Langr, a veteran software developer, has compiled the definitive guide for writing readable, maintainable Java code. The text features detailed patterns and “best practices” code for the challenges every Java developer faces, the ideal reference for team-based development and covers behavior, state, collections, classes, and formatting with both JDK 2 and JDK 1.1. Build maintainable websites with elegant Django design patterns and modern best practices Key Features Explore aspects of Django from Models and Views to testing and deployment Understand the nuances of web development such as browser attack and data design Walk through various asynchronous tools such as Celery and Channels Book Description Building secure and maintainable web applications requires comprehensive knowledge. The second edition of this book not only sheds light on Django, but also encapsulates years of experience in the form of design patterns and best practices. Rather than sticking to GoF design patterns, the book looks at higher-level patterns. Using the latest version of Django and Python, you’ll learn about Channels and asyncio while building a solid conceptual background. The book compares design choices to help you make everyday decisions faster in a rapidly changing environment. You’ll first learn about various architectural patterns, many of which are used to build Django. You’ll start with building a fun superhero project by gathering the requirements, creating mockups, and setting up the project. Through project-guided examples, you’ll explore the Model, View, templates, workflows, and code responsibility techniques. In addition to this, you’ll learn practical Python coding techniques in Django that’ll enable you to tackle problems related to complex topics such as legacy coding, data modeling, and code responsibility. You’ll discover API design principles and best practices, and understand the need for asynchronous workflows. During this journey, you’ll study popular Python code testing techniques in Django, various web security threats and their countermeasures, and the monitoring and performance of your application. What you will learn Make use of common design patterns to help you write better code Implement best practices and idioms in this rapidly evolving framework Deal with legacy code and debugging Use asynchronous tools such as Celery, Channels, and asyncio Use patterns while designing API interfaces with the Django REST Framework Reduce the maintenance burden with well-tested, cleaner code Host, deploy, and secure your Django projects Who this book is for This book is for you whether you’re new to Django or just want to learn its best practices. You do not have to be an expert in Django or Python. No prior knowledge of patterns is expected for reading this book but it would be helpful.

“One of the most significant books in my life.” —Obie Fernandez, Author, The Rails Way “Twenty years ago, the first edition of The Pragmatic Programmer completely changed the trajectory of my career. This new edition could do the same for yours.” —Mike Cohn, Author of Succeeding with Agile, Agile Estimating and Planning, and User Stories Applied “... filled with practical advice, both technical and professional, that will serve you and your projects well for years to come.” —Andrea Goulet, CEO, Corgibytes, Founder, LegacyCode.Rocks “...lightning does strike twice, and this book is proof.” —VM (Vicky) Brasseur, Director of Open Source Strategy, Juniper Networks The Pragmatic Programmer is one of those rare tech books you’ll read, re-read, and read again over the years. Whether you’re new to the field or an experienced practitioner, you’ll come away with fresh insights each and every time. Dave Thomas and Andy Hunt wrote the first edition of this influential book in 1999 to help their clients create better software and rediscover the joy of coding. These lessons have helped a generation of programmers examine the very essence of software development, independent of any particular language, framework, or methodology, and the Pragmatic philosophy has spawned hundreds of books, screencasts, and audio books, as well as thousands of careers and success stories. Now, twenty years later, this new edition re-examines what it means to be a modern programmer. Topics range from personal responsibility and career development to architectural techniques for keeping your code flexible and easy to adapt and reuse. Read this book, and you’ll learn how to: Fight software rot Learn continuously Avoid the trap of duplicating knowledge Write flexible, dynamic, and adaptable code Harness the power of basic tools Avoid programming by coincidence Learn real requirements Solve the underlying problems of concurrent code Guard against security vulnerabilities Build teams of Pragmatic Programmers Take responsibility for your work and career Test ruthlessly and effectively, including property-based testing Implement the Pragmatic Starter Kit Delight your users Written as a series of self-contained sections and filled with classic and fresh anecdotes, thoughtful examples, and interesting analogies, The Pragmatic Programmer illustrates the best approaches and major pitfalls of many different aspects of software development. Whether you’re a new coder, an experienced programmer, or a manager responsible for software projects, use these lessons daily, and you’ll quickly see improvements in personal productivity, accuracy, and job satisfaction. You’ll learn skills and develop habits and attitudes that form the foundation of a career that can last long-term in your career. You’ll become a Pragmatic Programmer. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details. The first edition of “Extreme Programming Explained” is a classic. It won awards for its then-radical ideas for improving small-team development, such as having developers write automated tests for their own code and having the whole team plan weekly. Much has changed in five years. This completely rewritten second edition expands the scope of XP to teams of any size by suggesting a program of continuous improvement based on: five core values consistent with excellence in software development; eleven principles for putting those values into action; and, thirteen primary and eleven corollary practices to help you push development past its current business and technical limitations. Whether you have a small team that is already closely aligned with your customers or a large team in a gigantic or multinational organization, you will find in these pages a wealth of ideas to challenge, inspire, and encourage you and your team members to substantially improve your software development. Software Expert Kent Beck Presents a Catalog of Patterns Infinitely Useful for Everyday Programming Great code doesn’t just function: it clearly and consistently communicates your intentions, allowing other programmers to understand your code, rely on it, and modify it with confidence. But great code doesn’t just happen. It is the outcome of hundreds of small but critical decisions programmers make every single day. Now, legendary software innovator Kent Beck—known worldwide for creating Extreme Programming and pioneering software patterns and test-driven development—focuses on these critical decisions, unveiling powerful “implementation patterns” for writing programs that are simpler, clearer, better organized, and more cost effective. Beck collects 77 patterns for handling everyday programming tasks and writing more readable code. This new collection of patterns addresses many aspects of development, including class, state, behavior, method, collections, frameworks, and more. He uses diagrams, stories, examples, and essays to engage the reader as he illustrates the patterns. You’ll find proven solutions for handling everything from naming variables to checking exceptions.

