

Java And Object Oriented Programming Paradigm Debasis Jana

This book has a strong focus on object-oriented design and gives readers a realistic experience of writing programs that are systems of cooperating objects. Programming fundamentals are learned through visually appealing graphics applications in all examples and exercises. Introduction of object-oriented concepts from the beginning including objects, classes, polymorphism, inheritance, and interfaces. It fully embraces Java 5.0 topics including the standard scanner class and makes extensive use of graphical user-interfaces and real graphics applications. This book is appropriate for beginning programmers who want to learn to program with Java as well as experienced programmers who want to add Java to their skill-set.

Object-Oriented Programming and Java Springer Science & Business Media
"Head First Object Oriented Analysis and Design is a refreshing look at subject of OOAD. What sets this book apart is its focus on learning. The authors have made the content of OOAD accessible, usable for the practitioner." Ivar Jacobson, Ivar Jacobson Consulting **"I just finished reading HF OOAD and I loved it! The thing I liked most about this book was its focus on why we do OOAD-to write great software!"** Kyle Brown, Distinguished Engineer, IBM **"Hidden behind the funny pictures and crazy fonts is a serious, intelligent, extremely well-crafted presentation of OO Analysis and Design. As I read the book, I felt like I was looking over the shoulder of an expert designer who was explaining to me what issues were important at each step, and why."** Edward Sciore, Associate Professor, Computer Science Department, Boston College **Tired of reading Object Oriented Analysis and Design books that only makes sense after you're an expert? You've heard OOAD can help you write great software every time-software that makes your boss happy, your customers satisfied and gives you more time to do what makes you happy. But how? Head First Object-Oriented Analysis & Design shows you how to analyze, design, and write serious object-oriented software: software that's easy to reuse, maintain, and extend; software that doesn't hurt your head; software that lets you add new features without breaking the old ones. Inside you will learn how to: Use OO principles like encapsulation and delegation to build applications that are flexible Apply the Open-Closed Principle (OCP) and the Single Responsibility Principle (SRP) to promote reuse of your code Leverage the power of design patterns to solve your problems more efficiently Use UML, use cases, and diagrams to ensure that all stakeholders are communicating clearly to help you deliver the right software that meets everyone's needs. By exploiting how your brain works, Head First Object-Oriented Analysis & Design compresses the time it takes to learn and retain complex information. Expect to have fun, expect to learn, expect to be writing great software consistently by the time you're finished reading this!**

Take a step beyond syntax to discover the true art of software design, with Java as your paintbrush and objects on your palette. This in-depth discussion of how, when, and why to use objects enables you to create programs that not only work smoothly, but are easy to maintain and upgrade using Java or any other object-oriented language! Companion CD software Pc.zip (8.4MB) Unix.zip (541K)

Learn and Test Your Skills

Problem Solving Through Object Oriented Analysis and Design

The Object-Oriented Approach

Object-oriented Programming Featuring Graphical Applications in Java

An Introduction

Abstraction, Specification, and Object-oriented Design

Java's support for GUI and network programming makes a great setting for diverse programming examples: a calculator, a strategy game, reading the Dow Jones from Yahoo , a Web surveyor application, scheduling songs for a rock-and-roll radio station, as well as traditional payroll and student GPA computations. Working with these and other examples, students learn to think like a programmer, analyze problems, devise solutions, design classes, and write code. Features *Uses the necessary features of Java 1.1 while teaching C# concepts. *Uses object-oriented concepts from the very beginning—classes, objects, and messages are all introduced in Chapter 1—and develops them throughout. *Applies a consistent class design procedure, usable by beginners. *Contains graphic user interface (GUI) supplements in each chapter. *Provides an early introduction to testing, covering test drivers, debugging, and test case selection. *Includes a chapter with three robust applications—a LOGO turtle, a Web surveyor, and Mancala (a strategy game)—which use the text's class design procedure and allow the students to tie the material together.

