

C Sharp Programming 3rd Edition By Balagurusamy

Effectively balance today's most important programming principles and concepts with the latest insights into C# using Doyle's C# PROGRAMMING: FROM PROBLEM ANALYSIS TO PROGRAM DESIGN, 4E. This insightful introductory book highlights the latest Visual Studio 2012 and C# 4.0 software with a unique, principles-based approach to give readers a deep understanding of programming. Respected author Barbara Doyle admirably balances principles and concepts, offering just the right amount of detail to create a strong foundation for beginning students. A straightforward approach and understandable vocabulary make it easy for readers to grasp new programming concepts without distraction. The book introduces a variety of fundamental programming concepts, from data types and expressions to arrays and collections, all using the popular C# language. New programming exercises and new numbered examples throughout this edition reflect the latest updates in Visual Studio 2012, while learning objectives, case studies and Coding Standards summaries in each chapter ensure mastery. While this edition assumes no prior programming knowledge, coverage extends beyond traditional programming books to cover new advanced topics, such as portable class libraries to create applications for Windows Phone and other platforms. With entire chapters devoted to working with databases and Web-based applications, you'll find everything you need for a solid understanding of C# and programming fundamentals for ongoing success.

Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

What is this book about? C# is designed to work with .NET to provide a new framework for programming on the Windows platform. This comprehensive reference prepares you to program in C#, while at the same time providing the necessary background in how the .NET architecture works. In this all-new third edition, you'll be introduced to the fundamentals of C# and find updated coverage of application deployment and globalization. You'll gain a working knowledge of the language and be able to apply it in the .NET environment, build Windows forms, access databases with ADO.NET, write components for ASP.NET, take advantage of .NET support for working with COM and COM+, and much more. Professional C#, 3rd Edition, is the complete C# resource for developers, packed with code and examples that have been updated for the latest release — the .NET Framework 1.1 and Visual Studio .NET 2003. What does this book cover? Here is just a few of the things you'll discover in this book: How to program in the object-oriented C# language Methods for manipulating XML using C# Integration with COM, COM+, and Active Directory How to write Windows applications and Windows services Distributed applications with .NET Remoting An understanding of .NET Assemblies How to generate graphics with C# Ways to control .NET security, and much more Who is this book for? This book is for experienced developers who are already familiar with C++, Visual Basic, or J++. No prior knowledge of C# is required.

Presents an instructional guide to SQL which uses humor and simple images to cover such topics as the structure of relational databases, simple and complex queries, creating multiple tables, and protecting important table data.

A guide to C# 3.0 and Visual Studio 2008 covers such topics as objects, data types and references, encapsulation, interfaces, exception handling, and LINQ.

Summary C# in Depth, Fourth Edition is your key to unlocking the powerful new features added to the language in C# 5, 6, and 7. Following the expert guidance of C# legend Jon Skeet, you'll master asynchronous functions, expression-bodied members, interpolated strings, tuples, and much more. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology The powerful, flexible C# programming language is the foundation of .NET development. Even after two decades of success, it's still getting better! Exciting new features in C# 6 and 7 make it easier than ever to take on big data applications, cloud-centric web development, and cross-platform software using .NET Core. There's never been a better time to learn C# in depth. About the Book C# in Depth, Fourth Edition is a revised edition of the bestseller written by C# legend Jon Skeet. This authoritative and engaging guide is your key to unlocking this powerful language, including the new features of C# 6 and 7. In it, Jon introduces expression-bodied members, interpolated strings, pattern matching, and more. Real-world examples drive it all home. By the end of this awesome book, you'll be writing C# code with skill, style, and confidence. What's Inside Comprehensive coverage of C# 6 and 7 Greatest hits of C# 2-5 Extended pass-by-reference functionality String interpolation Composition with tuples Decomposition and pattern matching About the Reader For intermediate C# developers. About the Author Jon Skeet is a senior software engineer at Google. He studied mathematics and computer science at Cambridge, is a recognized authority in Java and C#, and maintains the position of top contributor to Stack Overflow. Table of Contents PART 1 C# IN CONTEXT Survival of the sharpest PART 2 C# 2-5 C# 2 C# 3: LINQ and everything that comes with it C# 4: Improving interoperability Writing asynchronous code Async implementation C# 5 bonus features PART 3 C# 6 Super-sleek properties and expression-bodied members Stringy features A smörgåsbord of features for concise code PART 4 C# 7 AND BEYOND Composition using tuples Deconstruction and pattern matching Improving efficiency with more pass by reference Concise code in C# 7 C# 8 and beyond