It’s easy to write correct Ruby code, but to gain the fluency needed to write great Ruby code, you must go beyond syntax and absorb the “Ruby way” of thinking and problem solving. In Eloquent Ruby, Russ Olsen helps you write Ruby like true Rubyists do—so you can leverage its immense, surprising power. Olsen draws on years of experience internalizing the Ruby culture and teaching Ruby to other programmers. He guides you to the “Ah Ha!” moments when it suddenly becomes clear why Ruby works the way it does, and how you can take advantage of this
language's elegance and expressiveness. Eloquent Ruby starts small, answering tactical questions focused on a single statement, method, test, or bug. You'll learn how to write code that actually looks like Ruby (not Java or C#); why Ruby has so many control structures; how to use strings, expressions, and symbols; and what dynamic typing is really good for. Next, the book addresses bigger questions related to building methods and classes. You'll discover why Ruby classes contain so many tiny methods, when to use operator overloading, and when to avoid it. Olsen explains how to write Ruby code that writes its own code—and why you'll want to. He concludes with powerful project-level features and techniques ranging from gems to Domain Specific Languages. A part of the renowned Addison-Wesley Professional Ruby Series, Eloquent Ruby will help you “put on your Ruby-colored glasses” and get results that make you a true believer.

With Pro JavaScript Design Patterns, you'll start with the basics of object-oriented programming in JavaScript applicable to design patterns, including making JavaScript more expressive, inheritance, encapsulation, information hiding, and more. The book then details how to implement and take advantage of several design patterns in JavaScript. Each chapter is packed with real-world examples of how the design patterns are best used and expert advice on writing better code, as well as what to watch out for. Along the way you'll discover how to create your own libraries and APIs for even more efficient coding.

Smalltalk Best Practice Patterns

This book presents a set of patterns that organize all the informal experience successful Smalltalk programmers have learned the hard way. Understand these patterns, and you can write much more effective code. Understand the concept of Smalltalk patterns and why they work. Then learn patterns for working with methods, messages, state, collections, classes and formatting. Walk through a development example utilizing patterns. Smalltalk programmers, project managers, teachers and students — both new and experienced.

xUnit Test Patterns

Pro JavaScript Design Patterns

Refactoring

The Language

Contributing to Eclipse

The Pragmatic Programmer

Smalltalk Best Practice Patterns

A JavaScript and jQuery Developer's Guide

Go: Design Patterns for Real-World Projects

Build applications using idiomatic, extensible, and concurrent design patterns in Delphi

