Synopsis

Beginning Haskell provides a broad-based introduction to the Haskell language, its libraries and environment, and to the functional programming paradigm that is fast growing in importance in the software industry. The book takes a project-based approach to learning the language that is unified around the building of a web-based storefront. Excellent coverage is given to the Haskell ecosystem and supporting tools. These include the Cabal build tool for managing projects and modules, the HUnit and QuickCheck tools for software testing, the Scotty framework for developing web applications, Persistent and Esqueleto for database access, and also parallel and distributed programming libraries. Functional programming is gathering momentum, allowing programmers to express themselves in a more concise way, reducing boilerplate and increasing the safety of code. Indeed, mainstream languages such as C# and Java are adopting features from functional programming, and from languages implementing that paradigm. Haskell is an elegant and noise-free pure functional language with a long history, having a huge number of library contributors and an active community. This makes Haskell the best tool for both learning and applying functional programming, and Beginning Haskell the perfect book to show off the language and what it can do. Takes you through a series of projects showing the different parts of the language. Provides an overview of the most important libraries and tools in the Haskell ecosystem. Teaches you how to apply functional patterns in real-world scenarios.

Book Information

Paperback: 428 pages
Publisher: Apress; 1st ed. edition (January 23, 2014)
Language: English
ISBN-10: 1430262508
Product Dimensions:  7.5 x 1 x 9.2 inches
Shipping Weight: 2 pounds (View shipping rates and policies)
Average Customer Review: 3.8 out of 5 stars Â— See all reviews (12 customer reviews)
Best Sellers Rank: #991,635 in Books (See Top 100 in Books)  #83 in Books > Computers & Technology > Programming > Functional  #171 in Books > Computers & Technology > Programming > Languages & Tools > Compilers  #3436 in Books > Textbooks > Computer Science > Programming Languages

Customer Reviews
Learning a functional programming language such as Haskell can be challenging for anyone who learned programming with a procedural programming language. I found this book helpful in bettering my understanding of Haskell. To the newcomer writings about Haskell are often clouded by layers of bewildering discussions on category theory, functors, arrows, monoids and, above all, the Monad. While readers of Alejandro's book won't miss out on theory where it is essential, the more daunting theoretical aspects are not mentioned for a good part of the book in which readers already can get their feet wet if they choose to solve the exercises posed in each chapter. This works out well. At no point did I find myself just following concepts that are thrown at me without understanding them. Throughout the book new concepts are introduced and put to use in practical examples. While this works well, I find this does not do the proclaimed 'project based approach' justice. Then again If the subtitle had just been left out there would be nothing for me to complain about. The material is up to date and thus features chapters dealing with topics such as lenses or cabal sandboxes. Both of which are not covered in any of the currently available Haskell books (that I am aware of). The author uses EclipseFP and cabal for project setup. However the use of eclipse is completely optional and I can follow just fine using vim and cabal on the command line. There are typing errors here and there but for the first edition of a 400+ book this can be excused. Prior to the publication of this book my recommendation to aspiring Haskell programmers would have been to buy 'Real World Haskell' and 'Learn You A Haskell For Great Good'. Now I would say your best bet is to get 'Beginning Haskell' and 'Learn You A Haskell For Great Good' (And also read it in that order). Thus my verdict: 4 out of 5 stars. Well done.

"Beginning Haskell" is a good, fast-paced, and practical introduction to programming in Haskell. The emphasis is on practical hands-on programming rather than theoretical concepts and type theory which tend to dominate other books on Haskell. There is, however, an unstated assumption that you already have some programming experience, preferably in a functional programming language, and that you do know your way around computers and the world wide web. I would recommend this book to those who already have programming experience in other languages and who wants a practical "how do I develop things in Haskell" book. The book begins by explaining how to install your Haskell development environment on Linux, OS X, or Windows, and then rather quickly, in the first few chapters, goes through the basics of functional programming in Haskell. From there on the emphasis shifts to implementing practical algorithms and solutions in Haskell. This is done by leveraging the full Haskell ecosystem with parallelism, database access, web frameworks, DSLs, parsing, testing, documentation, etc. The book uses a simplified top-down application development
perspective for this and introduces the necessary Haskell concepts as it goes along without getting bogged down in theory. This book is similar in spirit to the book "Real World Haskell" by O'Sullivan et al., but it is less wordy and has more "real world" feel to it than "Real World Haskell". It is not as refined as "Real World O'Caml" by Minsky et al., but rather ends up somewhere in between the two. As alluded to above "Beginning Haskell" is not an introduction to programming. If you are looking for an introduction to programming then Graham Hutton's "Programming in Haskell" is an excellent book to start with.

This is the best Haskell book available if you want to learn modern Haskell at a reasonably fast pace, and close to the reality of actually implementing useful things. It has some issues, listed below, but while these are significant, the book in total is still good enough to warrant 5 stars. The problems are all due to lack of proof reading/quality assurance. There’s plenty of spelling mistakes, a couple of places the pacing could be better and throughout the book, examples contain references to earlier code that exists in multiple variants. Some library interfaces have also changed slightly since the publication of this book. This book deserves a second edition with proper QA and proofreading.

Extensive and practical but not a beginner’s book. Hence the loss of a star, for being somewhat misleading. This is more in the tradition or "Real World Haskell" which needs a new edition. If you have been exposed to Scheme or Clojure or Lisp, etc. Then this can serve as a beginning text for Haskell, otherwise; beginners would do well, to have a go at "Learn You A Haskell For Greater Good" first; which IS a beginners book; and if the sophomoric tone gets on your nerves, you could also try Thompson’s "Craft of Functional Programming" 3rd edition; beware of earlier editions as they are from before the 2010 Haskell revision and may use deprecated compilers. Many other Haskell texts from the previous decade also use Unicode symbols which will require translating to ASCII if you wish to use the REPL to play with the examples. Happily all the above mentioned have their examples in ASCII, so you can copy them out and they will most likely compile; as long as you remember to set your tabs to spaces, which is the #1 noob headache for first time Haskellers. I welcome more books on Haskell and this certainly fits into the ecosystem of instructional Haskell texts, but it’s not what I would consider a beginner’s text, that said there is much here to recommend. Check the errata for corrections as there are quite a few.

*Download to continue reading...*

Beginning Haskell: A Project-Based Approach Project Management Using Microsoft Project 2013: A