

Universal Windows Apps With Xaml And C Unleashed

Emphasizing XAML and C#, this book provides readers with all the tools, ideas, and inspiration to begin Windows Universal App development for Windows 10. Real World Windows 10 Development addresses developers who want to break into this market by providing detailed explanations of the various aspects of Universal App development. Written by authors with deep knowledge in Windows 10 universal app development, you will learn how to make the most of the Windows 10 SDK to build applications that can be published on IoT devices, phones, tablets, laptops, desktops, Xbox, HoloLens, and the Surface Hub. Readers will learn how to: Extend the appeal of their native, web-based, or universal apps with media, shell integration, and inter-app communications Build adaptive user interfaces that scale to the screen dimensions they are displayed on Monetize your apps Introduce mapping What if you already have pre-existing software in the form of native win32 applications or a website? Real World Windows 10 Development tackles this by providing detailed tutorials on the approaches used to leverage your existing code investment. Finally, Real World Windows 10 Development provides a step-by-step walk through of the various approaches developers can use to distribute their universal apps. In this book, you'll get: Detailed descriptions of Windows 10 app development Samples emphasizing the use of XAML/C# Adherence to Windows 10 guidelines for successful app acceptance

Modern Cross-Platform Development About This Book Build modern, cross-platform applications with .NET Core Get up to speed with C#, and up to date with all the latest features of C# 7 Start creating professional web applications with ASP.NET Core Who This Book Is For This book is targeted towards readers who have some prior programming experience or have a science, technology, engineering, or mathematics (STEM) background, and want to gain a solid foundation with C# and to be introduced to the types of applications they could build and will work cross-platform on Windows, Linux, and macOS. What You Will Learn Build cross-platform applications using C# 7 and .NET Core Explore ASP.NET Core and learn how to create professional web applications Improve your application's performance using multitasking Use Entity Framework Core and find out how to build code-first databases Master object-oriented programming with C# to increase code reuse and efficiency Familiarize yourself with cross-device app development using the Universal Windows Platform and XAML Query and manipulate data using LINQ Protect your data by using encryption and hashing In Detail If you want to build powerful cross-platform applications with C# 7 and .NET Core, then this book is for you. First, we'll run you through the basics of C#, as well as object-oriented programming, before taking a quick tour through the latest features of C# 7 such as tuples, pattern matching, out variables, and so on. After quickly taking you through C# and how .NET works, we'll dive into the .NET Standard 1.6 class libraries, covering topics such as performance, monitoring, debugging, serialization and encryption. The final section will demonstrate the major types of application that you can build and deploy cross-device and cross-platform. In this section, we'll cover Universal Windows Platform (UWP) apps, web applications, mobile apps, and web services. Lastly, we'll look at how you can package and deploy your applications so that they can be hosted on all of today's most popular platforms, including Linux and Docker. By the end of the book, you'll be armed with all the knowledge you need to build modern, cross-platform applications using C# and .NET Core. Style and approach This book takes a step-by-step approach and is filled with exciting projects and fascinating theory. It uses three high-impact sections to equip you with all the tools you'll need to build modern, cross-platform applications using C# and .NET Core.

This second Preview Edition ebook, now with 16 chapters, is about writing applications for Xamarin.Forms, the new mobile development platform for iOS, Android, and Windows phones unveiled by Xamarin in May 2014. Xamarin.Forms lets you write shared user-interface code in

C# and XAML that maps to native controls on these three platforms.

WinUI is the future of Windows application development. It is the first step in Microsoft's Project Reunion, an open source effort to unify Windows development on an SPA. This book will help developers get up to speed with WinUI quickly to build new Windows applications or modernize existing desktop applications with the power of XAML Islands.

Get up to speed with using C# 8 and .NET Core 3.0 features to build real-world .NET Core applications

Key Features Learn the core concepts of web applications, serverless computing, and microservices Create an ASP.NET Core MVC application using controllers, routing, middleware and authentication Build modern applications using cutting-edge services from Microsoft Azure

Book Description .NET Core is a general-purpose, modular, cross-platform, and opensource implementation of .NET. The latest release of .NET Core 3 comes with improved performance and security features, along with support for desktop applications. .NET Core 3 is not only useful for new developers looking to start learning the framework, but also for legacy developers interested in migrating their apps. Updated with the latest features and enhancements, this updated second edition is a step-by-step, project-based guide. The book starts with a brief introduction to the key features of C# 8 and .NET Core 3. You'll learn to work with relational data using Entity Framework Core 3, before understanding how to use ASP.NET Core. As you progress, you'll discover how you can use .NET Core to create cross-platform applications. Later, the book will show you how to upgrade your old WinForms apps to .NET Core 3. The concluding chapters will then help you use SignalR effectively to add real-time functionality to your applications, before demonstrating how to implement MongoDB in your apps. Finally, you'll delve into serverless computing and how to build microservices using Docker and Kubernetes. By the end of this book, you'll be proficient in developing applications using .NET Core 3.

What you will learn Understand how to incorporate the Entity Framework Core 3 to build ASP.NET Core MVC applications Create a real-time chat application using Azure's SignalR service Gain hands-on experience of working with Cosmos DB Develop an Azure Function and interface it with an Azure Logic App Explore user authentication with Identity Server and OAuth2 Understand how to use Azure Cognitive Services to add advanced functionalities with minimal code Get to grips with running a .NET Core application with Kubernetes

Who this book is for This book is for developers and programmers of all levels who want to build real-world projects and explore the new features of .NET Core 3. Developers working on legacy desktop software who are looking to migrate to .NET Core 3 will also find this book useful. Basic knowledge of .NET Core and C# is assumed.