Are you searching for a coding language that will work for you? Do you want to create your own website of desktop applications? If so, C# is the right choice for you. When it comes to programming and choosing a coding language there are so many on the market that the beginner is faced with a bewildering choice and it can appear that they all do much the same job. But if creating visually elegant and functional applications is what you want, then C# is the one for you. Now, with C#: 2 books in 1 - The Ultimate Beginner's & Intermediate Guide to Learn C# Programming Step by Step, even a complete beginner can start to understand and develop programs and increase his knowledge with it through chapters on: Book 1 • What C# is • An overview of the features • Program structure and basic syntax • Working with variables • The conditional statements • C#

methods • 7 data types supported by C# • Accurate use of operators and conditional statements • Proper use of arrays, structures, and encapsulations • And lots more... Book 2 • How C# was conceived and where it came from • C# interfaces and how to use them • Advanced decision statements and flow control • The different functions that are available • An introduction to garbage collections • Asynchronous programming and what it does • And much more... Book 3 • An insight into advanced C# languages • Dealing with unary and binary operators overload • Simple ways to fix name clashes • How to create and apply custom attributes • The benefits of CIL and dynamic assemblies • Graphics rendering made easy • The purpose and uses for NET core With the information contained in this book you could be on your way to learning how this guide can develop and expand on your programming knowledge and lead you to exciting new discoveries in this fascinating subject. This book will help you take the next step up from the basics of C# quickly and seamlessly. Get a copy now and begin your journey to a better and simpler world of programming.

Programming C#Building .NET Applications with C#"O'Reilly Media, Inc."

This guide teaches C# and provides readers with the fundamental programming concepts they need to grasp in order to learn any computer language.

The definitive reference to the C# Programming Language, updated for the new version 4.0, direct from its creator, Anders Hejlsberg * *New to this edition - all code presented in full color.

*Contains insightful, valuable annotations from twelve leading C# programmers, available nowhere else. *C# has become the most widely used language for Windows development. *Anders Hejlsberg is the creator of C#, and a true legend among programmers. C# is now firmly established as the most-used language when writing applications for Windows and the Microsoft platform. Written by the language's architect, Anders Hejlsberg, and design team members, and now updated for C# 4.0, The C# Programming Language, 4/e, is the definitive technical reference for C#. It provides the most complete specification of the languages, along with descriptions, reference materials, and code samples from the C# design team. This edition also adds valuable notes, comments, and tips from twelve of the world's top C# programmers, including Bill Wagner, Chris Sells, Jesse Liberty, and Brad Abrams. It has been brought fully up to date with the new features of C# 4.0. And new to this edition, all the code will be presented in full color, so that it appears in the book exactly as it appears on screen. This book is a must-have for any developer using C# on a regular basis.

C# is undeniably one of the most versatile programming languages available to engineers today. With this comprehensive guide, you'll learn just how powerful the combination of C# and .NET can be. Author Ian Griffiths guides you through C# 8.0 fundamentals and techniques for building cloud, web, and desktop applications. Designed for experienced programmers, this book provides many code examples to help you work with the nuts and bolts of C#, such as generics, LINQ, and asynchronous programming features. You'll get up to speed on .NET Core and the latest C# 8.0 additions, including asynchronous streams, nullable references, pattern matching, default interface implementation, ranges and new indexing syntax, and changes in the .NET tool chain. Discover how C# supports fundamental coding features, such as classes, other custom types, collections, and error handling Learn how to write high-performance memory-efficient code with .NET Core's Span and Memory types Query and process diverse data sources, such as in-memory object models, databases, data streams, and XML documents with LINQ Use .NET's multithreading features to exploit your computer's parallel processing capabilities Learn how asynchronous language features can help improve application responsiveness and scalability

The programming language C# was built with the future of application development in mind. Pursuing that vision, C#'s designers succeeded in creating a safe, simple, component-based, high-performance language that works effectively with Microsoft's .NET Framework. Now the favored language among those programming for the Microsoft platform, C# continues to grow in popularity as more developers discover its strength and flexibility. And, from the start, C# developers have relied on Programming C# both as an introduction to the language and a means of further building their skills. The fourth edition of Programming C#--the top-selling C# book on the market--has been updated to the C# ISO standard as well as changes to Microsoft's implementation of the language. It also provides notes and warnings on C# 1.1 and C# 2.0. Aimed at experienced programmers and web developers, Programming C#, 4th Edition, doesn't waste too much time on the basics. Rather, it focuses on the features and programming patterns unique to the C# language. New C# 2005 features covered in-depth include: Visual Studio 2005 Generics Collection interfaces and iterators Anonymous methods New ADO.NET data controls Fundamentals of Object-Oriented Programming Author Jesse Liberty, an acclaimed web programming expert and entrepreneur, teaches C# in a way that experienced programmers will appreciate by grounding its applications firmly in the context of Microsoft's .NET platform and the development of desktop and Internet applications. Liberty also incorporates reader suggestions from previous editions to help create the most consumer-friendly guide possible.

