Software Abstractions: Logic, Language, and Analysis (MIT Press)

By Daniel Jackson

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson

In *Software Abstractions* Daniel Jackson introduces an approach to software design that draws on traditional formal methods but exploits automated tools to find flaws as early as possible. This approach -- which Jackson calls "lightweight formal methods" or "agile modeling" -- takes from formal specification the idea of a precise and expressive notation based on a tiny core of simple and robust concepts but replaces conventional analysis based on theorem proving with a fully automated analysis that gives designers immediate feedback. Jackson has developed Alloy, a language that captures the essence of software abstractions simply and succinctly, using a minimal toolkit of mathematical notions. This revised edition updates the text, examples, and appendixes to be fully compatible with Alloy 4.

⬇ **Download** Software Abstractions: Logic, Language, and Analys ...pdf

▤ **Read Online** Software Abstractions: Logic, Language, and Anal ...pdf

Software Abstractions: Logic, Language, and Analysis (MIT Press)

By Daniel Jackson

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson

In *Software Abstractions* Daniel Jackson introduces an approach to software design that draws on traditional formal methods but exploits automated tools to find flaws as early as possible. This approach -- which Jackson calls "lightweight formal methods" or "agile modeling" -- takes from formal specification the idea of a precise and expressive notation based on a tiny core of simple and robust concepts but replaces conventional analysis based on theorem proving with a fully automated analysis that gives designers immediate feedback. Jackson has developed Alloy, a language that captures the essence of software abstractions simply and succinctly, using a minimal toolkit of mathematical notions. This revised edition updates the text, examples, and appendixes to be fully compatible with Alloy 4.

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson Bibliography

- Sales Rank: #916930 in Books
- Published on: 2012-02
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x .63" w x 6.00" l, 1.38 pounds
- Binding: Hardcover
- 376 pages

[**⬇ Download** Software Abstractions: Logic, Language, and Analys ...pdf](#)

[**🗐 Read Online** Software Abstractions: Logic, Language, and Anal ...pdf](#)

Editorial Review

Review

Those who have to learn and use the modern generation of formal methods -- streamlined, lightweight, and highly automated -- will welcome the appearance of the second edition of Daniel Jackson's book on the Alloy language and its analysor. Jackson's writing, like his language design, is full of good taste, and he makes an intelligent and compelling argument for the construction of automated software abstractions as the central activity in software development. Every serious software engineer should read this book.

(**Jim Woodcock**, University of York, UK)

In an area plagued by unnecessary complexity, Alloy shows there is still room for economy and elegance in software design. Readers of this book will enjoy a rare opportunity to learn how to write less in order to say more, without ambiguity. In short, to learn how to be productive.

(**José N. Oliveira**, University of Minho)

Relational modeling is a powerful but subtle craft. This book applies the Alloy tool suite to pithy examples to educate everyone from working practitioners to researchers. Its joyful and informal tone mask the depth of accumulated wisdom in these pages.

(**Shriram Krishnamurthi**, Brown University)

About the Author

Daniel Jackson is Professor in the Department of Electrical Engineering and Computer Science and leads the Software Design Group at the Computer Science and Artificial Intelligence Lab at MIT.

Users Review

From reader reviews:

Alice Hill:

Book is usually written, printed, or illustrated for everything. You can understand everything you want by a book. Book has a different type. To be sure that book is important matter to bring us around the world. Beside that you can your reading ability was fluently. A guide Software Abstractions: Logic, Language, and Analysis (MIT Press) will make you to possibly be smarter. You can feel far more confidence if you can know about anything. But some of you think that will open or reading a book make you bored. It is far from make you fun. Why they are often thought like that? Have you searching for best book or suited book with you?

Penny Risley:

Now a day people who Living in the era where everything reachable by talk with the internet and the resources inside it can be true or not need people to be aware of each facts they get. How many people to be smart in having any information nowadays? Of course the answer then is reading a book. Studying a book can help men and women out of this uncertainty Information specifically this Software Abstractions: Logic, Language, and Analysis (MIT Press) book because this book offers you rich facts and knowledge. Of course the data in this book hundred per cent guarantees there is no doubt in it as you know.

Louise Denison:

The book Software Abstractions: Logic, Language, and Analysis (MIT Press) will bring you to the new experience of reading a book. The author style to explain the idea is very unique. Should you try to find new book to see, this book very suited to you. The book Software Abstractions: Logic, Language, and Analysis (MIT Press) is much recommended to you to learn. You can also get the e-book in the official web site, so you can quickly to read the book.

Armida Shipman:

Reading a reserve tends to be new life style in this particular era globalization. With examining you can get a lot of information that will give you benefit in your life. With book everyone in this world may share their idea. Textbooks can also inspire a lot of people. Lots of author can inspire all their reader with their story or maybe their experience. Not only the storyplot that share in the publications. But also they write about the ability about something that you need example of this. How to get the good score toefl, or how to teach children, there are many kinds of book that you can get now. The authors these days always try to improve their proficiency in writing, they also doing some investigation before they write to their book. One of them is this Software Abstractions: Logic, Language, and Analysis (MIT Press).

Download and Read Online Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson #NIXRUQC1LZ9

Read Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson for online ebook

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson books to read online.

Online Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson ebook PDF download

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson Doc

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson Mobipocket

Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson EPub

NIXRUQC1LZ9: Software Abstractions: Logic, Language, and Analysis (MIT Press) By Daniel Jackson