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# C Sharp Programming 3rd Edition By Balagurusamy

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*C Sharp Programming  
3rd Edition By  
Balagurusamy*

2020-06-16

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## **BRAIDEN VANG**

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A Learner's Guide to Real-World  
Programming with C#, XAML, and .NET  
"O'Reilly Media, Inc."

Sharpen your knowledge of C# C# know-how is a must if you want to be a professional Microsoft developer. It's also good to know a little C# if you're building tools for the web, mobile apps, or other development tasks. C# 7.0 All-in-One For

Dummies offers a deep dive into C# for coders still learning the nuances of the valuable programming language. Pop it open to get an intro into coding with C#, how to design secure apps and databases, and even pointers on building web and mobile apps with C#. C# remains one of the most in-demand programming language skills. The language regularly ranks in the top five among "most in-demand" languages, typically along with Java/JavaScript, C++, and Python. A December 2016 ZDNet article noted 'If your employer is a Microsoft developer,

you better know C#." Lucky for you, this approachable, all-in-one guide is here to help you do just that—without ever breaking a sweat! Includes coverage of the latest changes to C# Shows you exactly what the language can (and can't) do Presents familiar tasks that you can accomplish with C# Provides insight into developing applications that provide protection against hackers If you have a basic understanding of coding and need to learn C#—or need a reference on the language in order to launch or further your career—look no further.

Learn C# Programming Springer Nature  
 “Based on my own experience, I can safely say that every .NET developer who reads this will have at least one ‘aha’ moment and will be a better developer for it.”  
 —From the Foreword by Don Box  
 The popular C# programming language combines the high productivity of rapid application development languages with the raw power of C and C++. Now, C# 3.0 adds functional programming techniques and LINQ, Language INtegrated Query. The *C# Programming Language, Third Edition*, is the authoritative and annotated technical reference for C# 3.0. Written by Anders Hejlsberg, the language’s architect, and his colleagues, Mads Torgersen, Scott Wiltamuth, and Peter Golde, this volume has been completely updated and reorganized for C# 3.0. The book provides the complete specification of the language, along with descriptions, reference materials, code samples, and annotations from nine prominent C# gurus. The many annotations—a new feature in this edition—bring a depth and breadth of understanding rarely found in any programming book. As the main text of the book introduces the concepts of the

C# language, cogent annotations explain why they are important, how they are used, how they relate to other languages, and even how they evolved. This book is the definitive, must-have reference for any developer who wants to understand C#. *Head First C#* Simon and Schuster  
 Designed for beginners with no knowledge or experience in game development or programming, this book teaches the essentials of the Unity game engine, the C# programming language, and the art of object-oriented programming. New concepts are not only explained, but thoroughly demonstrated. Starting with an introduction to Unity, you'll learn about scenes, GameObjects, prefabs, components, and how to use the various windows to interact with the engine. You'll then dive into the fundamentals of programming by reviewing syntax rules, formatting, methods, variables, objects and types, classes, and inheritance, all while getting your hands dirty writing and testing code yourself. Later, the book explains how to expose script data in the Inspector and the basics of Unity’s serialization system. This carefully crafted work guides you through the planning and

development of bare bones, simple game projects designed to exercise programming concepts while keeping less relevant interruptions out of the way, allowing you to focus on the implementation of game mechanics first and foremost. Through these example projects, the book teaches input handling, rigidbodies, colliders, cameras, prefab instantiation, scene loading, user interface design and coding, and more. By the end, you'll have built a solid foundation in programming that will pave your way forward in understanding core C# syntax and fundamentals of object-oriented programming—not just what to type but why it's typed and what it’s really doing. *Game Programming with Unity and C#* will send you on your way to becoming comfortable with the Unity game engine and its documentation and how to independently seek further information on yet-untouched concepts and challenges. *What You'll Learn* Understand the fundamentals of object-oriented computer programming, including topics specifically relevant for games. Leverage beginner-to-intermediate-level skills of the C# programming language and its syntax.