If you want to build applications that take full advantage of Windows Vista's new user interface capabilities, you need to learn Microsoft's Windows Presentation Foundation (WPF). This new edition, fully updated for the official release of .NET 3.0, is designed to get you up to speed on this technology quickly. By page 2, you'll be writing a simple WPF application. By the end of Chapter 1, you'll have taken a complete tour of WPF and its major elements. WPF is the new presentation framework for Windows Vista that also works with Windows XP. It's a cornucopia of new technologies, which includes a new graphics engine that supports 3-D graphics, animation, and more; an XML-based markup language, called XAML, for declaring the structure of your Windows UI; and a radical new model for controls. This second edition includes new chapters on printing, XPS, 3-D, navigation, text and documents, along with a new appendix that covers Microsoft's new WPF/E platform for delivering richer UI through standard web browsers -- much like Adobe Flash. Content from the first edition has been significantly expanded and modified. Programming WPF includes: Scores of C# and XAML examples that show you what it takes to get a WPF application up and running, from a simple "Hello, Avalon" program to a tic-tac-toe game Insightful discussions of the powerful new programming styles that WPF brings to Windows development, especially its new model for controls A color insert to better illustrate WPF support for 3-D, color, and other graphics effects A tutorial on XAML,

the new HTML-like markup language for declaring Windows UI An explanation and comparison of the features that support interoperability with Windows Forms and other Windows legacy applications WPF represents the best of the control-based Windows world and the content-based web world. Programming WPF helps you bring it all together.

Create powerful cross-platform applications using C# 6, .NET Core 1.0, ASP.NET Core 1.0, and Visual Studio 2015 About This Book Build modern, cross-platform applications with .NET Core 1.0 Get up-to-speed with C#, and up-to-date with all the latest features of C# 6 Start creating professional web applications with ASP.NET Core 1.0 Who This Book Is For Are you struggling to get started with C#? Or maybe you're interested in the potential of the new cross-platform features that .NET Core can offer? If so, C# 6 and .NET Core 1.0 is the book for you. While you don't need to know any of the latest features of C# or .NET to get started, it would be beneficial if you have some programming experience. What You Will Learn Build cross-platform applications using C# 6 and .NET Core 1.0 Explore ASP.NET Core 1.0 and learn how to create professional web applications Improve your application's performance using multitasking Use Entity Framework Core 1.0 and learn how to build Code-First databases Master object-oriented programming with C# to increase code reuse and efficiency Familiarize yourself with cross-device app development using the Universal Windows Platform and XAML Query and manipulate data using LINQ Protect your data by using encryption and hashing In Detail With the release of .NET Core 1.0, you can now create applications for Mac OS X and Linux, as well as Windows, using the development tools you know and love. C# 6 and .NET Core 1.0 has been divided into three high-impact sections to help start putting these new features to work. First, we'll run you through the basics of C#, as well as object-oriented programming, before taking a quick tour through the latest features of C# 6 such as string interpolation for easier variable value output, exception filtering, and how to perform static class imports. We'll also cover both the full-feature, mature .NET Framework and the new, cross-platform .NET Core. After quickly taking you through C# and how .NET works, we'll dive into the internals of the .NET class libraries, covering topics such as performance, monitoring, debugging, internationalization, serialization, and encryption. We'll look at Entity Framework Core 1.0 and how to develop Code-First entity data models, as well as how to use LINQ to query and manipulate that data. The final section will demonstrate the major types of applications that you can build and deploy cross-device and cross-platform. In this section, we'll cover Universal Windows Platform (UWP) apps, web applications, and web services. Lastly, we'll help you build a complete application that can be hosted on all of today's most popular platforms, including Linux and Docker. By the end of the book, you'll be armed with all the knowledge you need to build modern, cross-platform applications using C# and .NET Core. Style and approach This book takes a step-by-step approach and is filled with exciting projects and fascinating theory. It uses three high-impact sections to equip you with all the tools you'll need to build modern, cross-platform applications using C# and .NET Core.

Microcontrollers like Arduino provide a great introduction to physical computing, allowing you to design: environment sensors and controls; visual and auditory alerts based on input; and devices comprising the Internet of Things. In Arduino, author Marko Svaljek explains the fundamentals of the Arduino Uno board and how it interacts with common components. This updated and expanded second edition of Book provides a user-friendly introduction to the subject, Taking a clear structural framework, it guides the reader through the subject's core elements. A flowing writing style combines with the use of illustrations and diagrams throughout the text to ensure the reader understands even the most complex of concepts. This succinct and enlightening overview is a required reading for all those interested in the subject . We hope you find this book useful in shaping your future career & Business.

Build and optimize Windows Phone 8 apps for performance and security Drill into Windows Phone 8 design and architecture, and learn best practices for building phone apps for

consumers and the enterprise. Written by two senior members of the core Windows Phone Developer Platform team, this hands-on book gets you up to speed on the Windows 8 core features and application model, and shows you how to build apps with managed code in C# and native code in C++. You'll also learn how to incorporate Windows Phone 8 features such as speech, the Wallet, and in-app purchase. Discover how to: Create UIs with unique layouts, controls, and gesture support Manage databinding with the Model View ViewModel pattern Build apps that target Windows Phone 8 and Windows Phone 7 Use built-in sensors, including the accelerometer and camera Consume web services and connect to social media apps Share code across Windows Phone 8 and Windows 8 apps Build and deploy company hub apps for the enterprise Start developing games using Direct3D Test your app and submit it to the Windows Phone Store

