

Java Software Structures Designing And Using Data Structures 4th Edition

Cay Horstmann offers readers an effective means for mastering computing concepts and developing strong design skills. This book introduces object-oriented fundamentals critical to designing software and shows how to implement design techniques. The author's clear, hands-on presentation and outstanding writing style help readers to better understand the material.· A Crash Course in Java· The Object-Oriented Design Process· Guidelines for Class Design· Interface Types and Polymorphism· Patterns and GUI Programming· Inheritance and Abstract Classes· The Java Object Model· Frameworks· Multithreading· More Design Patterns

Intended for use in the Java Data Structures course The fourth edition of Java Software Structures embraces the enhancements of the latest version of Java, where all structures and collections are based on generics. The framework of the text walks the reader through three main areas: conceptualization, explanation, and implementation, allowing for a consistent and coherent introduction to data structures. Students learn how to develop high-quality software systems using well-designed collections and algorithms. Teaching and Learning Experience To provide a better teaching and learning experience, for both instructors and students, this program will: Apply Theory and/or Research: Three main areas: conceptualization, explanation, and implementation, allow for a consistent and coherent introduction to data structures. Engage Students: Hands-on optional case studies and new VideoNotes tutorials offer real-world perspective, and keep students interested in the material. Support Instructors and Students: Instructor Supplemental Support includes PowerPoint presentation slides, Solution Manual, test bank, case studies with source code, and solutions.

Comprehensive treatment focuses on creation of efficient data structures and algorithms and selection or design of data structure best suited to specific problems. This edition uses Java as the programming language.

This book teaches beginners how to create well-designed software using Java and prepares them for both the A and AB advanced placement tests in Java. With a focus on object-oriented programming, teaching objects first and then writing classes, the authors identify the material, within an introduction to Java and a case study, that will be featured on the AP tests. Any student preparing to take the AP test in Java.

The fourth edition of Java Software Structures embraces the enhancements of the latest version of Java, where all structures and collections are based on generics. The framework of the text walks the reader through three main areas: conceptualization, explanation, and implementation, allowing for a consistent and coherent introduction to data structures. Readers will learn how to develop high-quality software systems using well-designed collections and algorithms.

JavaServer Pages (JSP) is harmonizing how web designers and programmers create dynamic web pages. The reason for this is simple: JSP capitalizes on the power of Java servlets to create effective, reusable web applications. JSP allows you to develop robust, powerful web content, and the best part is that you're not required to be a hard-core Java programmer. JavaServer Pages Pocket Reference is the perfect companion volume to O'Reilly's best-selling JavaServer Pages, also by Hans Bergsten. This book provides detailed coverage of JSP syntax and processing, directive elements, standard action elements, scripting elements, implicit objects, custom actions, tag library description creation, and WARs.

Inspired by the success of their best-selling introductory programming text, Java Software Solutions, authors Lewis, DePasquale, and Chase now release Java Foundations, Third Edition. This text is a comprehensive resource for instructors who want a two-or three-semester introduction to programming textbook that includes detail on data structures topics. Java Foundations introduces a Software Methodology early on and revisits it throughout to ensure students develop sound program development skills from the beginning. Control structures are covered before writing classes, providing a solid foundation of fundamental concepts and sophisticated topics.

Summary Serious developers know that code can always be improved. With each iteration, you make optimizations—small and large—that can have a huge impact on your application's speed, size, resilience, and maintainability. In Seriously Good Software: Code that Works, Survives, and Wins, author, teacher, and Java expert Marco Faella teaches you techniques for writing better code. You'll start with a simple application and follow it through seven careful refactorings, each designed to explore another dimension of quality. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Great code blends the skill of a programmer with the time-tested techniques and best practices embraced by the entire development community. Although each application has its own context and character, some dimensions of quality are always important. This book concentrates on eight pillars of seriously good software: speed, memory usage, reliability, readability, thread safety, generality, and elegance. The Java-based examples demonstrate techniques that apply to any OO language. About the book Seriously Good Software is a handbook for any professional developer serious about improving application quality. It explores fundamental dimensions of code quality by enhancing a simple implementation into a robust, professional-quality application. Questions, exercises, and Java-based examples ensure you'll get a firm grasp of the concepts as you go. When you finish the last version of the book's central project, you'll be able to confidently choose the right optimizations for your code. What's inside Evaluating software qualities Assessing trade-offs and interactions Fulfilling different objectives in a single task Java-based exercises you can apply in any OO language About the reader For