Review all major component types of the Unity game engine: colliders and rigidbodies, lights, cameras, scripts, etc. Use essential knowledge of the Unity game engine and its features to balance gameplay mechanics for making interesting experiences. Who This Book Is For Beginners who have no prior experience in programming or game development who would like to learn with a solid foundation that prepares them to further develop their skills.

Microsoft Visual C# Step by Step "O'Reilly Media, Inc."

Learn C# language basics, including variables, arrays, logic, looping, methods, and classes, and then move on to Object Oriented Programming - all in easy steps! Modern coding with C# 10 and .NET 6. Updated for Visual Studio 2022 C# Programming in easy steps, 3rd teaches you how to code applications and demonstrates every aspect of the C# language you will need to produce professional programming results. Its examples provide clear syntax-highlighted code showing C# language basics including variables, arrays, logic, looping, methods, and classes. The book begins by

explaining how to install the free Visual Studio Community Edition, to create an environment in which you can quickly begin to create your own executable programs by copying the book's examples. It demonstrates all the C# language basics before moving on to provide examples of Object Oriented Programming. It concludes by demonstrating how you can use your acquired knowledge to create graphic programs for traditional PC Desktop apps, and also as Universal apps for multiple devices. You need have no previous knowledge of any programming language, so it's ideal for the newcomer to computer programming. Also ideal for:

- Programmers moving from another programming language.
- Students who are studying C# programming at school or college.
- Those seeking a career in computing who need a fundamental understanding of procedural programming.

Free, downloadable sample code is available to download from our website for checking against your own work. Table of Contents

1. Getting started
2. Storing values
3. Performing operations
4. Making statements
5. Devising methods
6. Handling strings
7. Accessing files
- 8.

Solving problems 9. Creating objects 10. Controlling events 11. Building an application 12. Targeting devices  
How to write better C# code Simon and Schuster

Your hands-on guide to Microsoft Visual C# fundamentals with Visual Studio 2015 Expand your expertise--and teach yourself the fundamentals of programming with the latest version of Visual C# with Visual Studio 2015. If you are an experienced software developer, you'll get all the guidance, exercises, and code you need to start building responsive, scalable Windows 10 and Universal Windows Platform applications with Visual C#. Discover how to: Quickly start creating Visual C# code and projects with Visual Studio 2015 Work with variables, operators, expressions, and methods Control program flow with decision and iteration statements Build more robust apps with error, exception, and resource management Master the essentials of Visual C# object-oriented programming Use enumerations, structures, generics, collections, indexers, and other advanced features Create in-memory data queries with LINQ query expressions Improve

application throughput and response time with asynchronous methods Decouple application logic and event handling Streamline development with new app templates Implement the Model-View-ViewModel (MVVM) pattern Build Universal Windows Platform apps that smoothly adapt to PCs, tablets, and Windows phones Integrate Microsoft Azure cloud databases and RESTful web services About You For software developers who are new to Visual C# or who are upgrading from older versions Readers should have experience with at least one programming language No prior Microsoft .NET or Visual Studio development experience required "O'Reilly Media, Inc."

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.

Learning C# 3.0 Starbound Software This new edition of Pro C# 5.0 and the .NET 4.5 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

4.5 the most comprehensive release yet, including: .NET APIs for Windows 8 style UI apps New asynchronous task-based model for async operations How HTML5 support is being wrapped into C# web applications New programming interfaces for HTTP applications, including improved IPv6 support Expanded WPF, WCF and WF libraries giving C# more power than ever before 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 (you'll find everything from generics to pLINQ covered here). The mission of this text is to provide you with a rock-solid foundation in the C# programming language and the core aspects of the .NET platform (assemblies, remoting, Windows Forms, Web Forms, ADO.NET, XML web services, etc.). Once you digest the information presented in these 25 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.

