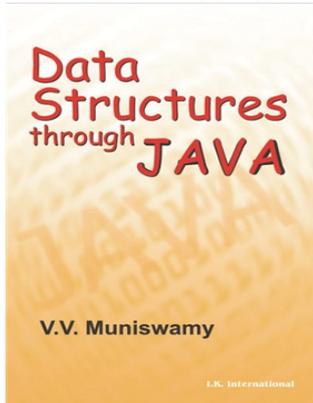# Data Structures Through Java: With CD-ROM containing Lab Manual, 1/e

V.V. Muniswamy

| 2009 | 408 pp | Paperback | ISBN: 9788189866822 | Price: 495.00 |

About the Book

This book is designed for the way we learn and intended for one-semester course in Data Structures through Java. This is a very useful guide for graduate and undergraduate students and teachers of Computer Science. This modern object-oriented approach to data structures helps students make the transition from a first course in programming to an integrated understanding of data structures and their applications. Carefully developing topics with sufficient detail, this text enables students to learn about concepts on their own, offering instructors' flexibility and allowing them to use the text as lecture reinforcement. It includes an exhaustive introduction to algorithms, an integral part of understanding data structures, and uses Java syntax and structure in the design of data structures. Its breadth of coverage insures that data structures and algorithms are carefully and comprehensively discussed.

Salient Features

▸Provides an understanding of fundamental data structures through clear explanations, illustrations, and exercises.
▸Uses actual Java code for nearly all algorithms.
▸Broad use of Java interfaces—defines and implements abstract data types. Gives students practical experience.
▸Clear and precise illustrations of program objects—aids students by providing clear visual images that help understanding and remembering.
▸Explicit use of Abstract Data Types—clarifies the distinction between how the type is used and what makes it work.
▸Includes exercises as well as many previous GATE questions.
▸Accompanies CD-ROM containing Lab Manual.

Table of Contents

1. Java Basics
2. Java Classes and Objects
3. Inheritance
4. Packages and Interfaces
5. Exception Handling
6. Multi-Threading
7. Java Library
8. Algorithms and Data Structures
9. Linked Lists
10. Stacks
11. Queues
12. Trees
13. Search Trees
14. Heaps and Priority Queues
15. Hashing
16. Graphs
17. Searching and Sorting
18. Text Processing References Index

About the Author

V.V. Muniswamy :- V.V. Muniswamy was Professor of Industrial Engineering and Computer Science at Sri Venkateswara University (SVU). He received his B.E. and M. Tech from SVU, Tirupati-AP and Ph.D. in Computer Simulation Modeling from Indian Institute of Technology (IIT), Madras. Dr. Swamy's computer software experience started in 1975 from IBM Mainframe in IIT (through punched cards) to PCs and Client-Server Systems. He is the first person to create computer awareness in SVU. He worked as an SAP consultant in the USA from 1997 to 2003. He has been involved in teaching and curriculum development in academic settings for more than forty years. He is currently the Director at Annamacharya Institute of Technology & Sciences, Tirupati.