The #1 WPF Book--Now Updated for WPF 4.5! Thorough, authoritative coverage, practical examples, clear writing, and full-color presentation make this one of the most widely acclaimed programming books of the last decade. Windows Presentation Foundation (WPF) is the recommended technology for creating modern Windows desktop apps. Whether you want to develop traditional user interfaces or integrate 3D graphics, audio/video, animation, dynamic skinning, touch, rich document support, speech recognition, or more, WPF enables you to do so in a seamless, resolution-independent manner that scales from small tablets to large TVs. WPF 4.5 Unleashed is the authoritative book that covers it all, in a practical and approachable fashion, authored by WPF guru and Microsoft architect Adam Nathan. Covers everything you need to know about Extensible Application Markup Language (XAML) Examines the WPF feature areas in incredible depth: controls, layout, resources, data binding, styling, graphics, animation, and more Delves into topics that aren't covered by most books: 3D, speech, audio/video, documents, effects Shows how to create popular UI elements and leverage built-in controls such as the new Office-style Ribbon Demonstrates how to create sophisticated UI mechanisms, such as Visual Studio-like collapsible/dockable panes Explains how to create first-class custom controls for WPF Demonstrates how to create hybrid WPF software that leverages Windows Forms, DirectX, ActiveX, or other non-WPF technologies Explains how to exploit desktop features, such as Jump Lists and taskbar customizations, and the same toast notifications used by Windows Store apps

Universal Windows Apps with XAML and C# Unleashed Pearson Education

Get the latest coverage of the newest features in C#9 and .NET 5 In Professional C# and .NET: 2021 Edition, Microsoft MVP for Visual Studio and Development Technologies and veteran developer, Christian Nagel, delivers a comprehensive tour of the new features and capabilities of C#9 and .NET 5. Experienced programmers making the transition to C# will benefit from the author's in-depth explorations to create Web- and Windows applications using ASP.NET Core, Blazor, and WinUI using modern application patterns and new features offered by .NET including Microservices deployed to Docker images, GRPC, localization, asynchronous streaming, and much more. The book also offers: Discussions of the extension of .NET to non-Microsoft platforms like OSX and Linux Explanations of the newest features in C#9, including support for record types, and enhanced support for tuples, pattern matching, and nullable reference types Integrating .NET applications with Microsoft Azure services such as Azure App Configuration, Azure Key Vault, Azure Functions, the Azure Active Directory, and others Downloadable code examples from wrox.com and github.com with online updates for C# 10 and .NET 6 Perfect for programmers with a background in C#, Visual Basic, Java, or C/C++, Professional C# and .NET: 2021 Edition will also earn a place in the libraries of software architects seeking an up-to-date and fulsome treatment of the latest C# and .NET releases.

Full Color: Figures and code appear as they do in Visual Studio. If you want to write Windows apps with XAML, one person can help you more than anyone else: Adam Nathan. He has built

a well-deserved reputation as the world's #1 expert on putting it to work. Now, he's written the definitive, practical XAML tutorial and reference: XAML Unleashed. Nathan answers the questions you're most likely to ask, walks through the tasks you're sure to perform, and helps you avoid problems as you use XAML. You'll learn how to create effective user interfaces for line-of-business apps, consumer apps, reusable controls, or anything else. These techniques will be invaluable whether you're creating universal Windows apps or working with Silverlight or WPF. XAML Unleashed is packed with C# and XAML code examples that are fully color-coded to match their appearance in Visual Studio--the same approach that has made Nathan's previous Unleashed books so popular. Detailed information on how to... Understand and apply XAML's syntax, namespaces, and keywords Organize controls and other elements in a smooth and intuitive user interface Make the most of XAML's rich controls for content, items, images, text, and media Build exceptionally powerful user and custom controls Master reliable and efficient ways to mix XAML with procedural code Extend XAML with type converters, markup extensions, and other third-party desktop classes Use data binding to link and synchronize controls with in-memory representations of data Leverage XAML's support for binary and logical resources Use styles, templates, and visual states to radically redesign controls without sacrificing their built-in functionality Access the Windows animation library to create stunning theme transitions and animations Build custom panels to enforce consistency in unusual user interfaces Understand subtle changes in XAML's behavior across different Microsoft UI frameworks

Summary Windows Store App Development introduces C# developers to working with Windows Store apps. It provides full coverage of XAML, and addresses both app design and development. Following numerous carefully crafted examples, you'll learn about new Windows 8 features, the WinRT API, and .NET 4.5. Along the way, you'll pick up tips for deploying apps, including sale through the Windows Store. And, of course, you'll find the same deep and unique insights Pete provides in his Silverlight books. About the Technology The Windows Store provides an amazing array of productivity tools, games, and other apps directly to the millions of customers already using Windows 8.x or Surface. Windows Store apps boast new features like touch and pen input, standardized app-to-app communication, and tight integration with the web. And, you can build Windows Store apps using the tools you already know: C# and XAML. About this Book Windows Store App Development introduces the Windows 8.x app model to readers familiar with traditional desktop development. You'll explore dozens of carefully crafted examples as you master Windows features, the Windows Runtime, and the best practices of app design. Along the way, you'll pick up tips for deploying apps, including selling through the Windows Store. This book requires some knowledge of C#. No experience with Windows 8 is needed. What's Inside Designing, creating, and selling Windows Store apps Developing touch and sensor-centric apps Working C# examples, from feature-level techniques to complete app design Making apps that talk to each other Mixing in C++ for even more features About the Author Pete Brown is a Developer Evangelist at Microsoft and author of Silverlight 4 in Action and Silverlight 5 in Action. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. Table of Contents Hello, Modern Windows The Modern UI The Windows Runtime and .NET XAML Layout Panels Brushes, graphics, styles, and resources Displaying beautiful text Controls, binding, and MVVM View controls, Semantic Zoom, and navigation The app bar The splash screen, app tile, and notifications View states Contracts: playing nicely with others Working with files Asynchronous everywhere Networking with SOAP and RESTful services A chat app using sockets A little UI work: user controls and Blend Networking player location Keyboards, mice, touch, accelerometers, and gamepads App settings and suspend/resume Deploying and selling your app