Head First C# is a complete learning experience for learning how to program with C#, XAML, the .NET Framework, and Visual Studio. Fun and highly visual, this introduction to C# is designed to keep you engaged and entertained from first page to last. Updated for Windows 8.1 and Visual Studio 2013, and includes projects for all previous versions of Windows (included in the book, no additional downloading or printing required). You'll build a fully functional video game in the opening chapter, and then learn how to use classes and object-oriented programming, draw graphics and animation, and query data with LINQ and serialize it to files. And you'll do it all by creating games, solving puzzles, and doing hands-on projects. By the time you're done, you'll be a solid C# programmer—and you'll have a great time along the way! Create a fun arcade game in the first chapter, and build games and other projects throughout the book Learn how to use XAML to design attractive and interactive pages and windows Build modern Windows Store apps using the latest Microsoft technology Learn WPF (Windows Presentation Foundation) using the downloadable WPF Learner's Guide Using the Model-View-ViewModel (MVVM) pattern to create robust architecture Build a bonus Windows Phone project and run it in the Visual Studio Windows Phone emulator Projects in the book work with all editions of Visual Studio, including the free Express editions.

Get started with C# and strengthen your knowledge of core programming concepts such as procedural, object-oriented, generic, functional, and asynchronous programming along with the latest features of C# 8 Key Features Learn the fundamentals of C# with the help of easy-to-follow examples and explanations Leverage the latest features of C# 8, including nullable reference types, pattern matching enhancements, and asynchronous streams Explore object-oriented programming, functional programming, and multithreading concepts Book Description The C#

programming language is often developers' primary choice for creating a wide range of applications for desktop, cloud, and mobile. In nearly two decades of its existence, C# has evolved from a general-purpose, object-oriented language to a multi-paradigm language with impressive features. This book will take you through C# from the ground up in a step-by-step manner. You'll start with the building blocks of C#, which include basic data types, variables, strings, arrays, operators, control statements, and loops. Once comfortable with the basics, you'll then progress to learning object-oriented programming concepts such as classes and structures, objects, interfaces, and abstraction. Generics, functional programming, dynamic, and asynchronous programming are covered in detail. This book also takes you through regular expressions, reflection, memory management, pattern matching, exceptions, and many other advanced topics. As you advance, you'll explore the .NET Core 3 framework and learn how to use the dotnet command-line interface (CLI), consume NuGet packages, develop for Linux, and migrate apps built with .NET Framework. Finally, you'll understand how to run unit tests with the Microsoft unit testing frameworks available in Visual Studio. By the end of this book, you'll be well-versed with the essentials of the C# language and be ready to start creating apps with it. What you will learn Get to grips with all the new features of C# 8 Discover how to use attributes and reflection to build extendable applications Utilize LINQ to uniformly query various sources of data Use files and streams and serialize data to JSON and XML Write asynchronous code with the async-await pattern Employ .NET Core tools to create, compile, and publish your applications Create unit tests with Visual Studio and the Microsoft unit testing frameworks Who this book is for If you have little experience in coding or C# and want to learn the essentials of C# programming to develop powerful programming techniques, this book is for you. It will also help aspiring programmers to write scripts or programs to accomplish specific tasks.

Offering a hands-on approach, this text offers a fresh and easily accessible way to learning programming concepts using Visual C# for 2008. The authors incorporate basic concepts of programming, problem solving, and programming logic to teach a mastery of Visual C# at an introductory level.

The C# Player's Guide (3rd Edition) is the ultimate guide for people starting out with C#, whether you are new to programming, or an experienced vet. This guide takes you from your journey's beginning, through the most challenging parts of programming in C#, and does so in a way that is casual, informative, and fun. This version of the book is updated for C# 7.0 and Visual Studio 2017 Get off the ground quickly, with a gentle introduction to C#, Visual Studio, and a step-by-step walkthrough and explanation of how to make your first C# program. Learn the fundamentals of procedural programming, including variables, math operations, decision making, looping, methods, and an in-depth look at the C# type system. Delve into object-oriented programming, from start to finish, including inheritance, polymorphism, interfaces, and generics. Explore some of the most useful advanced features of C#, and take on some of the most common tasks that a programmer will tackle. Learn to control the tools and tricks of programming in C#, including the .NET framework, dealing with compiler errors, and hunting down bugs in your program. Master the needed skills by taking on a large collection of Try It Out! challenges, to ensure that you've learned the things you need to. With this guide, you'll soon be off to save the world (or take over it) with your own awesome C# programs!