The Art and Science of Smalltalk

your journey to mastery, 20th Anniversary Edition

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

Create various design patterns to master the art of solving problems using Java Key Features This book demonstrates the shift from OOP to functional programming and covers reactive and functional patterns in a clear and step-by-step manner All the design patterns come with a practical use case as part of the explanation, which will improve your productivity Tackle all kinds of performance-related issues and streamline your development Book Description Having a knowledge of design patterns enables you, as a developer, to improve your code base, promote code reuse, and make the architecture more robust. As languages evolve, new features take time to fully understand before they are adopted en masse. The mission of this book is to ease the adoption of the latest trends and provide good practices for programmers. We focus on showing you the practical aspects of smarter coding in Java. We'll start off by going over object-oriented (OOP) and functional programming (FP) paradigms, moving on to describe the most frequently used design patterns in their classical format and explain how Java's functional programming features are changing them. You will learn to enhance implementations by mixing OOP and FP, and finally get to know about the reactive programming model, where FP and OOP are used in conjunction with a view to writing better code. Gradually, the book will show you the latest trends in architecture, moving from MVC to microservices and serverless architecture. We will finish off by highlighting the new Java features and best practices. By the end of the book, you will be able to efficiently address common problems faced while developing applications and be comfortable working on scalable and maintainable projects of any size. What you will learn

Understand the OOP and FP paradigms Explore the traditional Java design patterns Get to know the new functional features of Java
See how design patterns are changed and affected by the new features. Discover what reactive programming is and why it is the natural augmentation of FP work with reactive design patterns and find the best ways to solve common problems using them. See the latest trends in architecture and the shift from MVC to serverless applications. Use best practices when working with the new features.

Who this book is for:
This book is for those who are familiar with Java development and want to be in the driver’s seat when it comes to modern development techniques. Basic OOP Java programming experience and elementary familiarity with Java is expected.

A guide to XP leads the developer, project manager, and team leader through the software development planning process, offering real-world examples and tips for reacting to changing environments quickly and efficiently.

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." —André Hansson, Lead Front-End Developer, presis!

The Smalltalk-80 system is an integrated, graphical, and interactive programming environment with capabilities for producing highly functional contact with personal computer systems. This book, a revision of Smalltalk-80: The Language and its Implementation, includes the latest developments and newest features of Smalltalk-80 Version 2.

An insightful guide to learning the Go programming language. About This Book Get insightful coverage of Go programming syntax, constructs, and idioms to help you understand Go code. Get a full explanation of all the known GoF design patterns in Go, including comprehensive theory and examples. Learn to apply the nuances of the Go language, and get to know the open source community that surrounds it. To implement a wide range of start-up quality projects. Who This Book Is For Beginners to Go who are comfortable in other OOP languages like Java, C#, or Python will find this course interesting and beneficial. What You Will Learn Install and configure the Go development environment to quickly get started with your first program. Use the basic elements of the language including source code structure, variables, constants, and control flow primitives. Get to know all the basic syntax and tools you need to start coding in Go. Create unique instances that cannot be duplicated within a program. Build quirky and fun projects from scratch while exploring patterns, practices, and techniques, as well as a range of different technologies. Create websites and data services capable of massive scaling using Go's net/http package. Explore RESTful patterns as well as low-latency WebSocket APIs. Interact with a variety of remote web services to consume capabilities, ranging from authentication and authorization to a fully functioning thesaurus. In Detail The Go programming language has firmly established itself as a favorite for building complex and scalable system applications. Go offers a direct and practical approach to programming that lets programmers write correct and predictable code using concurrency idioms and a full-featured standard library. This practical guide is full of real-world examples to help you get started with Go in no time at all. You'll start by understanding the fundamentals of Go, then get a detailed description of the Go data types, program structures, and Maps. After that, you'll learn how to use Go concurrency idioms to avoid pitfalls and create programs that are exact in expected behavior. Next, you will get familiar with the tools and libraries that are available in Go to write and exercise tests, benchmarking, and code coverage. After that, you will be able to utilize some of the most important features of GO such as Network Programming and OS integration to build efficient applications. Then you'll start applying your skills to build some amazing projects in Go. You will learn to develop high-quality command-line tools that utilize the powerful shell capabilities and perform well using Go's built-in concurrency mechanisms. Scale,
performance, and high availability lie at the heart of our projects, and the lessons learned throughout the sections will arm you with everything you need to build world-class solutions. You will get a feel for app deployment using Docker and Google App Engine. Each project could form the basis of a start-up, which means they are directly applicable to modern software markets. With these skills in hand, you will be able to conquer all your fears of application development and go on to build large, robust and succinct apps in Go. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: Learning Go Programming Go Design Patterns Go Programming Blueprints, Second Edition Style and approach Full of real-world, practical examples, this course teaches you the widely used design patterns and best practices in Go in a step-by-step manner. It also provides fun projects that involve building applications from scratch.