Explore C# and the .NET Core framework to create applications and optimize them with

ASP.NET Core 2 Key Features Get to grips with multi-threaded, concurrent, and asynchronous programming in C# and .NET Core Develop modern, cross-platform applications with .NET Core 2.0 and C# 7.0 Create efficient web applications with ASP.NET Core 2. Book Description C# is a widely used programming language, thanks to its easy learning curve, versatility, and support for modern paradigms. The language is used to create desktop apps, background services, web apps, and mobile apps. .NET Core is open source and compatible with Mac OS and Linux. There is no limit to what you can achieve with C# and .NET Core. This Learning Path begins with the basics of C# and object-oriented programming (OOP) and explores features of C#, such as tuples, pattern matching, and out variables. You will understand .NET Standard 2.0 class libraries and ASP.NET Core 2.0, and create professional websites, services, and applications. You will become familiar with mobile app development using Xamarin.Forms and learn to develop high-performing applications by writing optimized code with various profiling techniques. By the end of C# 7 and .NET: Designing Modern Cross-platform Applications, you will have all the knowledge required to build modern, cross-platform apps using C# and .NET. This Learning Path includes content from the following Packt products: C# 7.1 and .NET Core 2.0 - Modern Cross-Platform Development - Third Edition by Mark J. Price C# 7 and .NET Core 2.0 High Performance by Ovais Mehboob Ahmed Khan What you will learn Explore ASP.NET Core to create professional web applications Master OOP with C# to increase code reusability and efficiency Protect your data using encryption and hashing Measure application performance using BenchmarkDotNet Use design techniques to increase your application's performance Learn memory management techniques in .NET Core Understand tools and techniques to monitor application performance Who this book is for This Learning Path is designed for developers who want to gain a solid foundation in C# and .NET Core, and want to build cross-platform applications. To gain maximum benefit from this Learning Path, you must have basic knowledge of C#.

Develop Windows 10 applications faster and more efficiently using the Universal Windows Platform. You will use Xamarin to create apps for macOS, iOS, and Android devices. Building Apps for the Universal Windows Platform is a complete guide covering PCs, tablets, phones, and other devices such as HoloLens. You will use Windows 10 to develop apps for desktop, mobile, holographic, wearable, and IoT devices. You will reuse code to easily create cross-platform apps. What You Will Learn Design and develop apps using Visual Studio and Blend Create Cortana-enabled apps for a hands-free experience Build IoT apps and apps for wearables such as the Microsoft HoloLens Monitor apps post-publication to gain insights from actionable data using Windows Store Analytics and Azure Who This Book Is For Professional developers working independently or in a team on Windows 10 applications, and students coming into the world of software development

Skip the basics and delve right into Visual Studio 2017 advanced features and tools Professional Visual Studio 2017 is the industry-favorite guide to getting the most out of Microsoft's primary programming technology. From touring the new UI to exploiting advanced functionality, this book is designed to help professional developers become more productive. A unique IDE-centric approach provides a clear path through the typical workflow while exploring the nooks and crannies that can make your job easier. Visual Studio 2017 includes a host of features aimed at improving developer productivity and UI, and this book covers them all with clear explanation, new figures, and expert insight. Whether you're new to VS or just upgrading, this all-inclusive guide is an essential resource to keep within arm's reach. Visual Studio 2017 fixes the crucial issues that kept professionals from adopting VS 2015, and includes new features and tools that streamline the developer's job. This book provides the straightforward answers you need so you can get up to speed quickly and get back to work. Master the core functionality of Visual Studio 2017 Dig into the tools that make writing code easier Tailor the environment to your workflow, not the other way around Work your way through configuration,

debugging, building, deployment, customizing, and more Microsoft is changing their release cadence—it's only been about two years since the last release—so developers need to quickly get a handle on new tools and features if they hope to remain productive. The 2017 release is designed specifically to help you get more done, in less time, with greater accuracy and attention to detail. If you're ready to get acquainted, Professional Visual Studio 2017 is your ideal guide.