If you're one of the many developers uncertain about concurrent and multithreaded development, this practical cookbook will change your mind. With more than 75 code-rich recipes, author Stephen Cleary demonstrates parallel processing and asynchronous programming techniques, using libraries and language features in .NET 4.5 and C# 5.0. Concurrency is becoming more common in responsive and scalable application development, but it's been extremely difficult to code. The detailed solutions in this cookbook show you how modern tools raise the level of abstraction, making concurrency much easier than before. Complete with ready-to-use code and discussions about how and why the solution works, you get recipes for using: async and await for asynchronous operations Parallel programming with the Task Parallel Library The TPL Dataflow library for creating dataflow pipelines Capabilities that Reactive Extensions build on top of LINQ Unit testing with concurrent code Interop scenarios for combining concurrent approaches Immutable, threadsafe, and producer/consumer collections Cancellation support in your concurrent code Asynchronous-friendly Object-Oriented Programming Thread synchronization for accessing data

Explores C# fundamentals, programming elements, the development of desktop and Internet applications, and such .NET attributes as remoting, threads, synchronization, streams, and interoperation with COM objects.

This new 7th edition of Pro C# 6.0 and the .NET 4.6 Platform has been completely revised and rewritten to reflect the latest changes to the C# language specification and new advances in the .NET Framework. You'll find new chapters covering all the important new features that make .NET 4.6 the most comprehensive release yet, including: A Refined ADO.NET Entity Framework Programming Model Numerous IDE and MVVM Enhancements for WPF Desktop Development Numerous updates to the ASP.NET Web APIs This comes on top of award winning coverage of core C# features, both old and new, that have made the previous editions of this book so popular. Readers will gain a solid foundation of object-oriented development techniques, attributes and reflection, generics and collections as well as numerous advanced topics not found in other texts (such as CIL opcodes and emitting dynamic assemblies). The mission of this book is to provide you with a comprehensive foundation in the C# programming language and the core aspects of the .NET platform plus overviews of technologies built on top of C# and .NET (ADO.NET and Entity Framework, Windows Communication Foundation (WCF), Windows Presentation Foundation (WPF), ASP.NET (WebForms, MVC, WebAPI).). Once you digest the information presented in these chapters, you'll be in a perfect position to apply this knowledge to your specific programming assignments, and you'll be well equipped to explore the .NET universe on your own terms. What You Will Learn: Be the first to understand the .NET 4.6 platform and C# 6. Discover the ins and outs of the leading .NET technology. Learn from an award-winning author who has been teaching the .NET world since version 1.0. Find complete coverage of XAML, .NET 4.6 and Visual Studio 2015 together with discussion of the new Windows Runtime.

Dig deep and master the intricacies of the common language runtime, C#, and .NET development. Led by programming expert Jeffrey Richter, a longtime consultant to the Microsoft .NET team - you'll gain pragmatic insights for building robust, reliable, and responsive apps and components. Fully updated for .NET Framework 4.5 and Visual Studio 2012 Delivers a thorough grounding in the .NET Framework architecture, runtime environment, and other key topics, including asynchronous programming and the new Windows Runtime Provides extensive code samples in Visual C# 2012 Features authoritative, pragmatic guidance on difficult development concepts such as generics and threading

A comprehensive guide for beginners to learn the key concepts, real-world applications, and latest features of C# 9 and .NET 5 with hands-on exercises using VS Code Key Features Explore the newest additions to C# 9, the .NET 5 class library, Entity Framework Core and Blazor Strengthen your command of ASP.NET Core 5.0 and create professional websites and services Build cross-platform apps for Windows, macOS, Linux, iOS, and Android Book Description In C# 9 and .NET 5 – Modern Cross-Platform Development, Fifth Edition, expert teacher Mark J. Price gives you everything you need to start programming C# applications. This latest edition uses the popular Visual Studio Code editor to work across all major operating systems. It is fully updated and expanded with a new chapter on the Microsoft Blazor framework. The book's first part teaches the fundamentals of C#, including object-oriented programming and new C# 9 features such as top-level programs, target-typed new object instantiation, and immutable types using the record keyword. Part 2 covers the .NET APIs, for performing tasks like managing and querying data, monitoring and improving performance, and working with the file system, async streams, serialization, and encryption. Part 3 provides examples of cross-platform apps you can build and deploy, such as websites and services using ASP.NET Core or mobile apps using Xamarin.Forms. By the end of the book, you will have acquired the understanding and skills you need to use C# 9 and .NET 5 to create websites, services, and mobile apps. What you will learn Build your own types with object-oriented programming Query and manipulate data using LINQ Build websites and services using ASP.NET Core 5 Create intelligent apps using machine learning Use Entity Framework Core and work with relational databases Discover Windows app development using the Universal Windows Platform and XAML Build rich web experiences using the Blazor framework Build mobile applications for iOS and Android using Xamarin.Forms Who this book is for This book is best for C# and .NET beginners, or programmers who have worked with C# in the past but feel left behind by the changes in the past few years. This book doesn't expect you to have any C# or .NET experience; however, you should have a general understanding of programming. Students and professionals with a science, technology, engineering, or mathematics (STEM) background can certainly benefit from this book.