Squeak is a modern, open source, fully-featured implementation of the Smalltalk programming language and environment. Squeak is highly portable -- even its virtual machine is written entirely in Smalltalk, making it easy to debug, analyze, and change. Squeak is the vehicle for a wide range of innovative projects from multimedia applications and educational platforms to commercial web development environments. -- Preface.

Focuses on Implementation of System; Provides Documentation & Covers General Software & Engineering Patterns, Domain-Driven Design (DDD), and Test-Driven Development (TDD) enable architects and developers to create systems that are powerful, robust, and maintainable. Now, there's a comprehensive, practical guide to leveraging all these techniques primarily in Microsoft .NET environments, but the discussions are just as useful for Java developers. Drawing on seminal work by Martin Fowler (Patterns of Enterprise Application Architecture) and Eric Evans (Domain-Driven Design), Jimmy Nilsson shows how to create real-world architectures for any .NET application. Nilsson illuminates each principle with clear, well-annotated code examples based on C# 1.1 and 2.0. His examples and discussions will be valuable both to C# developers and those working with other .NET languages and any databases—even with other platforms, such as J2EE. Coverage includes · Quick primers on patterns, TDD, and refactoring · Using architectural techniques to improve software quality · Using domain models to support business rules and validation · Applying enterprise patterns to provide persistence support via NHibernate · Planning effectively for the presentation layer and UI testing · Designing for Dependency Injection, Aspect Orientation, and other new paradigms

JUnit Pocket Guide
Squeak by Example
Django Design Patterns and Best Practices
Embrace Change
Hands-On Design Patterns with Delphi
The Design Patterns Smalltalk Companion
Test-driven Development
Learning JavaScript Design Patterns
Smalltalk-80
Extreme Programming Explained
Patterns for Implementation
A New Perspective on Object-Oriented Design

From a well-known developer of object-oriented systems in Smalltalk, this book provides an introduction to programming for the novice alongside complete coverage of the Smalltalk language. The coverage provides a complete introduction to the syntax of Smalltalk, including the Smalltalk libraries and the Smalltalk environment using Digitalk/V as the example environment. If you want to learn how best to utilize commonly found patterns and learn best practices in developing applications with Django, this is the book for you. This book, like Django itself, is accessible to amateur and professional developers alike and assumes little in the way of prior experience. Although written for Python 3, the majority of the code in this book works in Python 2 or can be easily translated.

Users can dramatically improve the design, performance, and manageability of object-oriented code without altering its interfaces or behavior. "Refactoring" shows users exactly how to spot the best opportunities for refactoring and exactly how to do it, step by step.

Widely considered one of the best practical guides to programming, Steve McConnell's original CODE COMPLETE has been helping developers write better software for more than a decade.
Now this classic book has been fully updated and revised with leading-edge practices— and hundreds of new code samples— illustrating the art and science of software construction. Capturing the body of knowledge available from research, academia, and everyday commercial practice, McConnell synthesizes the most effective techniques and must-know principles into clear, pragmatic guidance. No matter what your experience level, development environment, or project size, this book will inform and stimulate your thinking— and help you build the highest quality code. Discover the timeless techniques and strategies that help you: Design for minimum complexity and maximum creativity Reap the benefits of collaborative development Apply effective refactoring techniques to reduce and flush out errors Exploit opportunities to refactor—or evolve— code, and do it safely Use construction practices that are right-weight for your project Debug problems quickly and effectively Resolve critical construction issues early and correctly Build quality into the beginning, middle, and end of your project
Written by two world class programmers and software designers, this guide explains how to extend Eclipse for software projects and how to use Eclipse to create software tools that improve development time.
More than a guide to the Smalltalk language.