A guide to mastering Visual Studio 2017 About This Book Focus on coding with the new, improved, and powerful tools of VS 2017 Master improved debugging and unit testing support capabilities Accelerate cloud development with the built-in Azure tools Who This Book Is For .NET Developers who would like to master the new features of VS 2017, and would like to delve into newer areas such as cloud computing, would benefit from this book. Basic knowledge of previous versions of Visual Studio is assumed. What You Will Learn Learn what's new in the Visual Studio 2017 IDE, C# 7.0, and how it will help developers to improve their productivity Learn the workloads and components of the new installation wizard and how to use the online and offline installer Build stunning Windows apps using Windows Presentation Foundation (WPF) and Universal Windows Platform (UWP) tools Get familiar with .NET Core and learn how to build apps targeting this new framework Explore everything about NuGet packages Debug and test your applications using Visual Studio 2017 Accelerate cloud development with Microsoft Azure Integrate Visual Studio with most popular source control repositories, such as TFS and GitHub In Detail Visual Studio 2017 is the all-new IDE released by Microsoft for developers, targeting Microsoft and other platforms to build stunning Windows and web apps. Learning how to effectively use this technology can enhance your productivity while simplifying your most common tasks, allowing you more time to focus on your project. With this book, you will learn not only what VS2017 offers, but also what it takes to put it to work for your projects. Visual Studio 2017 is packed with improvements that increase productivity, and this book will get you started with the new features introduced in Visual Studio 2017 IDE and C# 7.0. Next, you will learn to use XAML tools to build classic WPF apps, and UWP tools to build apps targeting Windows 10. Later, you will learn about .NET Core and then explore NuGet, the package manager for the Microsoft development platform. Then, you will familiarize yourself with the debugging and live unit testing techniques that comes with the IDE. Finally, you'll adapt Microsoft's implementation of cloud computing with Azure, and the Visual Studio integration with Source Control repositories. Style and approach This comprehensive guide covers the advanced features of Visual Studio 2017, and communicates them through a practical approach to explore the underlying concepts of how, when, and why to use it. In Windows 10 Microsoft has created a single platform with a common runtime to enable development of single code-base applications running on various Windows devices. These applications are called Universal Windows Apps. With the introduction of the Universal App Platform (UAP), an integrated set of development tools and APIs/SDKs for Windows 10, it is now truly possible to have "One Windows Platform" to develop Universal Apps. The Model-View-View-Model (MVVM) pattern is valued by many developers as an excellent way of creating sophisticated modern applications. Its clear separation of presentation and business logic produces a clean implementation that promotes speed, scalability and code reuse in applications with a complex UI. These characteristics are particularly valuable to WPF developers. This 200 page, information-rich, guide we will show you how MVVM works with both XAML (C#) and HTML5 (JavaScript) flavors of Windows 10 Universal Apps. Beginning with a brief recap of Windows 10 Universal Apps and Microsoft One Windows Platform

and MVVM concepts under .NET (to provide a common frame of reference) the author then will then dive into the details of how MVVM can best be implemented for Windows 10 Universal Apps, showing a working application framework in each case.

With Microsoft new Universal Windows Apps tools, it's easy to share code between Windows 8.1 and Windows Phone 8.1 XAML apps. Now, developers can deliver beautiful end user experiences on all new Windows devices, with radically less cost and development effort. This means they can painlessly extend their conventional PC development work to fast-growing tablet and smartphone markets. In *Universal Windows Apps with XAML and C# Unleashed*, the world's #1 XAML expert shows Windows developers how to do all this, and more. Just as he did in previous best-sellers like *Windows Presentation Foundation Unleashed* and *Windows 8 Apps with XAML and C# Unleashed*, Adam Nathan delivers comprehensive coverage, accessible explanations, and plenty of outstanding full-color code samples. Drawing on his unsurpassed experience with modern Windows mobile development, Nathan shows how to build the apps you want to build -- not just the apps Microsoft's SDK makes easy. You'll learn how to unify your Visual Studio code bases for assets ranging from user controls to styles, graphics, and animation. You'll even learn how to unify your monetization, delivering apps and in-app purchases on both Windows and Windows Phone through a single purchase.

C# 7.1 and .NET Core 2.0 – Modern Cross-Platform Development, Third Edition is a practical guide to creating powerful cross-platform applications with C# 7 and .NET Core 2.0. About This Book Build modern, cross-platform applications with .NET Core 2.0 Get up to speed with C#, and up to date with all the latest features of C# 7.1 Start creating professional web applications with ASP.NET Core 2.0 Who This Book Is For This book is targeted towards readers who have some prior programming experience or have a science, technology, engineering, or mathematics (STEM) background, and want to gain a solid foundation with C# and to be introduced to the types of applications they could build and will work cross-platform on Windows, Linux, and macOS. What You Will Learn Build cross-platform applications using C# 7.1 and .NET Core 2.0 Explore ASP.NET Core 2.0 and learn how to create professional websites, services, and applications Improve your application's performance using multitasking Use Entity Framework Core and LINQ to query and manipulate data Master object-oriented programming with C# to increase code reuse and efficiency Familiarize yourself with cross-device app development using the Universal Windows Platform Protect and manage your files and data with encryption, streams, and serialization Get started with mobile app development using Xamarin.Forms Preview the nullable reference type feature of C# 8 In Detail C# 7.1 and .NET Core 2.0 – Modern Cross-Platform Development, Third Edition, is a practical guide to creating powerful cross-platform applications with C# 7.1 and .NET Core 2.0. It gives readers of any experience level a solid foundation in C# and .NET.

The first part of the book runs you through the basics of C#, as well as debugging functions and object-oriented programming, before taking a quick tour through the latest features of C# 7.1 such as default literals, tuples, inferred tuple names, pattern matching, out variables, and more. After quickly taking you through C# and how .NET works, this book dives into the .NET Standard 2.0 class libraries, covering topics such as packaging and deploying your own libraries, and using common libraries for working with collections, performance, monitoring, serialization, files, databases, and encryption. The final section of the book demonstrates the major types of application that you can build and deploy cross-device and cross-platform. In this section, you'll learn about websites, web applications, web services, Universal Windows Platform (UWP) apps, and mobile apps. By the end of the book, you'll be armed with all the knowledge you need to build modern, cross-platform applications using C# and .NET. Style and approach This book takes a step-by-step approach and is filled with exciting projects and fascinating theory. It uses three high-impact sections to equip you with all the tools you'll need to build modern, cross-platform applications using C# and .NET Core 2.0.

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.

What is XAML? XAML is one of the primary languages used to create user interfaces for .NET and Windows apps. This course, part one in our XAML series, provides an overview of the what, when, and how of XAML for the Microsoft developer who wants to build better user interfaces for their applications. Learn why markup is so important in UI definition, which frameworks use XAML, and how to identify parts of a XAML file. Author Walt Ritscher shares his preferred settings for working with XAML in Visual Studio 2015, explores XAML namespaces and namespace mapping, and discusses the use of XAML in other popular frameworks, including Windows Presentation Foundations, Universal Windows, and Silverlight.