Written to appeal to both novice and veteran programmers, this complete and well-organized guide to the versatile and popular object-oriented programming language Java shows how to use it as a primary tool in many different aspects of one's programming work. It emphasizes the importance of good programming style—particularly the need to maintain an object's integrity from outside interference—and helps users harness the power of Java in object-oriented programming to create their own interesting and practical every-day applications. Discusses the basics of computer systems, and describes the fundamental elements of the Java language, with complete instructions on how to compile and run a simple program. Introduces fundamental object-oriented concepts, and shows how simple classes may be defined from scratch. Explores Java's exception-handling mechanism, and investigates Java's interface facility (i.e., polymorphism). Covers all Java applications, including use of the Abstract Windowing Toolkit, graphical programming, networking, and simulation. Includes numerous exercises, periodic reviews, case studies, and supporting visuals. For those in the computer science industry.

Connecting with students of all levels in the Introductory Programming course, Gary Bronson builds the problem solving skills that students need to be successful in Computer Science. Bronson presents a new and unique method of introducing class and object-oriented design using familiar examples of recipes and product plans, both of which contain lists of procedures and materials. These fundamental ideas and design techniques are clearly applied throughout the text and further highlighted in the "Program Design and Development" sections in later chapters. This very well written text engages a wide variety of students. It includes a wealth of pedagogical learning aids to guide students while enriching the course for more advanced students with special features like the "Closer Look" boxes. Teaching object-oriented programming from the beginning, the book also introduces the Unified Modeling Language (UML) and provides an Internet development environment on the accompanying CD-ROM. Overall, this book equips students for success with a solid foundation in problem-solving and object-oriented programming.

Using research in neurobiology, cognitive science and learning theory, this text loads patterns into your brain in a way that lets you put them to work immediately, makes you better at solving software design problems, and improves your ability to speak the language of patterns with others on your team.

Object Oriented Programming In Java (With Cd)

Head First Design Patterns

Java Methods, Second AP Edition

Java with Object-Oriented and Generic Programming

Object-oriented Programming in JAVA

Object-Oriented Programming Languages: Interpretation

Discover object oriented programming with Java in this unique tutorial. This book uses Java and Eclipse to write and generate output for examples in topics such as classes, interfaces, overloading, and overriding. Interactive Object Oriented Programming in Java uniquely presents its material in a dialogue with the reader to encourage thinking and experimentation. Later chapters cover further Java programming concepts, such as abstract classes, packages, and exception handling. At each stage you'll be challenged by the author to help you absorb the information and become a proficient Java programmer. Additionally, each chapter contains simple assignments to encourage you and boost your confidence level. What You Will Learn
Become proficient in object oriented programming Test your skills in the basics of Java Develop as a Java programmer Use the Eclipse IDE to write your code Who This Book Is For Software developers and software testers.

Object-Oriented Design with UML and Java provides an integrated introduction to object-oriented design with the Unified Modeling Language (UML) and the Java programming language. The book demonstrates how Java applications, no matter how small, can benefit from some design during their construction. Fully road-tested by students on the authors' own courses, the book shows how these complementary technologies can be used effectively to create quality software. It requires no prior knowledge of object orientation, though readers must have some experience of Java or other high level programming language. This book covers object technology; object-oriented analysis and design; and implementation of objects with Java. It includes two case studies dealing with library applications. The UML has been incorporated into a graphical design tool called ROME, which can be downloaded from the book's website. This object modelling environment allows readers to prepare and edit various UML diagrams. ROME can be used alongside a Java compiler to generate Java code from a UML class diagram then compile and run the resulting application for hands on learning. This text would be a valuable resource for undergraduate students taking courses on O-O analysis and design, O-O modelling, Java programming, and modelling with UML. * Integrates design and implementation, using Java and UML * Includes case studies and exercises * Bridges the gap between programming texts and high level analysis books on design

A tutorial introducing Java basics covers programming principles, integrating applets with Web applications, and using threads, arrays, and sockets.