Read Book Java Software Structures Designing And Using Data Structures 4th Edition

web developers comfortable with JavaScript and HTML. About the author Marco Faella teaches advanced programming at a major Italian university. His published work includes peer-reviewed research articles, a Java certification manual, and a video course.

Table of Contents

- *Part 1: Preliminaries *
- 1 Software qualities and a problem to solve
- 2 Reference implementation
- *Part 2: Software Qualities*
- 3 Need for speed: Time efficiency
- 4 Precious memory: Space efficiency
- 5 Self-conscious code: Reliability through monitoring
- 6 Lie to me: Reliability through testing
- 7 Coding aloud: Readability
- 8 Many cooks in the kitchen: Thread safety
- 9 Please recycle: Reusability

Java Software Solutions teaches a foundation of programming techniques to foster well-designed object-oriented software. Heralded for its integration of small and large realistic examples, this worldwide best-selling text emphasizes building solid problem-solving and design skills to write high-quality programs.

MyProgrammingLab, Pearson's new online homework and assessment tool, is available with this edition. Subscriptions to MyProgrammingLab are available to purchase online or packaged with your textbook (unique ISBN). Use the following ISBNs to purchase MyProgrammingLab: Java Software Solutions: Foundations of Program Design & MyProgrammingLab with Pearson eText Student Access Code Card for Java Software Solutions, 7/E ISBN:0132760770 This package includes the Java Software Solutions, textbook, an access card for MyProgrammingLab, and a Pearson eText student access code card for the Java Software Solutions Pearson eText. MyProgrammingLab with Pearson eText -- Access Card -- for Java Software Solutions, 7/E ISBN: 013277478X This stand-alone access card package contains an access card for MyProgrammingLab and a Pearson eText student access code card for the Java Software Solutions Pearson eText. Purchase instant access to MyProgrammingLab online.

With Learning JavaScript Design Patterns, you'll learn how to write beautiful, structured, and maintainable JavaScript by applying classical and modern design patterns to the language. If you want to keep your code efficient, more manageable, and up-to-date with the latest best practices, this book is for you. Explore many popular design patterns, including Modules, Observers, Facades, and Mediators. Learn how modern architectural patterns—such as MVC, MVP, and MVVM—are useful from the perspective of a modern web application developer. This book also walks experienced JavaScript developers through modern module formats, how to namespace code effectively, and other essential topics. Learn the structure of design patterns and how they are written Understand different pattern categories, including creational, structural, and behavioral Walk through more than 20 classical and modern design patterns in JavaScript Use several options for writing modular code—including the Module pattern, Asynchronous Module Definition (AMD), and CommonJS Discover design patterns implemented in the jQuery library Learn popular design patterns for writing maintainable jQuery plug-ins "This book should be in every JavaScript developer's hands. It's the go-to book on JavaScript patterns that will be read

and referenced many times in the future."—Andrée Hansson, Lead Front-End Developer, presis!

A book for an undergraduate course on data structures which integrates the concepts of object-oriented programming and GUI programming.