Developing computer games is a perfect way to learn how to program in modern programming languages. This book teaches how to program in C# through the creation of computer games – and without requiring any previous programming experience. Contrary to most programming books, van Toll, Egges, and Fokker do not organize the presentation according to programming language constructs, but instead use the structure and elements of computer games as a framework. For instance, there are chapters on dealing with player input, game objects, game worlds, game states, levels, animation, physics, and intelligence. The reader will be guided through the development of four games showing the various aspects of game development. Starting with a simple shooting game, the authors move on to puzzle games consisting of multiple levels, and conclude the book by developing a full-fledged platform game with animation, game physics, and intelligent enemies. They show a number of commonly used techniques in games, such as drawing layers of sprites, rotating, scaling and animating sprites, dealing with physics, handling interaction between game objects, and creating pleasing visual effects. At the same time, they provide a thorough introduction to C# and object-oriented programming, introducing step by step important programming concepts such as loops, methods, classes, collections, and exception handling. This second edition includes a few notable updates. First of all, the book and all example programs are now based on the library MonoGame 3.6, instead of the obsolete XNA Game Studio. Second, instead of explaining how the example programs work, the text now invites readers to write these programs themselves, with clearly marked reference points throughout the text. Third, the book now makes a clearer distinction between general (C#) programming concepts and concepts that are specific to game development. Fourth, the most important programming concepts are now summarized in convenient “Quick Reference” boxes, which replace the syntax diagrams of the first edition. Finally, the updated exercises are now grouped per chapter and can be found at the end of each chapter, allowing readers to test their knowledge more directly. The book is also designed to be used as a basis for a game-oriented programming course. Supplementary materials for organizing such a course are available on an accompanying web site, which also includes all example programs, game sprites, sounds, and the solutions to all exercises.

C# Programming: From Problem Analysis to Program Design has been thoroughly revised for Visual Studio 2010. As in previous editions of the text Doyle introduces a variety of basic programming concepts, from data types and expressions to arrays and collections - all using C# as the programming language. Every chapter begins with an identification of objectives and ends with a case study solidifying concepts presented in the chapter. New to this edition, each chapter ends with a new Coding Standards section summarizing style issues and links to additional Resources. Ideal for both novices and programmers with experience in other languages, this book goes beyond traditional programming books by including new, advanced software topics such as an introduction to database connectivity using LINQ (Language Integrated Query) and ADO.NET. A full chapter is devoted to web programming using ASP.NET. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

What will you learn from this book? Dive into C# and create apps, user interfaces, games, and more using this fun and highly visual introduction to C#, .NET Core, and Visual Studio. With this completely updated guide, which covers C# 8.0 and Visual Studio 2019, beginning programmers like you will build a fully functional game in the opening chapter. Then you'll learn how to use classes and object-oriented programming, create 3D games in Unity, and query data with LINQ. And you'll do it all by solving puzzles, doing hands-on exercises, and building real-world applications. By the time you're done, you'll be a solid C# programmer--and you'll have a great time along the way! What's so special about this book? Based on the latest research in cognitive science and learning theory, Head First C# uses a visually rich format to engage your mind rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts? This multisensory learning experience is designed for the way your brain really works.

Beginning C# Object-Oriented Programming brings you into the modern world of development as you master the fundamentals of programming with C# and learn to develop efficient, reusable, elegant code through the object-oriented programming (OOP) methodology. Take your skills out of the 20th century and into this one with Dan Clark's accessible, quick-paced guide to C# and object-oriented programming, completely updated for .NET 4.0 and C# 4.0. As you develop techniques and best practices for coding in C#, one of the world's most popular contemporary languages, you'll experience modeling a “real world” application through a case study, allowing you to see how both C# and OOP (a methodology you can use with any number of languages) come together to make your code reusable, modern, and efficient. With more than 30 fully hands-on activities, you'll discover how to transform a simple model of an application into a fully-functional C# project, including designing the user interface, implementing the business logic, and integrating with a relational database for data storage. Along the way, you will

explore the .NET Framework, the creation of a Windows-based user interface, a web-based user interface, and service-oriented programming, all using Microsoft's industry-leading Visual Studio 2010, C#, Silverlight, the Entity Framework, and more.