This engaging textbook provides an accessible introduction to coding and the world of Object-Oriented (OO) programming, using Java as the illustrative programming language. Emphasis is placed on what is most helpful for the first-time coder, in order to develop and understand their knowledge and skills in a way that is relevant and practical. The examples presented in the text demonstrate how skills in OO programming can be used to create applications and programs that have real-world value in daily life. Topics and features: presents an overview of programming and coding, and a concise introduction to programming in Java using BlueJ; discusses classes and objects, reviews various Java library objects and packages, and introduces the idea of the Application Programming Interface (API); highlights how OO design forms an essential role in producing a useful solution to a problem, and the importance of the concept of class polymorphism; examines what to do when code encounters an error condition, describing the exception handling mechanism and practical measures in defensive coding; investigates the work of arrays and collections, with a particular focus on fixed length arrays, the ArrayList, HashMap and HashSet; describes the basics of building a Graphical User Interface (GUI) using Swing, and the concept of a design pattern; outlines two complete applications, from conceptual design to implementation, illustrating the content covered by the rest of the book; provides code for all examples and projects at an associated website. This concise guide is ideal for the novice approaching OO programming for the first time, whether they are a student of computer science embarking on a one-semester course in this area, or someone learning for the purpose of professional development or self-improvement. The text does not require any prior knowledge of coding, software engineering, OO, or mathematics.

From Problem Solving to Java

Java, Java, Java!

Object-oriented Programming in Java

Object-oriented Problem Solving

Introduction to Object-Oriented Programming with Java

Object-oriented Programming

This comprehensive examination of the main approaches to object-oriented language explains key features of the languages in use today. Class-based, prototypes and Actor languages are all examined and compared in terms of their semantic concepts. This book provides a unique overview of the main approaches to object-oriented languages. Exercises of varying length, some of which can be extended into mini-projects are included at the end of each chapter. This book can be used as part of courses on Comparative Programming Languages or Programming Language Semantics at Second or Third Year Undergraduate Level. Some understanding of programming language concepts is required.

Object-Oriented Programming: From Problem Solving to Java provides a thorough, easy-to-follow reference to master object-oriented programming principles. Throughout the text, problem solving and programming techniques are presented in modeling diagrams, pseudo-code, and flowcharts. Users then learn how to put theory into practice using actual Java code. Unlike "cookbook" guides where users blindly follow the instructions this book encourages users to explore their problem solving creativity, and then test their ideas in a real-world environment. By first learning the concepts involved in object-oriented programming, and then learning how to put them into use, readers not only learn Java, but they also learn how to become more efficient programmers.

This book introduces the Java Programming Language ad explains how to create Java applications and applets. It also discusses various Java programming concepts, such as Object Oriented Programming (OOP), arrays as Data Structure, inheritance, multithreaded programming, and HTML Programming. Chapter 1: Java FundamentalsChapter 2: Working with Java Members and Flow Control StatementsChapter 3: Working with Arrays, Vectors, Strings, and Wrapper ClassesChapter 4: Exception Handling and I/O OperationsChapter 5: Implementing Inheritance in JavaChapter 6: Multithreading and Packages in JavaChapter 7: Working with

AppletsChapter 8: Window-Based Applications in Java

This book offers a thorough introduction to the concepts and practices of object-oriented programming in Java. It also introduces the most common data structures and related algorithms and their implementations in the Java collections framework. Chapters 1 14 follow the syllabus of the AP Computer Science in Java course. They will prepare you well for the AP CS exam. Chapters 15-18 on file input and output, graphics, graphical user interfaces, and events handling in Java will give you a better sense of real-world Java programming, this material also makes case studies, labs, and exercises more fun. Chapters 19-26 deal with more advanced data structures and algorithms. Chapter 27, Design Patterns, introduces more intricate aspects of object-oriented design and serves as an introduction to design patterns. The last chapter, Computing in Context, discusses creative, responsible, and ethical computer use.

Beginning Java 17 Fundamentals

Object-Oriented Programming and Java

Object-Oriented Programming using Java

OBJECT ORIENTED PROGRAMMING WITH JAVA

Tutorial OOP with Java Programming for Beginners.