In 1994, Design Patterns changed the landscape of object-oriented development by introducing classic solutions to recurring design problems. In 1999, Refactoring revolutionized design by introducing an effective process for improving code. With the highly anticipated Refactoring to Patterns, Joshua Kerievsky has changed our approach to design by forever uniting patterns with the evolutionary process of refactoring. This book introduces the theory and practice of pattern-directed refactorings: sequences of low-level refactorings that allow designers to safely move designs to, towards, or away from pattern implementations. Using code from real-world projects, Kerievsky documents the thinking and steps underlying over two dozen pattern-based design transformations. Along the way he offers insights into pattern differences and how to implement patterns in the simplest possible ways. Coverage includes: A catalog of twenty-seven pattern-directed refactorings, featuring real-world code examples Descriptions of twelve design smells that indicate the need for this book’s refactorings General information and new insights about patterns and refactoring Detailed implementation mechanics: how low-level refactorings are combined to implement high-level patterns Multiple ways to implement the same pattern—and when to use each Practical ways to get started even if you have little experience with patterns or refactoring Refactoring to Patterns reflects three years of refinement and the insights of more than sixty software engineering thought leaders in the global patterns, refactoring, and agile development communities. Whether you’re focused on legacy or “greenfield” development, this book will make you a better software designer by helping you learn how to make important design changes safely and effectively.

An nyclo who develops software for a living needs a proven way to produce it better, faster, and cheaper. The Productive Programmer offers critical timesaving and productivity tools that you can adopt right away, no matter what platform you use. Master developer Neal Ford not only offers advice on the mechanics of productivity—how to work smarter, spurn interruptions, get the most out of your computer, and avoid repetition—he also details valuable practices that will help you elude common traps, improve your code, and become more valuable to your team. You'll learn to: Write the test before you write the code Manage the lifecycle of your objects fastidiously Build only what you need now, not what you might need later Apply ancient philosophies to software development Question authority, rather than blindly adhere to standards Make hard things easier and impossible things possible through meta-programming Be sure all code within a method is at the same level of abstraction Pick the right editor and assemble the best tools for the job This isn't theory, but the fruits of Ford's real-world experience as an Application Architect at the global IT consultancy ThoughtWorks. Whether you're a beginner or a pro with years of experience, you'll improve your work and your career with the simple and straightforward principles in The Productive Programmer.

In this new book, intended as a language companion to the classic Design Patterns, noted Smalltalk and design patterns experts implement the 23 design patterns using Smalltalk code. This approach has produced a language-specific companion that tailors the topic of design patterns to the Smalltalk programmer. The authors have worked closely with the authors of Design Patterns to ensure that this companion volume meets the same quality standards that made the original a bestseller and indispensable resource. The full source code will be available on the AWL web site.
into the history, philosophy, and even politics of object-oriented programming. West reveals how the best programmers rely on analysis and conceptualization--on thinking--rather than formal process and methods. Both provocative and pragmatic, this book gives form to what's primarily been an oral tradition among the field's revolutionary thinkers--and it illustrates specific object-behavior practices that you can adopt for true object design and superior results. Gain an in-depth understanding of: Prerequisites and principles of object thinking. Object knowledge implicit in eXtreme Programming (XP) and Agile software development. Object conceptualization and modeling. Metaphors, vocabulary, and design for object development. Learn viable techniques for: Decomposing complex domains in terms of objects. Identifying object relationships, interactions, and constraints. Relating object behavior to internal structure and implementation design. Incorporating object thinking into XP and Agile practice.

Delphi is a cross-platform IDE that supports rapid application development. Design Patterns gives a developer an array of use case scenarios to common problems, thus reducing the technical risk. This book will be your guide in building efficient and scalable projects utilizing all the design patterns available in Delphi.

Written for Smalltalk programmers, this book is designed to help readers become more effective Smalltalk developers and object technology users. Object technology pioneer Wirfs-Brock teams with expert McKean to present a thoroughly updated, modern, and proven method for the design of software. The book is packed with practical design techniques that enable the practitioner to get the job done.