Software Design for Engineers and Scientists integrates three core areas of computing: . Software engineering - including both traditional methods and the insights of 'extreme programming' . Program design - including the analysis of data structures and algorithms . Practical object-oriented programming Without assuming prior knowledge of any particular programming language, and avoiding the need for students to learn from separate, specialised Computer Science texts, John Robinson takes the reader from small-scale programming to competence in large software projects, all within one volume. Copious examples and case studies are provided in C++. The book is especially suitable for undergraduates in the natural sciences and all branches of engineering who have some knowledge of computing basics, and now need to understand and apply software design to tasks like data analysis, simulation, signal processing or visualisation. John Robinson introduces both software theory and its application to problem solving using a range of design principles, applied to the creation of medium-sized systems, providing key methods and tools for designing reliable, efficient, maintainable programs. The case studies are presented within scientific contexts to illustrate all aspects of the design process, allowing students to relate theory to real-world applications. Core computing topics - usually found in separate specialised texts - presented to meet the specific requirements of science and engineering students Demonstrates good practice through applications, case studies and worked examples based in real-world contexts The Model Driven Architecture defines an approach where the specification of the functionality of a system can be separated from its implementation on a particular technology platform. The idea being that the architecture will be able to easily be adapted for different situations, whether they be legacy systems, different languages or yet to be invented platforms. MDA is therefore, a significant evolution of the object-oriented approach to system development. Advanced System Design with Java, UML and MDA describes the factors involved in designing and constructing large systems, illustrating the design process through a series of examples, including a Scrabble player, a jukebox using web streaming, a security system, and others. The book first considers the challenges of software design, before introducing the Unified Modelling Language and Object Constraint Language. The book then moves on to discuss systems design as a whole, covering internet systems design, web services, Flash, XML, XSLT, SOAP, Servlets, Javascript and JSP. In the final section of the book, the concepts and terminology of the Model Driven Architecture are discussed. To get the most from this book, readers will need introductory knowledge of software engineering, programming in Java and basic knowledge of HTML. * Examines issues raised by the Model-Driven Architecture approach to

Read Book Java Software Structures Designing And Using Data Structures 4th Edition

development * Uses easy to grasp case studies to illustrate complex concepts *
Focused on the internet applications and technologies that are essential for
students in the online age

Computer Architecture/Software Engineering

For courses in Java Programming. A comprehensive, cohesive, and seamless exploration of Java programming Java Foundations is a comprehensive textbook for introductory programming sequences. The versatile layout supports a two-or three-semester sequence and introduces students to the world of programming—from basic programming concepts to the design and implementation of complex data structures. Inspired by the success of their industry-leading text, Java Software Solutions, authors Lewis, DePasquale, and Chase build a solid framework for lasting comprehension. The 5th Edition is updated to keep the content fully up-to-speed while incorporating changes from user feedback. The biggest change in this edition is the overhaul of the graphical content to fully embrace the JavaFX platform, which has replaced Swing as the supported technology for graphics and Graphical User Interfaces (GUIs) in Java. The switch over to the new approach simplifies GUI development and provides better opportunities to discuss object-oriented programming.

The design and analysis of efficient data structures has long been recognized as a key component of the Computer Science curriculum. Goodrich, Tomassia and Goldwasser's approach to this classic topic is based on the object-oriented paradigm as the framework of choice for the design of data structures. For each ADT presented in the text, the authors provide an associated Java interface. Concrete data structures realizing the ADTs are provided as Java classes implementing the interfaces. The Java code implementing fundamental data structures in this book is organized in a single Java package, `net.datastructures`. This package forms a coherent library of data structures and algorithms in Java specifically designed for educational purposes in a way that is complimentary with the Java Collections Framework.

Note: You are purchasing a standalone product; MyProgrammingLab does not come packaged with this content. If you would like to purchase both the physical text and MyProgrammingLab search for ISBN-10: 0133796280/ISBN-13: 9780133796285. That package includes ISBN-10: 0133594955/ISBN-13: 9780133594959 and ISBN-10:0133781283 /ISBN-13: 9780133781281.

MyProgrammingLab is not a self-paced technology and should only be purchased when required by an instructor. Java Software Solutions is intended for use in the Java programming course. It is also suitable for readers interested in introductory Java programming. Java Software Solutions teaches a foundation of programming techniques to foster well-designed object-oriented software. Heralded for its integration of small and large realistic examples, this worldwide best-selling text emphasizes building solid problem-solving and design skills to write high-quality programs. MyProgrammingLab for Java Software Solutions is a total learning package. MyProgrammingLab is an online homework, tutorial, and