An Object-oriented Approach

Learn object-oriented programming (O.O.P) with Java * Tutorial OOP with Java programming for beginners. Summary of the theory of the Java programming language. * Contents: + Chapter 1 - OOP and Java ? + Chapter 2 - Classes and Objects + Chapter 3 - More on Classes and Nested Classes + Chapter 4 - Interface and Inheritance + Java Programming Code Examples**

Learn the fundamentals of the Java 17 LTS or Java Standard Edition version 17 Long Term Support release, including basic programming concepts and the object-oriented fundamentals necessary at all levels of Java development. Authors Kishori Sharan and Adam L. Davis walk you through writing your first Java program step-by-step. Armed with that practical experience, you'll be ready to learn the core of the Java language. Beginning Java 17 Fundamentals provides over 90 diagrams and 240 complete programs to help you learn the topics faster. While this book teaches you the basics, it also has been revised to include the latest from Java 17 including the following: value types (records), immutable objects with an efficient memory layout; local variable type inference (var); pattern matching, a mechanism for testing and deconstructing values; sealed types, a mechanism for declaring all possible subclasses of a class; multiline text values; and switch expressions. The book continues with a series of foundation topics, including using data types, working with operators, and writing statements in Java. These basics lead onto the heart of the Java language: object-oriented programming. By learning topics such as classes, objects, interfaces, and inheritance you'll have a good understanding of Java's object-oriented model. The final collection of topics takes what you've learned and turns you into a real Java programmer. You'll see how to take the power of object-oriented programming and write programs that can handle errors and exceptions, process strings and dates, format data, and work with arrays to manipulate data. What You Will Learn Write your first Java programs with emphasis on learning object-oriented programming How to work with switch expressions, value types (records), local variable type inference, pattern matching switch and more from Java 17 Handle exceptions, assertions, strings and dates, and object formatting Learn about how to define and use modules Dive in depth into classes, interfaces, and inheritance in Java Use regular expressions Take advantage of the JShell REPL tool Who This Book Is For Those who are new to Java programming, who may have some or even no prior programming experience

Introduction to Programming with Greenfoot: Object-Oriented Programming in Java with Games and Simulations is ideal for introductory courses in Java Programming or Introduction to Computer Science. The only textbook to teach Java programming using Greenfoot—this is "Serious Fun." Programming doesn't have to be dry and boring. This book teaches Java programming in an interactive and engaging way that is technically relevant, pedagogically sound, and highly motivational for students. Using the Greenfoot environment, and an extensive collection of compelling example projects, students are given a unique, graphical framework in which to learn programming.

The goal of this book is to explore the principle ideas of object-oriented programming using the Java programming language. It begins teaching the object-oriented power of Java by relying on textual commands instead of emphasizing the AWT or Swing libraries, providing the reader with a simple, generic introduction to the OO concepts using Java (without the language details getting in the way of the concept presentation). The author provides a thorough introduction to the three fundamental concepts of object-oriented programming: Encapsulation, Inheritance, and Polymorphism. The presentation of OO theory is augmented by interleaved examples that illustrate these concepts. Most of these program examples are 2-D graphics programs that provide an intuitive context for the issues that must be addressed when learning OOP. Additionally, since graphics programming is one of the strengths of the Java development environment, the examples produce interesting and unexpected images that engage and motivate the reader. It contains a concise introduction to using Design Patterns particularly the Template Method, Iterator, and Composite design patterns which relate to the graphics examples in the book and uses UML class diagrams to show the static structure of systems and sequence diagrams to show object interactions. This book is appropriate for readers who are new to object-oriented (but have experience with a non-object-oriented language) and for programmers who want to learn the graphical elements and capabilities of Java.