This classic book is the definitive real-world style guide for better Smalltalk programming. This author presents a set of patterns that organize all the informal experience successful Smalltalk programmers have learned the hard way. When programmers understand these patterns, they can write much more effective code. The concept of Smalltalk patterns is introduced, and the book explains why they work. Next, the book introduces proven patterns for working with methods, messages, state, collections, classes and formatting. Finally, the book walks through a development example utilizing patterns. For programmers, project managers, teachers and students -- both new and experienced. This book presents a set of patterns that organize all the informal experience of successful Smalltalk programmers. This book will help you understand these patterns, and empower you to write more effective code.

"One of the great things about the book is the way the authors explain concepts very simply using analogies rather than programming examples--this has been very inspiring for a product I'm working on: an audio-only introduction to OOP and software development." --Bruce Eckel "...I would expect that readers with a basic understanding of object-oriented programming and design would find this book useful, before approaching design patterns completely. Design Patterns Explained complements the existing design patterns texts and may perform a very useful role, fitting between introductory texts such as UML Distilled and the more advanced patterns books." --James Noble Leverage the quality and productivity benefits of patterns--without the complexity! Design Patterns Explained, Second Edition is the field's simplest, clearest, most practical introduction to patterns. Using dozens of updated Java examples, it shows programmers and architects exactly how to use patterns to design, develop, and deliver software far more effectively. You'll start with a complete
overview of the fundamental principles of patterns, and the role of object-oriented analysis and design in contemporary software development. Then, using easy-to-understand sample code, Alan Shalloway and James Trott illuminate dozens of today's most useful patterns: their underlying concepts, advantages, tradeoffs, implementation techniques, and pitfalls to avoid. Many patterns are accompanied by UML diagrams. Building on their best-selling First Edition, Shalloway and Trott have thoroughly updated this book to reflect new software design trends, patterns, and implementation techniques. Reflecting extensive reader feedback, they have deepened and clarified coverage throughout, and reorganized content for even greater ease of understanding. New and revamped coverage in this edition includes Better ways to start "thinking in patterns" How design patterns can facilitate agile development using eXtreme Programming and other methods How to use commonality and variability analysis to design application architectures The key role of testing into a patterns-driven development process How to use factories to instantiate and manage objects more effectively The Object-Pool Pattern—a new pattern not identified by the "Gang of Four" New study/practice questions at the end of every chapter Gentle yet thorough, this book assumes no patterns experience whatsoever. It's the ideal "first book" on patterns, and a perfect complement to Gamma's classic Design Patterns. If you're a programmer or architect who wants the clearest possible understanding of design patterns—or if you've struggled to make them work for you—read this book.

Kent Beck's Guide to Better Smalltalk
Design Patterns Explained
Refactoring to Patterns

APPLYING UML & PATTERNS 3RD EDITION
Smalltalk, Objects, and Design
Code Complete
Bits of History, Words of Advice
Design Patterns and Best Practices in Java
Applying Domain-Driven Design and Patterns
Refactoring Test Code
A Sorted Collection

The biggest challenge facing many game programmers is completing their game. Most game projects fizzle out, overwhelmed by the complexity of their own code. Game Programming Patterns tackles that exact problem. Based on years of experience in shipped AAA titles, this book collects proven patterns to untangle and optimize your game, organized as independent recipes so you can pick just the patterns you need. You will learn how to write a robust game loop, how to organize your entities using components, and take advantage of the CPU's cache to improve your performance. You'll dive deep into how scripting engines encode behavior, how quadtrees and other spatial partitions optimize your engine, and how other classic design patterns can be used in games.

JUnit, created by Kent Beck and Erich Gamma, is an open source framework for test-driven development in any Java-based code. JUnit automates unit testing and reduces the effort required to frequently test code while developing it. While there are lots of bits of documentation all over the place, there isn't a go-to-manual that serves as a quick reference for JUnit. This Pocket Guide meets the need, bringing together all the bits of hard to remember information, syntax, and rules for working with JUnit, as well as delivering the insight and sage advice that can only come from a technology's creator. Any programmer who has written, or is writing, Java Code will find this book valuable. Specifically it will appeal to programmers and developers of any level that use JUnit to do their unit testing in test-driven development under agile methodologies such as Extreme Programming (XP) [another Beck creation].