assessment program that truly engages students in learning. It helps students better prepare for class, quizzes, and exams--resulting in better performance in the course--and provides educators a dynamic set of tools for gauging individual and class progress. Teaching and Learning Experience To provide a better teaching and learning experience, for both instructors and students, this program will: Personalize Learning: Through the power of practice and immediate personalized feedback, MyProgrammingLab helps students fully grasp the logic, semantics, and syntax of programming. Help Students Build Sound Program-Development Skills: A software methodology is introduced early and revisited throughout the text to ensure that students build sound program-development skills. Enhance Learning with In-text Features: A variety of features in each chapter help motivate learning. Provide Opportunities to Practice Design Skills and Implement Java Programs: A wealth of end-of-chapter programming projects and chapter review features help reinforce key concepts. Support Instructors and Students: Resources to support learning are available on the Companion website and Instructor Resource Center.

Software engineering and computer science students need a resource that explains how to apply design patterns at the enterprise level, allowing them to design and implement systems of high stability and quality. Software Architecture Design Patterns in Java is a detailed explanation of how to apply design patterns and develop software architectures. It provides in-depth examples in Java, and guides students by detailing when, why, and how to use specific patterns. This textbook presents 42 design patterns, including 23 GoF patterns. Categories include: Basic, Creational, Collectional, Structural, Behavioral, and Concurrency, with multiple examples for each. The discussion of each pattern includes an example implemented in Java. The source code for all examples is found on a companion Web site. The author explains the content so that it is easy to understand, and each pattern discussion includes Practice Questions to aid instructors. The textbook concludes with a case study that pulls several patterns together to demonstrate how patterns are not applied in isolation, but collaborate within domains to solve complicated problems.

Data structures provide a means to managing large amounts of information such as large databases, using SEO effectively, and creating Internet/Web indexing services. This book is designed to present fundamentals of data structures for beginners using the Java programming language in a friendly, self-teaching format. Practical analogies using real world applications are integrated throughout the text to explain technical concepts. The book includes a variety of end-of-chapter practice exercises, e.g., programming, theoretical, and multiple-choice. Features: Covers data structure fundamentals using Java Numerous tips, analogies, and practical applications enhance understanding of subjects under discussion "Frequently Asked Questions" integrated throughout the text clarify and explain concepts Includes a variety of end-of-chapter exercises, e.g., programming, theoretical, and multiple choice

Read Book Java Software Structures Designing And Using Data Structures 4th Edition

Describes ways to incorporate domain modeling into software development. Master the fundamentals of Scala and understand its emphasis on functional programming that sets it apart from Java. This book will help you translate what you already know in Java to Scala to start your functional programming journey. Learn Scala is split into four parts: a tour of Scala, a comparison between Java and Scala, Scala-specific features and functional programming idioms, and finally a discussion about adopting Scala in existing Java teams and legacy projects. After reading and using this tutorial, you'll come away with the skills in Scala to kick-start your productivity with this growing popular language. What You'll Learn Tour Scala and learn the basic syntax, constructs, and how to use the REPL Translate Java syntax that you already know into Scala Learn what Scala offers over and above Java Become familiar with functional programming concepts and idioms Gain tips and advice useful when transitioning existing Java projects to Scala Who This Book Is For Java developers looking to transition to Scala. No prior experience necessary in Scala.

This practical text contains fairly "traditional" coverage of data structures with a clear and complete use of algorithm analysis, and some emphasis on file processing techniques as relevant to modern programmers. It fully integrates OO programming with these topics, as part of the detailed presentation of OO programming itself. Chapter topics include lists, stacks, and queues; binary and general trees; graphs; file processing and external sorting; searching; indexing; and limits to computation. For programmers who need a good reference on data structures.