If you're new to C#, this popular book is the ideal way to get started. Completely revised for the latest version of the language, Learning C# 3.0 starts with the fundamentals and takes you through intermediate and advanced C# features -- including generics, interfaces, delegates, lambda expressions, and LINQ. You'll also learn how to build Windows applications and handle data with C#. No previous programming experience is required -- in fact, if you've never written a line of code in your life, bestselling authors Jesse Liberty and Brian MacDonald will show you how it's done. Each chapter offers a self-contained lesson to help you master key concepts, with plenty of annotated examples, illustrations, and a concise summary. With this book, you will:

- Learn how to program as you learn C#
- Grasp the principles of object-oriented programming through C#
- Discover how to use the latest features in C# 3.0 and the .NET 3.5 Framework--including LINQ and the Windows Presentation Foundation (WPF)
- Create Windows applications and data-driven applications

You'll also find a unique Test Your Knowledge section in each chapter, with practical exercises and review quizzes, so you can practice new skills and test your understanding. If you're ready to dive into C# and .NET programming, this book is a great way to quickly get up to speed.

This essential classic title provides a comprehensive foundation in the C# programming language and the frameworks it lives in. Now in its 8th edition, you'll find all the very latest C# 7.1 and .NET 4.7 features here, along with four brand new chapters on Microsoft's lightweight, cross-platform framework, .NET Core, up to and including .NET Core 2.0. Coverage of ASP.NET Core, Entity Framework (EF) Core, and more, sits alongside the latest updates to .NET, including Windows Presentation Foundation (WPF), Windows Communication Foundation (WCF), and ASP.NET MVC. Dive in and discover why Pro C# has been a favorite of C# developers worldwide for over 15 years. Gain a solid foundation in object-oriented development techniques, attributes and reflection, generics and collections as well as numerous advanced topics not found in other texts (such as CIL opcodes and emitting dynamic assemblies). With the help of this book you'll have the confidence to put C# into practice and explore the .NET universe on your own terms. What You Will Learn

- Discover the latest C# 7.1 features, from tuples to pattern matching
- Hit the ground running with Microsoft's lightweight, open source .NET Core platform, including ASP.NET Core MVC, ASP.NET Core web services, and Entity Framework Core
- Find complete coverage of XAML, .NET 4.7, and Visual Studio 2017
- Understand the philosophy behind .NET and the new, cross-platform alternative, .NET Core

In *Effective C#*, Third Edition, respected .NET expert Bill Wagner identifies 50 ways to harness the full power of the C# 6.0 language to write exceptionally robust, efficient, and well-performing code. Reflecting the growing sophistication of the C# language and its development community, Wagner has identified dozens of new ways to write better code. This edition's new solutions include some that take advantage of generics and several that are more focused on LINQ, as well as a full chapter of advanced best practices for working with exceptions. Wagner's clear, practical explanations, expert tips, and realistic code examples have made *Effective C#* indispensable to hundreds of thousands of developers. Drawing on his unsurpassed C# experience, he addresses everything from resource management to multicore support, and reveals how to avoid common pitfalls in the language and its .NET environment. Learn how to choose the most effective solution when multiple options exist, and how to write code that's far easier to maintain and improve. Wagner shows how and why to

- Prefer implicitly typed local variables (see Item 1)
- Replace `string.Format()` with interpolated strings (see Item 4)
- Express callbacks with delegates (see Item 7)
- Make the most of .NET resource management (see Item 11)
- Define minimal and sufficient constraints for generics (see Item 18)
- Specialize generic algorithms using runtime type checking (see Item 19)
- Use delegates to define method constraints on type parameters (see Item 23)
- Augment minimal interface contracts with extension methods (see Item 27)
- Create composable APIs for sequences (see Item 31)
- Decouple iterations from actions, predicates, and functions (see Item 32)
- Prefer lambda expressions to methods (see Item 38)
- Distinguish early from deferred execution (see Item 40)
- Avoid capturing expensive resources (see Item 41)
- Use exceptions to report method contract failures (see Item 45)
- Leverage side effects in exception filters (see Item 50)

You're already a successful C# programmer, and this book will make you an outstanding one. Content Update Program: This book is part of the InformIT Content Update Program. As updates are made to C#, sections of this book will be updated or new sections will be added to match updates to the technologies. See inside for details.