Automated testing is a cornerstone of agile development. An effective testing strategy will deliver new functionality more aggressively, accelerate user feedback, and improve quality. However, for many developers, creating effective automated tests is a unique and unfamiliar challenge. xUnit Test Patterns is the definitive guide to writing automated tests using xUnit, the most popular unit testing framework in use today. A gile coach and test automation expert Gerard Meszaros describes 68 proven patterns for making tests easier to write, understand, and maintain. He then shows you how to make them more robust and repeatable—and far more cost-effective. Loaded with information, this book feels like three books in one. The first part is a detailed tutorial on test automation that covers everything from test strategy to in-depth test coding. The second part, a catalog of 18 frequently encountered "test smells," provides trouble-shooting guidelines to help you determine the root cause of problems and the most applicable patterns. The third part contains detailed descriptions of each pattern,
including refactoring instructions illustrated by extensive code samples in multiple programming languages.

Praise for Design Patterns in Ruby

Russ Olsen has done a great job of selecting classic patterns and augmenting these with newer patterns that have special relevance for Ruby. He clearly explains each idea, making a wealth of experience available to Ruby developers for their own daily work.” — Steve Metsker, Managing Consultant with Dominion Digital, Inc. “This book provides a great demonstration of the key ‘Gang of Four’ design patterns without resorting to overly technical explanations. Written in a precise, yet almost informal style, this book covers enough ground that even those without prior exposure to design patterns will soon feel confident applying them using Ruby. Olsen has done a great job to make a book about a classically ‘dry’ subject into such an engaging and even occasionally humorous read.” — Peter Cooper “This book renewed my interest in understanding patterns after a decade of good intentions. Russ picked the most useful patterns for Ruby and introduced them in a straightforward and logical manner, going beyond the GoF’s patterns. This book has improved my use of Ruby, and encouraged me to blow off the dust covering the GoF book.” — Mike Stok “Design Patterns in Ruby is a great way for programmers from statically typed object-oriented languages to learn how design patterns appear in a more dynamic, flexible language like Ruby.” — Rob Sanheim, Ruby Ninja, Relevance Most design pattern books are based on C++ and Java. But Ruby is different—and the language’s unique qualities make design patterns easier to implement and use. In this book, Russ Olsen demonstrates how to combine Ruby’s power and elegance with patterns, and write more sophisticated, effective software with far fewer lines of code. After reviewing the history, concepts, and goals of design patterns, Olsen offers a quick tour of the Ruby language—enough to allow any experienced software developer to immediately utilize patterns with Ruby. The book especially calls attention to Ruby features that simplify the use of patterns, including dynamic typing, code closures, and “mixins” for easier code reuse. Fourteen of the classic “Gang of Four” patterns are considered from the Ruby point of view, explaining what problems each pattern solves, discussing whether traditional implementations make sense in the Ruby environment, and introducing Ruby-specific improvements. You’ll discover opportunities to implement patterns in just one or two lines of code, instead of the endlessly repeated boilerplate that conventional languages often require. Design Patterns in Ruby also identifies innovative new patterns that have emerged from the Ruby community. These include ways to create custom objects with metaprogramming, as well as the ambitious Rails-based “Convention Over Configuration” pattern, designed to help integrate entire applications and frameworks. Engaging, practical, and accessible, Design Patterns in Ruby will help you build better software while making your Ruby programming experience more rewarding.

An introduction to programming in Smalltalk, covering technical background for programmers and managers and introducing some of the basic philosophy of the language. Step-by-step instructions take the reader through the basics via object-oriented programming with the Smalltalk language and its development environment. Includes a tour of the Smalltalk class library and the model-view-controller mechanism. For programmers who want to move from traditional languages to an object-oriented language. Annotation copyright by Book News, Inc., Portland, OR

Design Patterns in Ruby (Adobe Reader)

Roles, Responsibilities, and Collaborations
Planning Extreme Programming
Eloquent Ruby
Improving the Design of Existing Code
Implementation Patterns

A comprehensive guide to building smart and reusable code in Java
Elements of Reusable Object-Oriented Software
Game Programming Patterns