly recommend "Doing Hard Time" to all embedded s/w developers, beginners and experts alike - this book has potential of becoming a "classic".

See all 8 customer reviews...

DOING HARD TIME: DEVELOPING REAL-TIME SYSTEMS WITH UML, OBJECTS, FRAMEWORKS, AND PATTERNS BY BRUCE POWEL DOUGLASS PDF

Based on some experiences of lots of people, it is in fact that reading this **Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass** can help them making far better option as well as give even more encounter. If you wish to be among them, allow's acquisition this book **Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass** by downloading guide on web link download in this website. You could obtain the soft file of this book **Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass** to download as well as put aside in your readily available digital devices. Just what are you awaiting? Allow get this book **Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass** on-line and read them in at any time as well as any sort of area you will certainly read. It will certainly not encumber you to bring hefty publication **Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass** inside of your bag.

Amazon.com Review

Doing Hard Time: Developing Real-Time Systems with UML, Objects, Frameworks, and Patterns provides an excellent guide to using today's cutting-edge software-engineering techniques to develop software for embedded systems.

Author Bruce Powel Douglass begins by championing the advantages of objects for embedded development and then shows off basic UML document types. Next he addresses the difficulties of writing embedded systems (which are used in hospitals, aircraft, nuclear power plants, and other life-or-death environments). He looks at the restricted resources of embedded hardware and design issues regarding memory management and event handling.

The book expertly discusses the difference between the reliability and safety of software. (It describes the use of a number of patterns that can be used to provide safe operation in the event of single-point failure of a system.)

Rapid Object-Oriented Process for Embedded Systems (ROPES) finds its way to the heart of the text, a development process tailored to real-time software. Besides an introduction to iterative software development, the author walks the reader through the steps required for analysis, design, and eventual implementation of real-time software. The samples (which include several medical devices and a small air traffic control system) are exceptionally rich in detail and often use advanced aspects of UML notation.

Later sections concentrate on the latest in pattern design for embedded software used to manage threads and schedulability. The book closes with a tour of dynamic modeling, real-time frameworks--specifically, the I-Logix Rhapsody Object Execution Framework (OXF)--and details of the Rhapsody modeling tool. In all, **Doing Hard Time** delivers real technical expertise for any potential embedded software developer in a thorough and digestible format. --Richard Dragan

From the Back Cover

"This book will almost certainly become a seminal work in this field...the one book everyone will want to have both as a tutorial and as a reference."

--Larry McAlister, Senior Systems Architect, ENSCO, Inc.

The global demand for real-time and embedded systems is growing rapidly. With this increased demand comes an urgent need for more programmers in this realm; yet making the transition to real-time systems development or learning to build these applications is by no means simple. Real-time system designs must be written to meet hard and unforgiving requirements. It is a pursuit that requires a unique set of skills. Clearly, real-time systems development is a formidable task, and developers face many unique challenges as they attempt to do "hard time."

Doing Hard Time is written to facilitate the daunting process of developing real-time systems. It presents an embedded systems programming methodology that has been proven successful in practice. The process outlined in this book allows application developers to apply practical techniques--garnered from the mainstream areas of object-oriented software development--to meet the demanding qualifications of real-time programming.

Bruce Douglass offers ideas that are up-to-date with the latest concepts and trends in programming. By using the industry standard Unified Modeling Language (UML), as well as the best practices from object technology, he guides you through the intricacies and specifics of real-time systems development. Important topics such as schedulability, behavioral patterns, and real-time frameworks are demystified, empowering you to become a more effective real-time programmer.

The accompanying CD-ROM holds substantial value for the reader. It contains models from the book, as well as two applications that are extremely useful in the development of real-time and embedded systems. The first application, a UML-compliant design automation tool called Rhapsody (produced by I-Logix), captures analysis and design of systems and generates full behavioral code for those models with intrinsic model-level debug capabilities. The second application, TimeWiz, can analyze the timing and performance of systems and determine the schedulability of actions in multitasking systems.

0201498375B04062001

About the Author

Bruce Powel Douglass is the Chief Evangelist for i-Logix, a leading producer of tools for real-time systems development. He contributed to the original specification of the UML and to the UML 2.0 as one of the co-chairs of the Object Management Group's Real-Time Analysis and Design Working Group. Bruce consults for a number of companies and organizations, including NASA, on building large-scale, real-time, safety-critical systems. He is the author of seven other books, including Real-Time Design Patterns (Addison-Wesley, 2003) and Doing Hard Time (Addison-Wesley, 1999).

In checking out Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass, currently you could not additionally do traditionally. In this contemporary period, device as well as computer system will assist you so much. This is the time for you to open the gadget and stay in this site. It is the ideal doing. You can see the link to download this Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel

Douglass here, can't you? Merely click the web link as well as make a deal to download it. You could reach purchase guide [Doing Hard Time: Developing Real-Time Systems With UML, Objects, Frameworks, And Patterns By Bruce Powel Douglass](#) by on-line and all set to download and install. It is extremely different with the old-fashioned method by gong to the book shop around your city.