Data is at the center of many challenges in system design today. Difficult issues need to be figured out, such as scalability, consistency, reliability, efficiency, and maintainability. In addition, we have an overwhelming variety of tools, including relational databases, NoSQL datastores, stream or batch processors, and message brokers. What are the right choices for your application? How do you make sense of all these buzzwords? In this practical and comprehensive guide, author Martin Kleppmann helps you navigate this diverse landscape by examining the pros and cons of various technologies for processing and storing data. Software keeps changing, but the fundamental principles remain the same. With this book, software engineers and architects will learn how to apply those ideas in practice, and how to make full use of data in modern applications. Peer under the hood of the systems you already use, and learn how to use and operate them more effectively Make informed decisions by identifying the strengths and weaknesses of different tools Navigate the trade-offs around consistency, scalability, fault tolerance, and complexity Understand the distributed systems research upon which modern databases are built Peek behind the scenes of major online services, and learn from their architectures A Concise, Comprehensive Approach to Java Programming Java Foundations is a comprehensive textbook for introductory programming sequences. The versatile layout supports a two-or three-semester schedule and introduces you to

the world of programming--from the basics, to complex data structures. Inspired by the success of their highly successful text, *Java Software Solutions*, authors Lewis, DePasquale and Chase build a solid framework for lasting comprehension. The Fourth Edition is updated and revised to keep the content fully up-to-speed while incorporating changes from user feedback. One such revision is maintaining a section on Swing in addition to a separate chapter dedicated to JavaFX. Although JavaFX is slated to replace Swing as the main graphics package in Java, the large amount of existing Swing code will continue to make it relevant for some time to come. The overall flow of the text is redesigned for intuitive progression through programming discussions and problem solving.

Threads are a fundamental part of the Java platform. As multicore processors become the norm, using concurrency effectively becomes essential for building high-performance applications. Java SE 5 and 6 are a huge step forward for the development of concurrent applications, with improvements to the Java Virtual Machine to support high-performance, highly scalable concurrent classes and a rich set of new concurrency building blocks. In *Java Concurrency in Practice*, the creators of these new facilities explain not only how they work and how to use them, but also the motivation and design patterns behind them. However, developing, testing, and debugging multithreaded programs can still be very difficult; it is all too easy to create concurrent programs that appear to work, but fail when it matters most: in production, under heavy load. *Java Concurrency in Practice* arms readers with both the theoretical underpinnings and concrete techniques for building reliable, scalable, maintainable concurrent applications. Rather than simply offering an inventory of concurrency APIs and mechanisms, it provides design rules, patterns, and mental models that make it easier to build concurrent programs that are both correct and performant. This book covers: Basic concepts of concurrency and thread safety Techniques for building and composing thread-safe classes Using the concurrency building blocks in `java.util.concurrent` Performance optimization dos and don'ts Testing concurrent programs Advanced topics such as atomic variables, nonblocking algorithms, and the Java Memory Model

This is the eagerly-anticipated revision to one of the seminal books in the field of software architecture which clearly defines and explains the topic.

A catalog of solutions to commonly occurring design problems, presenting 23 patterns that allow designers to create flexible and reusable designs for object-oriented software. Describes the circumstances in which each pattern is applicable, and discusses the consequences and trade-offs of using the pattern within a larger design. Patterns are compiled from real systems, and include code for implementation in object-oriented programming languages like C++ and Smalltalk. Includes a bibliography. Annotation copyright by Book News, Inc., Portland, OR This title teaches CS2 students how to develop high quality software systems that will withstand the test of users and the test of time. The authors provide a consistent presentation of data structures, starting with a conceptual overview.

Data Structures and Other Objects Using Java is a gradual, "just-in-time" introduction to Data Structures for a CS2 course. Each chapter provides a review of the key aspects of object-oriented programming and a syntax review, giving students the foundation for understanding significant programming concepts. With this framework they are able to accomplish writing functional data structures by using a five-step method for working with data types; understanding the data type abstractly, writing a specification, using the data type, designing and implementing the data type, and analyzing the implementation. Students learn to think analytically about the efficiency and efficacy of design while gaining exposure to useful Java

Read Book Java Software Structures Designing And Using Data Structures 4th Edition

classes libraries.

