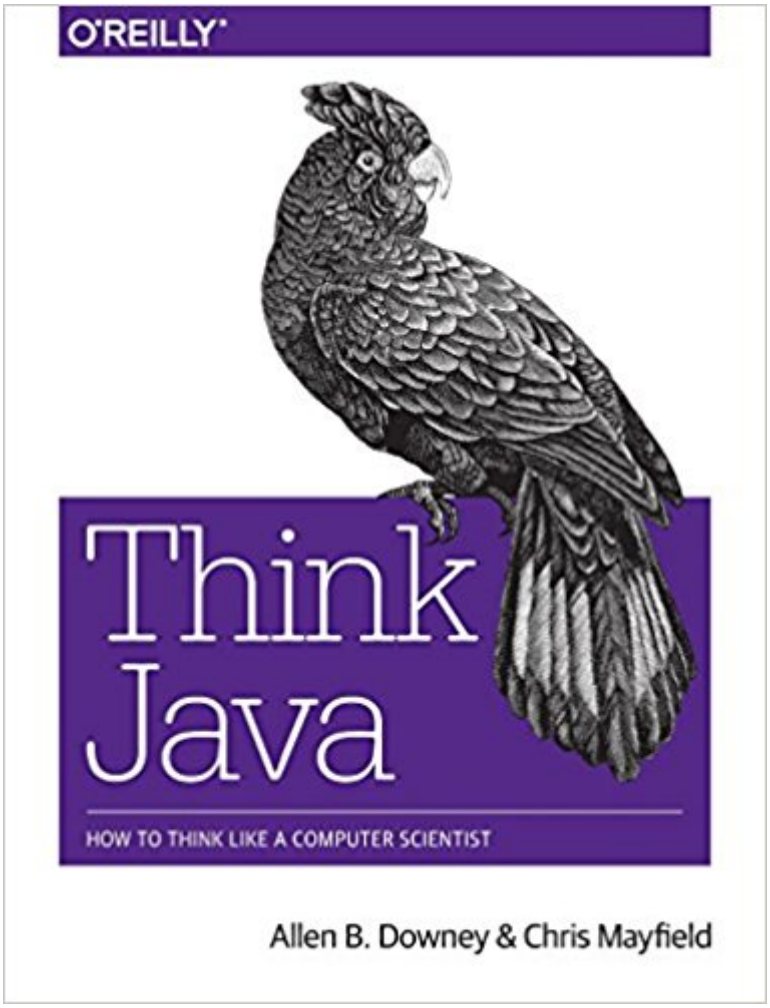
Think Java: How To Think Like A Computer Scientist



Synopsis

Currently used at many colleges, universities, and high schools, this hands-on introduction to computer science is ideal for people with little or no programming experience. The goal of this concise book is not just to teach you Java, but to help you think like a computer scientist. Youâ ™ll learn how to programâ ”a useful skill by itselfâ ”but youâ ™ll also discover how to use programming as a means to an end.Authors Allen Downey and Chris Mayfield start with the most basic concepts and gradually move into topics that are more complex, such as recursion and object-oriented programming. Each brief chapter covers the material for one week of a college course and includes exercises to help you practice what youâ ™ve learned.Learn one concept at a time: tackle complex topics in a series of small steps with examplesUnderstand how to formulate problems, think creatively about solutions, and write programs clearly and accuratelyDetermine which development techniques work best for you, and practice the important skill of debuggingLearn relationships among input and output, decisions and loops, classes and methods, strings and arraysWork on exercises involving word games, graphics, puzzles, and playing cards

Book Information

Paperback: 252 pages

Publisher: O’Reilly Media; 1 edition (June 2, 2016)

Language: English

ISBN-10: 1491929561

ISBN-13: 978-1491929568

Product Dimensions: 7 x 0.5 x 9.2 inches

Shipping Weight: 15.2 ounces (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars 5 customer reviews

Best Sellers Rank: #95,145 in Books (See Top 100 in Books) #43 inÂ Books > Textbooks > Computer Science > Object-Oriented Software Design #125 inÂ Books > Computers & Technology > Programming > Languages & Tools > Java #155 inÂ Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Object-Oriented Design

Customer Reviews

Allen B. Downey is a Professor of Computer Science at Olin College of Engineering. He has taught at Wellesley College, Colby College, and U.C. Berkeley. He has a Ph.D. in Computer Science from U.C. Berkeley and Masterâ ™s and Bachelorâ ™s degrees from MIT.Chris Mayfield is an Assistant Professor of Computer Science at James Madison University, with a research focus on CS

education and professional development. He has a Ph.D. in Computer Science from Purdue University and Bachelor's degrees in CS and German from the University of Utah.