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

Your expert guide to designing and building dynamic user interfaces Sharpen your application design and development skills using XAML—the declarative markup language used in Microsoft Silverlight and Windows Presentation Foundation (WPF). Led by two XAML experts, you'll learn practical ways to build rich, interactive user interfaces with data integration capabilities and support for

multimedia, graphics, and animation. This hands-on guide is ideal for Microsoft .NET developers and web designers alike. Discover how to: Control UI behavior and implement business logic with code-behind solutions Manage UI element positioning with the XAML layout system Use templates to customize UI elements—without affecting their functionality Apply different types of property and event systems in WPF and Silverlight Bind various kinds of data to your UI, and display them in the format you want Implement 2D and 3D vector graphics and animations Reuse control styles and properties to maintain consistency throughout your application

Benefit from a nuts-and-bolts examination of how XAML and C# 7 fit together and obtain a foundation for getting up and running with Windows 10. Once you have a good understanding of the basics, you progress to more advanced topics steadily increasing your understanding as a whole. This holistic knowledge is essential to get the most out of Windows 10 development. Each topic is covered clearly and concisely and is packed with the details you need to code effectively. The most important features are given a no-nonsense, in-depth treatment and chapters contain examples that demonstrate both the power and the subtlety of Windows 10. Windows 10 Development with XAML and C# 7 focuses on the features that you need for your project and brings your existing C# coding knowledge to bear. What You'll Learn Discover what universal Windows 10 apps are capable of and why they are special Use advanced features to create immersive and engaging Windows 10 applications Create applications that work seamlessly on tablets and desktops Manage the life cycle of your application Who This Book Is For Anyone wanting to get to grips with Windows 10 development using the cross-platform standards of XAML and C#.

The professional's guide to C# 7, with expert guidance on the newest features Professional C# 7 and .NET Core 2.0 provides experienced programmers with the information they need to work effectively with the world's leading programming language. The latest C# update added many new features that help you get more done in less time, and this book is your ideal guide for getting up to speed quickly. C# 7 focuses on data consumption, code simplification, and performance, with new support for local functions, tuple types, record types, pattern matching, non-nullable reference types, immutable types, and better support for variables. Improvements to Visual Studio will bring significant changes to the way C# developers interact with the space, bringing .NET to non-Microsoft platforms and incorporating tools from other platforms like Docker, Gulp, and NPM. Guided by a leading .NET expert and steeped in real-world practicality, this guide is designed to get you up to date and back to work. With Microsoft speeding up its release cadence while offering more significant improvement with each update, it has never been more important to get a handle on new tools and features quickly. This book is designed to do just that, and more—everything you need to know about C# is right here, in the single-volume resource on every developer's shelf. Tour the many new and enhanced features

packed into C# 7 and .NET Core 2.0 Learn how the latest Visual Studio update makes developers' jobs easier Streamline your workflow with a new focus on code simplification and performance enhancement Delve into improvements made for localization, networking, diagnostics, deployments, and more Whether you're entirely new to C# or just transitioning to C# 7, having a solid grasp of the latest features allows you to exploit the language's full functionality to create robust, high-quality apps. Professional C# 7 and .NET Core 2.0 is the one-stop guide to everything you need to know.

A true professional's guide to C# 6 Professional C# 6 and .NET Core 1.0 provides complete coverage of the latest updates, features, and capabilities, giving you everything you need for C#. Get expert instruction on the latest changes to Visual Studio 2015, Windows Runtime, ADO.NET, ASP.NET, Windows Store Apps, Windows Workflow Foundation, and more, with clear explanations, no-nonsense pacing, and valuable expert insight. This incredibly useful guide serves as both tutorial and desk reference, providing a professional-level review of C# architecture and its application in a number of areas. You'll gain a solid background in managed code and .NET constructs within the context of the 2015 release, so you can get acclimated quickly and get back to work. The new updates can actively streamline your workflow, with major changes including reimagined C# refactoring support, a new .NET Web app stack, and the .NET compiler platform that makes C# and Visual Basic compilers available as APIs. This book walks you through the changes with a comprehensive C# review. Explore the new Visual Studio templates for ASP.NET Core 1.0, Web Forms, and MVC Learn about the networking switch to HttpClient and ASP.NET Web API's replacement of WCF Data Services Work with the latest updates to the event log, Windows Runtime 2.0, and Windows 8.1 deployment and localization Dig deep into the new .NET 5.0 GC behaviors and the Migrations addition to ADO.NET Microsoft has stepped up both the cadence and magnitude of their software releases. Professional C# 6 and .NET Core 1.0 shows you everything you need to know about working with C# in a real-world context.

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.

If you're a .NET developer looking to build tablet apps, this practical book takes you step-by-step through the process of developing apps for the Windows Store. You'll learn how to use Microsoft's Modern UI design language with Windows 8.1 and WinRT 8.1.1 by building a line-of-business mobile app with C# through the course of the book. To develop the app, you'll work with the same system details and design specs that apply to retail apps, such as persistence, backend service, and Windows 8 features for sharing and search. You'll learn how to develop the code, incorporate third-party open source products, and package your app for the Windows Store. Build a UI with XAML and the Model/View/View-Model pattern Understand asynchrony—and rediscover threads and parallelism Store data and system settings locally with SQLite Use app bars for commands and the settings charm for Help options Present notifications as tile updates, badges, or toast popups Help users visualize locations and tag activities to a map Enable apps to share data and run side-by-side in the UI Implement functionality for running tasks in the background