**Head First C#** McGraw-Hill Osborne Media

With its support for dynamic

programming, C# 4.0 continues to evolve as a versatile language on its own. But when C# is used with .NET Framework 4, the combination is incredibly powerful. This bestselling tutorial shows you how to build web, desktop, and rich Internet applications using C# 4.0 with .NET's database capabilities, UI framework (WPF), extensive communication services (WCF), and more. In this sixth edition, .NET experts Ian Griffiths, Matthew Adams, and Jesse Liberty cover the latest enhancements to C#, as well as the fundamentals of both the language and framework. You'll learn concurrent programming with C# 4.0, and how to use .NET tools such as the Entity Framework for easier data access, and the Silverlight platform for browser-based RIA development. Learn C# fundamentals, such as variables, flow control, loops, and methods Build complex programs with object-oriented and functional programming techniques Process large collections of data with the native query features in LINQ Communicate across networks with Windows Communication Foundation (WCF) Learn the advantages of C# 4.0's dynamic language features Build

interactive Windows applications with Windows Presentation Foundation (WPF) Create rich web applications with Silverlight and ASP.NET

Pro C# 5.0 and the .NET 4.5 Framework  
"O'Reilly Media, Inc."

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!

*C# 7.0 All-in-One For Dummies* Addison-Wesley Professional

Tony Gaddis's accessible, step-by-step presentation helps beginning students understand the important details necessary to become skilled programmers at an introductory level. Gaddis motivates the study of both programming skills and the Visual C# programming language by presenting all the details needed to understand the how and the why but never losing sight of the fact that most beginners struggle with this material. His approach is both gradual and highly accessible, ensuring that students understand the logic behind developing high-quality programs. In Starting Out

With Visual C# 2012, Gaddis makes a very detailed and evenly paced presentation of both programming and C# syntax concepts so all readers will be able to follow along. His GUI-based approach to teaching C# will resonate with students in CS, IT, and CIS courses. Teaching and Learning Experience This program will provide a better teaching and learning experience, for both instructors and students. Here's how: Gaddis's Accessible, Step-by-Step Approach: Gaddis makes a very detailed and evenly paced presentation of both programming and C# syntax concepts so all readers will be able to follow along. Engaged Students: Gaddis's GUI-based visual approach and entertaining program examples will capture and keep students' interest. Support Instructors and Students: Easy-to-read code, practice problems, and streamlined design help facilitate learning. *Build Cloud, Web, and Desktop Applications* In Easy Steps 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 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 1. Survival of the sharpest 2. C# 2 3. C# 3: LINQ and everything that comes with it 4. C# 4: Improving interoperability 5. Writing asynchronous code 6. Async implementation 7. C# 5 bonus features 8. Super-sleek properties and expression-bodied members 9. Stringy features 10. A smörgåsbord of features for concise code 11. Composition using tuples 12. Deconstruction and pattern matching 13. Improving efficiency with more pass by reference 14. Concise code in C# 7 15. C# 8 and beyond PART 1 C# IN CONTEXT

PART 2 C# 2-5 PART 3 C# 6 PART 4 C# 7 AND BEYOND  
*Windows Runtime via C#* Pearson Education  
 Get hands-on experience with each Gang of Four design pattern using C#. For each of the patterns, you'll see at least one real-world scenario, a coding example, and a complete implementation including output. In the first part of Design Patterns in C#, you will cover the 23 Gang of Four (GoF) design patterns, before moving onto some alternative design patterns, including the Simple Factory Pattern, the Null Object Pattern, and the MVC Pattern. The final part winds up with a conclusion and criticisms of design patterns with chapters on anti-patterns and memory leaks. By working through easy-to-follow examples, you will understand the concepts in depth and have a collection of programs to port over to your own projects. Along the way, the author discusses the different creational, structural, and behavioral patterns and why such classifications are useful. In each of these chapters, there is a Q&A session that clears up any doubts and covers the pros and cons of each of these patterns. He



finishes the book with FAQs that will help you consolidate your knowledge. This book presents the topic of design patterns in C# in such a way that anyone can grasp the idea. What You Will Learn Work with each of the design patterns Implement the design patterns in real-world applications Select an alternative to these patterns by comparing their pros and cons Use Visual Studio Community Edition 2017 to write code and generate output Who This Book Is For Software developers, software testers, and software architects.