This is the best book on programming I've read (and I've read quite a few over the years). The text is accessible to the novice programmer, but also manages to preserve a great deal of intellectual depth.

This is a good book. It offers a nice foundation. It is not overly hard to follow, but it still covers important details. It will not teach you everything there is to know about Java, but it is a really good start.

"As an instructor of introductory programming course at Monterey Pensisula College, I have used Allen and Chris' book for many semesters. I like the concise approach emphasizing critical thinking and problem solving skills with enough specifics on the Java language to enable students to practice the art of programming. I like the way the book transitions from procedural to object oriented coding through a series of understandable steps -- basic data types, to String objects, to static methods with object parameters, and then instance methods. My favorite assignment for students is writing the Rational class from the chapter on Classes."

This is a great book! I have taught high school AP Computer Science for the last 12 years and this text aligns perfectly with my course syllabus. Think Java is a refreshing change from the traditional CS textbook. The chapters are informative and short, making them perfect for homework assignments. The source code for each chapter is available online and includes practice exercises for your students. The appendix chapters are very helpful and a great resource for beginner programming students (the debugging appendix is hysterical).

I loved _Think Python_ by the same primary author. It is a very readable and well-paced introduction to programming, and also teaches a great deal about the Python programming language.This book attempts to do something similar, but in a different language: Java. The problem is that the Java programming paradigm - how it is used in practice - is very different from Python, and I don't think this book is really "Java-ish." Their intro to programming is fine, but as an intro to Java, it falls short. The level of Java reached in this book is elementary - you will be forced to supplement with something else. E.g. generics, comparators, are not covered.TL;dr I wouldn't

recommend this book to learn to program (better is _Think Python_), and for experienced programmers, I definitely wouldn't recommend it to learn Java.)

Java: 2017 Ultimate Beginners Guide to Learn Java Programming (java for dummies, java apps, java for beginners, java apps, hacking, hacking exposed) ... Programming, Developers, Coding, CSS, PHP) Think Java: How to Think Like a Computer Scientist Java: The Ultimate Guide to Learn Java and Javascript Programming Programming, Java, Database, Java for dummies, how to program, javascript, javascript ... Developers, Coding, CSS, PHP Book 2) Think Python: How to Think Like a Computer Scientist Computer Memory: Develop A Computer Like Memory In 5 Minutes A Day (Think Faster, Smarter, Sharper) Act Like a Lady, Think Like a Man, Expanded Edition CD: What Men Really Think About Love, Relationships, Intimacy, and Commitment Act like a Lady, Think like a Man: What Men Really Think About Love, Relationships, Intimacy, and Commitment How to Think Like Sherlock: Improve Your Powers of Observation, Memory and Deduction (How To Think Like series) Act Like a Lady, Think Like a Man, Expanded Edition: What Men Really Think About Love, Relationships, Intimacy, and Commitment 1st Grade Computer Basics : The Computer and Its Parts: Computers for Kids First Grade (Children's Computer Hardware Books) Truth or Truthiness: Distinguishing Fact from Fiction by Learning to Think Like a Data Scientist Know Your Onions - Graphic Design: How to Think Like a Creative, Act like a Businessman and Design Like a God Sound (Tabletop Scientist) (Tabletop Scientist) Java: Beginner's Guide to Programming Code with Java Java: Advanced Guide to Programming Code with Java (Volume 4) Learn Java 8 In a Week: A Beginner's Guide to Java Programming (Black Book) Java: Tips and Tricks to Programming Code with Java A Guide to Programming in Java: Java 2 Platform Standard Edition 5 Java 8 Pocket Guide: Instant Help for Java Programmers Passport's Illustrated Guide to Bali & Java (Passport's Illustrated Guide to Bali & Java, 2nd Ed)