A beginner's guide to building Windows applications with WinUI for UWP and desktop applications Key Features: Create modern Windows 10 applications and gain access to UI controls that were previously limited to UWP applications Discover how to modernize your existing Win32 apps with a modern Windows 10 UI Learn to embed a single page application (SPA) in a WinUI application with a web framework like Blazor Book Description: WinUI 3.0 takes a whole new approach to delivering Windows UI components and controls, and is able to deliver the same features on more than one version of Windows 10. Learn WinUI 3.0 is a comprehensive introduction to WinUI and Windows apps for anyone who is new to WinUI, Universal Windows Platform (UWP), and XAML applications. The book begins by helping you get to grips with the latest features in WinUI and shows you how XAML is used in UI development. You'll then set up a new Visual Studio environment and learn how to create a new UWP project. Next, you'll find out how to incorporate the Model-View-ViewModel (MVVM) pattern in a WinUI project and develop unit tests for ViewModel commands. Moving on, you'll cover the Windows Template Studio (WTS) new project wizard and WinUI libraries in a step-by-step way. As you advance, you'll discover how to leverage the Fluent Design system to create beautiful WinUI applications. You'll also explore the contents and capabilities of the Windows Community Toolkit and learn to create a new UWP user control. Toward the end, the book will teach you how to build, debug, unit test, deploy, and monitor apps in production. By the end of this book, you'll have learned how to build WinUI applications from scratch and modernize existing WPF and WinForms applications using WinUI controls. What You Will Learn: Get up and running with WinUI and discover how it fits into the landscape of Project Reunion and Windows UI development Build new Windows apps quickly with robust templates Develop testable and maintainable apps using the MVVM pattern Modernize WPF and WinForms applications with WinUI and

XAML Islands Discover how to build apps that can target Windows and leverage the power of the web Install the XAML Controls Gallery sample app and explore available WinUI controls Who this book is for: This book is for anyone who wants to develop Windows applications with a modern user experience (UX). If you are familiar with UWP and WPF and are looking to enhance your knowledge of Windows development and modernize existing apps, you will find this book useful. Hands-on experience with C# and .NET is expected but no prior knowledge of WinUI is required.

Develop applications in Microsoft Kinect 2 using gesture and speech recognition, scanning of objects in 3D, and body tracking. Create motion-sensing applications for entertainment and practical uses, including for commercial products and industrial applications. Beginning Microsoft Kinect for Windows SDK 2.0 is dense with code and examples to ensure that you understand how to build Kinect applications that can be used in the real world. Techniques and ideas are presented to facilitate incorporation of the Kinect with other technologies. What You Will Learn Set up Kinect 2 and a workspace for Kinect application development Access audio, color, infrared, and skeletal data streams from Kinect Use gesture and speech recognition Perform computer vision manipulations on image data streams Develop Windows Store apps and Unity3D applications with Kinect 2 Take advantage of Kinect Fusion (3D object mapping technology) and Kinect Ripple (Kinect projector infotainment system) Who This Book Is For Developers who want to include the simple but powerful Kinect technology into their projects, including amateurs and hobbyists, and professional developers Learn the fundamentals, practical applications, and latest features of C# 8.0 and .NET Core 3.0 from expert teacher Mark J. Price. Key Features Build modern, cross-platform applications with .NET Core 3.0 Get up to speed with C#, and up to date with all the latest features of C# 8.0 Start creating professional web applications with ASP.NET Core 3.0 Book Description In C# 8.0 and .NET Core 3.0 – Modern Cross-Platform Development, Fourth 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 new chapters on Content Management Systems (CMS) and machine learning with ML.NET. The book covers all the topics you need. Part 1 teaches the fundamentals of C#, including object-oriented programming, and new C# 8.0 features such as nullable reference types, simplified switch pattern matching, and default interface methods. Part 2 covers the .NET Standard APIs, such as managing and querying data, monitoring and improving performance, working with the filesystem, async streams, serialization, and encryption. Part 3 provides examples of cross-platform applications you can build and deploy, such as web apps using ASP.NET Core or mobile apps using Xamarin.Forms. The book introduces three technologies for building Windows desktop applications including Windows Forms, Windows Presentation Foundation (WPF), and Universal Windows

Platform (UWP) apps, as well as web applications, web services, and mobile apps. What you will learn Build cross-platform applications for Windows, macOS, Linux, iOS, and Android Explore application development with C# 8.0 and .NET Core 3.0 Explore ASP.NET Core 3.0 and create professional web applications Learn object-oriented programming and C# multitasking Query and manipulate data using LINQ Use Entity Framework Core and work with relational databases Discover Windows app development using the Universal Windows Platform and XAML Build mobile applications for iOS and Android using Xamarin.Forms Who this book is for Readers with some prior programming experience or with a science, technology, engineering, or mathematics (STEM) background, who want to gain a solid foundation with C# 8.0 and .NET Core 3.0.

Using Visual Basic 2015, developers can build cutting-edge applications that run practically anywhere: on Windows desktops, new Windows 10 devices, in mobile and cloud environments, and beyond. Visual Basic 2015 Unleashed is the most comprehensive, practical reference to modern programming with VB 2015. Long-time Visual Basic MVP Alessandro Del Sole walks you through the latest version of the language, helping you thoroughly master its most valuable features, most powerful programming techniques, and most effective development patterns. Next, he shows how to use Visual Basic 2015 to build robust, effective software in a wide range of environments. Extensively updated for Visual Basic 2015's major improvements, this guide covers both Visual Basic 2015 Professional Edition for professional developers and the free Community Edition for hobbyists, novices, and students. Del Sole has added detailed coverage of building new universal Windows apps for Windows 10 and using new Visual Studio 2015 capabilities to supercharge your productivity as a developer. If you want to leverage all of VB 2015's power, this is the book you need. Detailed information on how to... Understand the Visual Studio 2015 IDE, .NET Framework 4.6 and the new .NET Core 5, and the anatomy of a VB 2015 application Debug VB applications and implement error handling and exceptions Keep your code clean and well-organized with VB 2015's new refactoring tools Master modern VB object development: namespaces, modules, structures, enums, inheritance, interfaces, generics, delegates, events, collections, iterators, and more Share Visual Basic code with Portable Class Libraries and Shared Projects Access data with LINQ and ADO.NET Entity Framework Manipulate XML documents with LINQ and XML Literals Build and deploy applications to run in the Microsoft Azure cloud Develop universal Windows apps that run on any Windows 10 device Use advanced .NET 4.6 platform capabilities, including async and parallel programming, multithreading, assemblies, reflection, and coding attributes Leverage new compiler APIs to write custom domain-specific live code analysis rules Test code with unit tests and TDD Deploy apps efficiently with InstallShield for Visual Studio and ClickOnce