Object-oriented Programming for the World Wide Web

Concise Guide to Object-Oriented Programming

The Object-Oriented Thought Process

Learning Java

Object-Oriented Programming in Java 17

A Graphical Approach

KEY FEATURES: Up-to-date Java 2 coverage, including coverage of the Swing Set Graphics, servlets, RMI, CORBA, Java beans, and networking topics such as security and encryption. Object-oriented programming is introduced in Chapter One and readers start to use and apply these concepts in Chapter Two. The pedagogy of the book is strongly reinforced by way of more than 600 section review exercises, including answers to all odd-numbered exercises. In addition, the book contains over 500 examples, 200 of which are complete programs. Over a dozen extended sample applications are included, which emphasize (a) problem statement, (b) problem solution, (c) Java implementation, (d) detailed discussion of the Sample Application, and (e) program development principles. Provides a comprehensive supplement package, including an Instructor CD, PowerPoint Slides, and a Companion Website.

Covering the latest in Java technologies, Object-Oriented Programming and Java teaches the subject in a systematic, fundamentals-first approach. It begins with the description of real-world object interaction scenarios and explains how they can be translated, represented and executed using object-oriented programming paradigm. By establishing a solid foundation in the understanding of object-oriented programming concepts and their applications, this book provides readers with the pre-requisites for writing proper object-oriented programs using Java.

"Java, Java, Java, Third Edition systematically introduces the Java 1.5 language to the context of practical problem-solving and effective object-oriented design. Carefully and incrementally, the authors demonstrate how to decompose problems, use UML diagrams to design Java software that solves those problems, and transform their designs into efficient, robust code. The book reflects the latest patterns and techniques in teaching Java, and their examples help readers apply sophisticated techniques rapidly and effectively."—BOOK JACKET

This book is designed to introduce object-oriented programming (OOP) in C++ and Java, and is divided into four areas of coverage: Preliminaries: Explains the basic features of C, C++, and Java such as data types, operators, control structures, storage classes, and array structures. Part I : Covers classes, objects, data abstraction, function overloading, information hiding, memory management, inheritance, binding, polymorphism, class template using working illustrations based on simple concepts. Part II : Discusses all the paradigms of Java programming with ready-to-use programs. Part III : Contains eight Java packages with their full structures. The book offers straightforward explanations of the concepts of OOP and discusses the use of C++ and Java in OOP through small but effective illustrations. It is ideally suited for undergraduate/postgraduate courses in computer science. The IT professionals should also find the book useful.

Object-oriented Program Development Using Java

Object-Oriented Design with UML and Java

A Class-centered Approach

An Introduction to Object-Oriented Programming with Java

Java with Object-oriented Programming

The Practical Guide to Effective, Efficient Program Design

A comprehensive Java guide, with samples, exercises, case studies, and step-by-step instruction Beginning Java Programming: The Object Oriented Approach is a straightforward resource for getting started with one of the world's most enduringly popular programming languages. Based on classes taught by the authors, the book starts with the basics and gradually builds into more advanced concepts. The approach utilizes an integrated development environment that allows readers to immediately apply what they learn, and includes step-by-step instruction with plenty of sample programs. Each chapter contains exercises based on real-world business and educational scenarios, and the final chapter uses case studies to combine several concepts and put readers' new skills to the test. Beginning Java Programming: The Object Oriented Approach provides both the information and the tools learners need to develop Java skills, from the general concepts of object-oriented programming. Learn to: Understand the Java language and object-oriented concept implementation Use Java to access and manipulate external data Make

applications accessible to users with GUIs Streamline workflow with object-oriented patterns The book is geared for those who want to use Java in an applied environment while learning at the same time. Useful as either a course text or a stand-alone self-study program, Beginning Java Programming is a thorough, comprehensive guide.

This book offers contemporary, comprehensive and in-depth coverage of all the concepts of object-oriented technologies, with an emphasis on problem-solving approaches as applied to C++ and Java Programming paradigms.