Effective techniques and experienced insights to maximize your C# 6 and 7 programming skills

Key Features

- Written by C# legend and top StackOverflow contributor Jon Skeet
- Unlock the new features of C# 6 and 7
- Insights on the future of the C# language
- Master asynchronous functions, interpolated strings, tuples, and more

Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. "An excellent overview of C# with helpful and realistic examples that make learning the newest features of C# easy." —Meredith Godar

About The Book C# is the foundation of .NET development. New features added in C# 6 and 7 make it easier to take on big data applications, cloud-centric web development, and cross-platform software using .NET Core. Packed with deep insight from C# guru Jon Skeet, this book takes you deep into concepts and features other C# books ignore. *C# in Depth*, Fourth Edition is an authoritative and engaging guide that reveals the full potential of the language, including the new features of C# 6 and 7. It combines deep dives into the C# language with practical techniques for enterprise development, web applications, and systems programming. As you absorb the wisdom and techniques in this book, you'll write better code, and become an exceptional troubleshooter and problem solver. What You Will Learn

- Comprehensive guidance on the new features of C# 6 and 7
- Important legacies and greatest hits of C# 2–5
- Expression-bodied members
- Extended pass-by-reference functionality
- Writing asynchronous C# code
- String interpolation
- Composition with tuples
- Decomposition and pattern matching

This Book Is Written For

- Intermediate C# developers.

About The Author Jon Skeet is a senior software engineer at Google. He studied mathematics and computer science at Cambridge, is a recognized authority in Java and C#, and maintains the position of top contributor to Stack Overflow.

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PART 1 C# IN CONTEXT

PART 2 C# 2–5

PART 3 C# 6

PART 4 C# 7 AND BEYOND

In *More Effective C#*, Second Edition, world-renowned .NET expert Bill Wagner identifies and illuminates 50 intermediate-to-advanced techniques for writing exceptionally robust and well-

performing C# 7.0 code. Reflecting the growing sophistication of the C# language and its development community, Wagner presents powerful new solutions to problems you're likely to encounter every day. Through three editions of *Effective C#*, Wagner's clear explanations, expert tips, and realistic code examples have proven invaluable to hundreds of thousands of developers. With the publication of this title, *Effective C#*, Third Edition, and *More Effective C#*, Second Edition, have been completely reorganized to provide clear explanations, expert tips, and realistic code examples in a cohesive package for modern C#. *More Effective C#*, Second Edition, brings the same proven approach to the new features in C# 7.0, helping you perform familiar tasks more efficiently and effectively. Drawing on his unsurpassed C# experience and key role on global C# standards committees, Wagner addresses object-oriented, functional, and service-oriented approaches to managing data with C#; better ways to express your intent to users and other programmers; and new opportunities to leverage powerful asynchronous and dynamic programming techniques. Use properties instead of accessible data members (Item 1) Distinguish between value and reference types (Item 4) Understand relationships among multiple concepts of equality (Item 9) Avoid conversion operators in your APIs (Item 11) Understand how interface and virtual methods differ (Item 15) Avoid overloading methods defined in base classes (Item 19) Create method groups that are clear, minimal, and complete (Item 22) Enable immediate error reporting in iterators and async methods (Item 26) Use async methods for async work (Item 27) Avoid thread allocations and context switches (Item 30) Construct PLINQ parallel algorithms with exceptions in mind (Item 36) Use the thread pool instead of creating threads (Item 37) Use *BackgroundWorker* for cross-thread communication (Item 38) Use the smallest possible scope for lock handles (Item 41) Understand the pros and cons of dynamic programming (Item 43) Make full use of the expression API (Item 46) Minimize dynamic objects in public APIs (Item 47) You're already a successful C# programmer: this book will make you an outstanding one. Content Update Program: This book is part of the InformIT Content Update Program. As updates are made to C#, sections of this book will be updated or new sections will be added to match updates to the technologies. Register your product at informit.com/register for convenient access to downloads, updates, and corrections as they become available. This book was designed to make concepts as easy as possible, while explaining how programming works. This guide is different from others in that it includes a variety of different exercises that readers can learn from.

A guide to the workings of the common language runtime, Microsoft .NET, and C#.

The free book "Fundamentals of Computer Programming with C#" is a comprehensive computer programming tutorial that teaches programming, logical thinking, data structures and algorithms, problem solving and high quality code with lots of examples in C#. It starts with the first steps in programming and software development like variables, data types, conditional statements, loops and arrays and continues with other basic topics like methods, numeral systems, strings and string processing, exceptions, classes and objects. After the basics this fundamental programming book enters into more advanced programming topics like recursion, data structures (lists, trees, hash-tables and graphs), high-quality code, unit testing and refactoring, object-oriented principles (inheritance, abstraction, encapsulation and polymorphism) and their implementation the C# language. It also covers fundamental topics that each good developer should know like algorithm design, complexity of algorithms and problem solving. The book uses C# language and Visual Studio to illustrate the programming concepts and explains some C# / .NET specific technologies like lambda expressions, extension methods and LINQ. The book is written by a team of developers lead by Svetlin Nakov who has 20+ years practical software development experience. It teaches the major programming concepts and way of thinking needed to become a good software engineer and the C# language in the meantime. It is a great start for anyone who wants to become a skillful software engineer. The books does not teach technologies like databases, mobile and web development, but shows the true way to master the basics of programming regardless of the languages, technologies and tools. It is good for beginners and intermediate developers who want to put a solid base for a successful career in the software engineering industry. The book is accompanied by free video lessons, presentation slides and mind maps, as well as hundreds of exercises and live examples.