This text is intended for use in the Java programming course Tony Gaddis's accessible, step-by-step presentation helps beginning students understand the important details necessary to become skilled programmers at an introductory level. Gaddis motivates the study of both programming skills and the Java programming language by presenting all the details needed to understand the "how" and the "why"—but never losing sight of the fact that most beginners struggle with this material. His approach is both gradual and highly accessible, ensuring that students understand the logic behind developing high-quality programs. In *Starting Out with Java: Early Objects*, Gaddis looks at objects—the fundamentals of classes and methods—before covering procedural programming. As with all Gaddis texts, clear and easy-to-read code listings, concise and practical real-world examples, and an abundance of exercises appear in every chapter. Teaching and Learning Experience This program presents a better teaching and learning experience—for you and your students. Enhance Learning with the Gaddis Approach: Gaddis's accessible approach features clear and easy-to-read code listings, concise real-world examples, and exercises in every chapter. Keep Your Course Current: Content is refreshed to provide the most up-to-date information on new technologies for your course. Support Instructors and Students: Student and instructor resources are available to expand on the topics presented in the text.

Data Structures and Problem Solving Using Java, Second Edition provides a practical introduction to data structures and algorithms from the viewpoint of abstract thinking and problem solving, as well as the use of Java. This text has a clear separation of the interface and implementation to promote abstract thinking. Java allows the programmer to write the interface and implementation separately, to place them in separate files and compile separately, and to hide the implementation details. This book goes a step further: the interface and implementation are discussed in separate parts of the book. Part I (Tour of Java), Part II (Algorithms and Building Blocks), and Part III (Applications) lay the groundwork by discussing basic concepts and tools and providing some practical examples, but implementation of data structures is not shown until Part IV (Implementations). Class interfaces are written and used before the implementation is known, forcing the reader to think about the functionality and potential efficiency of the various data structures (e.g., hash tables are written well before the hash table is implemented). *NEW! Complete chapter covering Design Patterns (Chapter 5).

*NE

Java Software Structures teaches CS2 students how to develop high quality software systems that will withstand the test of users and the test of time. The authors provide a consistent presentation of data structures, starting with a conceptual overview and moving through an explanation of each data structure's usefulness. Various approaches to implementing each data structure are also explored along with a list of the Pros and Cons for each implementation. Good software engineering practices are kept on the front lines of discussion when it comes to the more complicated data structures. The book is designed to be flexible, allowing professors to cover the collections and issues they want to stress. - Provides a consistent, easy-to-follow presentation of data structures. - Presents material in a flexible way, professors can choose what they want to stress. - Utilizes the graphical user interface in such a way that instructors who don't cover GUIs can skip over these examples easily. - Strong focus on software engineering concepts throughout the text. - Reviews key language concepts in an appendix. - Perfect follow-up to Lewis/Loftus, *Java Software Solutions*. - Complete supplements pa

If you're a student studying computer science or a software developer preparing for technical interviews, this practical book will help you learn and review some of the most important ideas in software engineering—data structures and algorithms—in a way that's clearer, more concise, and more engaging than other materials. By emphasizing

Read Book Java Software Structures Designing And Using Data Structures 4th Edition

practical knowledge and skills over theory, author Allen Downey shows you how to use data structures to implement efficient algorithms, and then analyze and measure their performance. You'll explore the important classes in the Java collections framework (JCF), how they're implemented, and how they're expected to perform. Each chapter presents hands-on exercises supported by test code online. Use data structures such as lists and maps, and understand how they work Build an application that reads Wikipedia pages, parses the contents, and navigates the resulting data tree Analyze code to predict how fast it will run and how much memory it will require Write classes that implement the Map interface, using a hash table and binary search tree Build a simple web search engine with a crawler, an indexer that stores web page contents, and a retriever that returns user query results Other books by Allen Downey include Think Java, Think Python, Think Stats, and Think Bayes.