The Object-Oriented Thought Process Third Edition Matt Weisfeld An introduction to object-oriented concepts for developers looking to master modern application practices. Object-oriented programming (OOP) is the foundation of modern programming languages, including C++, Java, C#, and Visual Basic .NET. By designing with objects rather than treating the code and data as separate entities, OOP allows objects to fully utilize other objects' services as well as inherit their functionality. OOP promotes code portability and reuse, but requires a shift in thinking to be fully understood. Before jumping into the world of object-oriented programming languages, you must first master The Object-Oriented Thought Process. Written by a developer for developers who want to make the leap to object-oriented technologies as well as managers who simply want to understand what they are managing, The Object-Oriented Thought Process provides a solution-oriented approach to object-oriented programming. Readers will learn to understand object-oriented design with inheritance or composition, object aggregation and association, and the difference between interfaces and implementations. Readers will also become more efficient and better thinkers in terms of object-oriented development. This revised edition focuses on interoperability across various technologies, primarily using XML as the communication mechanism. A more detailed focus is placed on how business objects operate over networks, including client/server architectures and web services. *Programmers who aim to create high quality software—as all programmers should—must learn the varied subtleties of the familiar yet not so familiar beasts called objects and classes. Doing so entails careful study of books such as Matt Weisfeld's The Object-Oriented Thought Process." —Bill McCarty, author of Java Distributed Objects, and Object-Oriented Design in Java Matt Weisfeld is an associate professor in business and technology at Cuyahoga Community College in Cleveland, Ohio. He has more than 20 years of experience as a professional software developer, project manager, and corporate trainer using C++, Smalltalk, .NET, and Java. He holds a BS in systems analysis, an MS in computer science, and an

MBA in project management. Weisfeld has published many articles in major computer trade magazines and professional journals.

Tasks engineering, Massachusetts Institute of Technology and Guttap (computer science and engineering, also at MIT) present a component-based methodology for software program development. The book focuses on modular program construction: how to get the modules right and how to organize a program as a collection of modules. It explains the key types of abstractions, demonstrates how to develop specifications that define these abstractions, and illustrates how to implement them using numerous examples. An introduction to key Java concepts is included. Annotation copyrighted by Book News, Inc., Portland, OR.

Object-oriented Programming with Java

Fundamentals of Object-Oriented Programming in Java

Beginning Java Programming

Program Development in Java

Head First Object-Oriented Analysis and Design

Object-oriented Programming in Java with Games and Simulations

This self-readable and highly informative text presents the exhaustive coverage of the concepts of Object Oriented Programming with JAVA. A number of good illustrative examples are provided for each concept supported by well-crafted programs, thus making it useful for even those having no previous knowledge of programming. Starting from the preliminaries of the language and the basic principles of OOP, this textbook moves gradually towards advanced concepts like exception handling, multithreaded programming, GUI support by the language through AWT controls, string handling, file handling and basic utility classes. In addition, the well-planned material in the book acts as a precursor to move towards high-end programming in Java, which includes the discussion of Servlets, Java Server Pages, JDBC, Swings, etc. The book is highly suitable for all undergraduate and postgraduate students of computer science, computer applications, computer science and engineering and information technology. KEY FEATURES: Extensive coverage of syllabi of various Indian universities Comprehensive coverage of the OOP concepts and Core Java Explanation of the concepts using simple and expressive language Complete explanation of the working of each program with more emphasis on the core segment of the program Chapter-end summary, over 230 illustrative programs, around 225 review questions, about 190 true/false questions and over 130 programming exercises

An Introduction to Object-Oriented Programming with Java takes a full-immersion approach to object-oriented programming. Proper object-oriented design practices are emphasized throughout the book. Students learn how to use the standard classes first, then learn to design their own classes. Wu uses a gentler approach to teaching students how to design their own classes, separating the coverage into two chapters. GUI coverage is also located independently in the back of the book and can be covered if desired. Wu also features a robust set of instructors' materials including PowerPoint slides, code samples, and quiz questions.