*Functional Programming in C#* Addison-Wesley

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.

*Updated for Visual Studio 2019* Tata McGraw-Hill Education

Summary Functional Programming in C# teaches you to apply functional thinking to real-world problems using the C# language. The book, with its many practical examples, is written for proficient C# programmers with no prior FP experience. It will give you an awesome new perspective. Purchase of the print book includes a free eBook in PDF, Kindle,

and ePub formats from Manning Publications. About the Technology Functional programming changes the way you think about code. For C# developers, FP techniques can greatly improve state management, concurrency, event handling, and long-term code maintenance. And C# offers the flexibility that allows you to benefit fully from the application of functional techniques. This book gives you the awesome power of a new perspective. About the Book Functional Programming in C# teaches you to apply functional thinking to real-world problems using the C# language. You'll start by learning the principles of functional programming and the language features that allow you to program functionally. As you explore the many practical examples, you'll learn the power of function composition, data flow programming, immutable data structures, and monadic composition with LINQ. What's Inside Write readable, team-friendly code Master async and data streams Radically improve error handling Event sourcing and other FP patterns About the Reader Written for proficient C# programmers with no prior FP experience.

About the Author Enrico Buonanno studied computer science at Columbia University and has 15 years of experience as a developer, architect, and trainer. Table of Contents PART 1 - CORE CONCEPTS Introducing functional programming Why function purity matters Designing function signatures and types Patterns in functional programming Designing programs with function composition PART 2 - BECOMING FUNCTIONAL Functional error handling Structuring an application with functions Working effectively with multi-argument functions Thinking about data functionally Event sourcing: a functional approach to persistence PART 3 - ADVANCED TECHNIQUES Lazy computations, continuations, and the beauty of monadic composition Stateful programs and stateful computations Working with asynchronous computations Data streams and the Reactive Extensions An introduction to message-passing concurrency *The Complete Reference* Apress 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. Microsoft Visual C#: An Introduction to Object-Oriented Programming "O'Reilly Media, Inc." C# Programming in easy steps, 2nd edition will teach you to code applications, and demonstrates every aspect of the C# language you will need to produce professional programming results. Its examples provide clear syntax-highlighted code showing C# language basics including variables, arrays, logic, looping, methods, and classes. C# Programming in easy steps, 2nd edition begins by explaining how to install the free Visual Studio Community Edition, to create an environment in which you can quickly begin to create your own executable programs by copying the book's examples. It demonstrates all the C# language basics before moving on to provide examples of Object Oriented Programming. The book concludes by demonstrating how you can use your acquired knowledge to create graphic programs for traditional PC Desktop apps, and also as Universal apps for multiple devices. C# Programming in easy steps, 2nd edition has an easy-to-

follow style that will appeal to: · Anyone who wants to begin programming in C# · The programmer who quickly wants to add C# to their skills set · The hobbyist who wants to begin creating apps for their own computer · The student, and to those seeking a career in computing, who need a fundamental understanding of C# programming Updated for Visual Studio 2019 Table of contents: 1. Getting started 2. Storing values 3. Performing operations 4. Making statements 5. Devising methods 6. Handling strings 7. Accessing files 8. Solving problems 9. Creating objects 10. Controlling events 11. Building an application 12. Targeting devices *Design Patterns in C#* "O'Reilly Media, Inc." The C# Player's Guide (4th Edition) is the ultimate guide for people starting with C#, whether 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# 9.0 and Visual Studio 2019. 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, including inheritance, polymorphism, interfaces, and generics, from start to finish. 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 it over) with your own awesome C# programs!

[Learning C# by Programming Games](#)

Programming C#Building .NET

Applications with 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)

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 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

#### The C# Programming Yellow Book

Cengage Learning

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.

Master the fundamentals of C# 3.0

Pearson Education

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. Normal 0 false false EN-US X-NONE X-NONE "