"Designing Data Structures in Java" provides a solid foundation for anyone seeking to understand the how and the why of programming data structures. Intended for the reader with an introductory Java background, this book aims to meet the needs of students enrolled in a typical "Data Structures and Algorithms with Java" (CS2) course. Starting with a description of the software development process, the book takes a problem-solving approach to programming, and shows how data structures form the building blocks of well-designed and cleanly-implemented programs. Topics include: Problem solving, Abstraction, Java objects and references, Arrays, Abstract Data Types, Ordered lists, Sorting, Algorithm evaluation, Binary searches, Stacks, Queues, Linked Lists, Double-ended lists, Recursion, Doubly-linked lists, Binary Search Trees, Traversals, Heaps, and more. Mr. Brouillette's 25+ years of experience as a software engineer and educator allow him to bring a unique and refreshing perspective to the topic of data structures which is rigorous, accessible and practical. Material is presented in a 'top down' approach, beginning with explanations of why different data structures are used, continuing with clearly illustrated concepts of how the structures work, and ending with clear, neat Java code examples. Succinct graphics provide visual representations of the ideas, and verbal explanations supplement the documented code. Each chapter ends with a Chapter Checklist summary page which distills and highlights the most important ideas from the chapter. The book is intended as a step by step explanation and exploration of the how and why of using Data Structures in modern computer program development. Even though the Java language is used in the explanation and implementation of the various structures, the concepts are applicable to other languages which the reader may encounter in the future. The topics included have been sequenced to build upon each other, always with the perspective of the beginning programming student in mind. There are discussions of software engineering concepts and goals, and motivations for learning different data structures. This text brings the beginning Java student from novice programmer to the next level of programming maturity.

Java Software Solutions teaches a foundation of programming techniques to foster well-designed object-oriented software. Heralded for its integration of small and large realistic examples, this worldwide best-selling text emphasizes building solid problem-solving and design skills to write high-quality programs. MyProgrammingLab, Pearson's new online homework and assessment tool, is available with this edition.

The second edition of Duane Bailey's Java Structures considers the design,

implementation, and use of data structures using Java 2. The structure package, a collection of nearly 100 different classes implementing a wide variety of data structures, has been the basis of Java Structures for more than five years. Thousands of faculty, students, researchers, industrial and recreational programmers have investigated this lean and well tested approach to data structure design. In this edition, the text develops a heavily tested package that is independent of but consistent with the Collection package offered by Sun. In many cases, the variety of implementations provides the programmer choices of data structure that are not available with the Collection system. For those curricula that make use of the Collection package, the structure package can be easily integrated into existing applications. All classes are fully documented and make consistent use of pre- and post-conditioning, and include support for assertion testing. The second edition also brings a wealth of new resources, including a large number of new and original exercises and drill problems. Throughout the text, exercises appear in the running text to direct a deeper consideration of subtle issues by students. Perhaps the most innovative feature (first found in Bailey's Java Elements) is the inclusion of more than a dozen original lab exercises that focus on interesting and often classic problems of computer science. All code for the book's examples, documentation, and the STRUCTURE package is posted on the book's website at www.mhhe.com/javastructures.

Inspired by the success of their best-selling introductory programming text, Java Software Solutions, authors Lewis, DePasquale, and Chase now release Java Foundations, Second Edition. This text is a comprehensive resource for instructors who want a two-or three-semester introduction to programming textbook that includes detail on data structures topics. Java Foundations introduces a Software Methodology early on and revisits it throughout to ensure students develop sound program development skills from the beginning. Control structures are covered before writing classes, providing a solid foundation of fundamental concepts and sophisticated topics. This is a step-by-step guide to successful wireless application design and development with Sun's Java 2 Micro Edition platform. Authored by one of Sun's leading wireless application consultants, it covers every key feature of the J2ME platform, and every step of the process -- from architecture through deployment. Piroumian begins by introducing the J2ME computing platform, key terminology, basic concepts, and application development process. Next, you'll walk through creating, compiling, preparing, executing, and debugging J2ME applications. One step at a time, you'll master J2ME MIDP platform's high-level and low-level APIs, user interface components, persistent storage mechanisms, and services for networking and distributed processing. The book teaches how to build applications from the ground up, using running examples. All topics are introduced in a logical order where each concept builds upon the ones that precede it. Piroumian also covers architecture and its impact on the developer; and introduces key elements of a complete wireless solution, including gateways, Internet portal interfaces, and wireless application interfaces.

[Copyright: 4f7ae096f97aa2082bd885f664afd61e](http://www.mhhe.com/javastructures)