This practice-oriented text explores the intricacies of Java language in the light of different procedural and object-oriented paradigms. It is primarily focussed on the Object-Oriented Programming (OOP) paradigm using Java as a language. The text begins with the programming overview and introduces the reader to the important object-oriented (OO) terms. It then deals with Java development as well as runtime environment set-up along with the steps of compilation and running of a simple program. The text explains the philosophy of Java by highlighting its core features and demonstrating its advantages over C++. Besides, it covers GUI through Java applets, Swing, as well as concurrency handling and synchronization through threads. A chapter is exclusively devoted to fundamental data structures and their applications in Java. The book shows how Unified Modeling Language (UML) represents objects, classes, components, relationships, and architectural design. This comprehensive and student friendly book is intended as a text for the students of computer science and engineering, computer applications (BCA/MCA), and IT courses.

This text is designed to take the programmer to the point where they can write truly interactive Internet applications using Java programming languages. It starts from the first principles and progresses to the point where the reader can employ the advance

Java Programming Fundamentals

Object Oriented Programming Using C++ and Java

An Accessible Approach Using Java

A Brain Friendly Guide to OOA&D

OBJECT-ORIENTED PROGRAMMING WITH C++ AND JAVA

Active Java

This book aims to present the concepts and techniques of object-oriented programming as simply as possible so that it can be easily understood and mastered by beginners. The emphasis is on presenting concepts at the right time and with the right amount of detail to encourage learning and mastery of the material. The book does not focus on the Java programming language; rather, Java is used as a vehicle to implement the object-oriented concepts presented in the book.To help readers become familiar with the Java programming language, the book starts off by describing the basic features of the language. These include data types and variables, arrays, control structures (if, while, for, etc.), and performing input and output. Several exercises have been carefully designed so that readers can get up to speed with Java as quickly as possible.The book strikes a good balance between theory and practice. Some object-oriented concepts often require lengthy explanations for beginners to fully understand the concepts. Based on years of experience in teaching object-oriented programming, the book condenses long explanations in favour of providing real examples which show how the concepts are implemented in an object-oriented program. Thus, detailed code examples are liberally interspersed with theoretical descriptions throughout the book. One of the unique features of the book is that it contains five chapters (called " Programming Projects ") which explain how to build a complete object-oriented program based on the material presented in the other chapters. These chapters appear when all the relevant material required for writing the program has been thoroughly discussed in the preceding chapters. Each of the five chapters starts by describing the problem in narrative form. The chapter then gives a detailed definition of the functionality required. Next, the chapter explains how the functionality can be implemented using the object-oriented concepts presented earlier in the book. The chapter ends with a complete working Java program that solves the problem described. Often, alternative solutions are presented so that readers will be aware that there are competing ways to implement an object-oriented program with different trade-offs. Another unique feature of the book is that that new material is not used or referenced before it has been discussed. The book is essentially incremental in nature so that new concepts being introduced always build on earlier concepts. Thus, readers are only exposed to new concepts or language features when pre-requisite material has been completely discussed. Also, great care has been taken to avoid the use of programming language features which, though very useful for advanced programmers, can make it harder for a beginner to focus on and learn the object-oriented principles being imparted.This book is based on the experience gained from many years of teaching object-oriented programming to beginners who know another programming language. It is likely to benefit readers who are looking for a good, practical introduction to object-oriented programming in Java, in an easy-to-understand format.

The author takes an objects early approach to teaching Java, with the assumption that teaching beginners the big picture early gives them more time to master the principles of object-oriented programming. The text focuses on the motivation behind Java's strengths and the benefits of the object-oriented paradigm. It provides a solid understanding of objects and methods, concentrating on problem decomposition and program design. A firm grasp on these fundamentals allows the smaller details, and some of Javas advanced features, to fall into place from both instructor and student perspectives.

While Java texts are plentiful, it's difficult to find one that takes a real-world approach, and encourages novice programmers to build on their Java skills through practical exercise. Written by an expert with 19 experience teaching computer programming, Java Programming Fundamentals presents object-oriented programming by employing examples taken

JAVA AND OBJECT-ORIENTED PROGRAMMING PARADIGM

Principles of Object-Oriented Programming in Java 1.1

Introduction to Programming Using Java

Java Methods

The Practice and Philosophy of Object-Oriented Programming in Java