Download the free C# programming book, videos, presentations and other resources from <http://introprogramming.info>. Title: Fundamentals of Computer Programming with C# (The Bulgarian C# Programming Book) ISBN: 9789544007737 ISBN-13: 978-954-400-773-7 (9789544007737) ISBN-10: 954-400-773-3 (9544007733) Author: Svetlin Nakov & Co. Pages: 1132 Language: English Published: Sofia, 2013 Publisher: Faber Publishing, Bulgaria Web site: <http://www.introprogramming.info> License: CC-Attribution-Share-Alike Tags: free, programming, book, computer programming, programming fundamentals, ebook, book programming, C#, CSharp, C# book, tutorial, C# tutorial; programming concepts, programming fundamentals, compiler, Visual Studio, .NET, .NET Framework, data types, variables, expressions, statements, console, conditional statements, control-flow logic, loops, arrays, numeral systems, methods, strings, text processing, StringBuilder, exceptions, exception handling, stack trace, streams, files, text files, linear data structures, list, linked list, stack, queue, tree, balanced tree, graph, depth-first search, DFS, breadth-first search, BFS, dictionaries, hash tables, associative arrays, sets, algorithms, sorting algorithm, searching algorithms, recursion, combinatorial algorithms, algorithm complexity, OOP, object-oriented programming, classes, objects, constructors, fields, properties, static members, abstraction, interfaces, encapsulation, inheritance, virtual methods, polymorphism, cohesion, coupling, enumerations, generics, namespaces, UML, design patterns, extension methods, anonymous types, lambda expressions, LINQ, code quality, high-quality code, high-quality classes, high-quality methods, code formatting, self-documenting code, code refactoring, problem solving, problem solving methodology, 9789544007737, 9544007733

Become a C# programmer—and have fun doing it! Start writing software that solves real problems, even if you have absolutely no programming experience! This friendly, easy, full-color book puts you in total control of your own learning, empowering you to build unique and useful programs. Microsoft has completely reinvented the beginning programmer's tutorial, reflecting deep research into how today's beginners learn, and why other books fall short. *Begin to Code with C#* is packed with innovations, from its "Snaps" prebuilt operations to its "Make Something Happen" projects. Whether you're a total beginner or you've tried before, this guide will put the power, excitement, and fun of programming where it belongs: in your hands! Easy, friendly, and you're in control! Learn how to... • Get the free tools you need to create modern programs • Work with 150 sample programs that illustrate important concepts • Use the sample programs as starting points for your own programs • Explore exactly what happens when a program runs • Approach program development with a professional perspective • Use powerful productivity shortcuts built into Microsoft Visual Studio • Master classes, interfaces, methods, and other essential concepts • Organize programs so they're easy to construct and improve • Capture and respond to user input • Store and manipulate many types of real-world data • Create interactive games that are fun to play • Build modern interfaces your users will love • Test and debug your code—and avoid problems in the first place

Learn C# from first principles the Rob Miles way. With jokes, puns, and a rigorous problem solving based approach. You can download all the code samples used in the book from here: <http://>

//www.robmiles.com/s/Yellow-Book-Code-Samples-64.z

Written by the most well known face of India's IT literacy movement, this book is designed for the first course in C# taken by undergraduate students in Computers and Information Technology. The revised edition maintains the lucid flow and continuity which has been the strength of the book.

Offers a reference to key C# programming concepts covering language elements, syntax, datatypes, and tasks.

A guide to the key topics of C# covers such topics as lambda expressions, LINQ, generics, nullable types, iterators, and extension methods.

Completely updated for C# 6.0, the new edition of this bestseller offers more than 150 code recipes to common and not-so-common problems that C# programmers face every day. More than a third of the recipes have been rewritten to take advantage of new C# 6.0 features. If you prefer solutions to general C# language instruction and quick answers to theory, this is your book. C# 6.0 Cookbook offers new recipes for asynchronous methods, dynamic objects, enhanced error handling, the Roslyn compiler, and more. Here are some of topics covered: Classes and generics Collections, enumerators, and iterators Data types LINQ and Lambda expressions Exception handling Reflection and dynamic programming Regular expressions Filesystem interactions Networking and the Web XML usage Threading, Synchronization, and Concurrency Each recipe in the book includes tested code that you can download from oreilly.com and reuse in your own applications, and each one includes a detailed discussion of how and why the underlying technology works. You don't have to be an experienced C# or .NET developer to use C# 6.0 Cookbook. You just have to be someone who wants to solve a problem now, without having to learn all the related theory first.

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