.NET 5 is a unified framework from Microsoft's cross-platform toolset that includes ASP.NET Core and Xamarin for mobile development. With this book,

you'll understand .NET 5 and how to develop mobile apps with Xamarin. You'll explore Microsoft Azure cloud services, advanced app features, and how to manage and maintain your mobile apps effectively.

This book is a practical tutorial that explains all the features of Kinect SDK by creating sample applications throughout the book. It includes a detailed discussion of APIs with step-by-step explanation of development of a real-world sample application. The purpose of this book is to explain how to develop applications using the Kinect for Windows SDK. If you are a beginner and looking to start developing applications using the Kinect for Windows SDK, and if you want to build motion-sensing, speech-recognizing applications with Kinect, this book is for you. This book uses C# and WPF (Windows P.

Full Color: Figures and code appear as they do in Visual Studio. Universal Windows apps are a total game-changer. You can now write once and deploy your app to any modern PC, tablet, phone, or other Windows device. Suddenly, it's quick and easy to serve new devices and form factors, sharing unified assets ranging from code to styles to user controls. It has never been easier to reach multiple-device markets! Now, the world's #1 expert on Microsoft XAML brings together all the knowledge Windows developers need to build universal apps that adapt smoothly for any device running Windows 8.1, Windows Phone 8.1, or their successors. Drawing on his unsurpassed personal experience and direct input from Microsoft's Windows and Visual Studio teams, Adam Nathan illuminates core development concepts, answers your most important questions, and candidly assesses the technology's strengths and limitations. This full-color guide walks you through every key task involved in building a universal Windows app: layout and input, working with the app model, using advanced controls, leveraging XAML's powerful rich media features, and much more. Detailed information on how to... Quickly build universal, localized apps that exploit the vast global scale of the Windows Store Size, position, and transform elements within layouts that gracefully adapt to different devices Handle input from touch, mouse, pen, keyboard, and any sensor Monetize apps with Windows Store sales, in-app purchases, and advertising Make the most of controls for managing content, items, text, images, media, speech, and more Create efficient 2D vector graphics and animations Use styles, templates, and visual states to redesign controls without losing functionality Bind data sources to simplify data presentation and updates Easily integrate data from apps, users, and networks Support Windows app commands: Search, Share, Print, Play, Project, Settings Use contracts to build apps that cooperate to perform complex tasks Improve the user experience even when your app isn't running

Find out what's new in Windows Phone 8.1 for developers, including how to build a Universal Windows App for Windows Phone, Windows and Xbox. Windows Phone 8.1 Development Revealed is the book you need to help you navigate the new Windows Phone landscape and ensure the success of your current and future apps in the marketplace. Part I introduces the new options open to you, with pure Windows Phone apps and the new Universal Windows Apps. You'll need to understand the pros and cons of a phone-first or cross-platform approach and make the right decisions depending on your current needs and priorities: do you want to take advantage of the full power of native device interaction? Or is it more important to offer an app across a

range of devices and tap into a wider potential market? These considerations and more are discussed as Lars Klint sets you a challenge: build it right! Part II drills down into the phone-first approach to app development, including a description of breaking changes from Windows Phone 8 and a showcase and code examples for all the latest features. Part III then shows you how to set up a Universal Windows App and adapt the UI for a range of different devices. You'll want your users to have a great and consistent experience on any device, but your phone app should still feel like a phone app, with controls that feel right in that context, and a presentation that works for a smaller screen size. Finally you'll learn what you can do to future-proof your apps for long-term success in the marketplace. *Windows Phone 8.1 Development Revealed* is the book you'll want at your side as you prepare to launch your next app to the Windows Phone marketplace. What you'll learn Meet the new dual landscape of Windows Phone development: pure Windows Phone and Universal Windows Apps. Understand the pros and cons of each and how to choose the approach that's right for you in each case, depending on your situation and needs. Get up to speed with the latest features in both Windows Phone and Universal Windows Apps, with code examples for each. Learn how a phone-first approach can help you tap into the best native features, and how a Universal Windows App can open up a new and wider audience. Understand the new storage, notifications and output options for Windows Phone, and how to design a consistent app experience across multiple devices with a Universal Windows App Future-proof your app, ready for the next versions of Windows Phone and Windows. Who this book is for Readers should have some experience with either Windows 8 or Windows Phone application development in C# and XAML.

Master Windows 8.1/Windows Runtime Programming Through 80 Expert Projects This is the most complete, hands-on, solutions-focused guide to programming modern Windows applications with the Windows Runtime. Leading Windows development consultants Jeremy Likness and John Garland present easy-to-adapt C# and XAML example code for more than 80 projects. Their real-world application examples help you apply Windows 8.1's best improvements, including large tiles, the new search control, flyouts, command bars, native WinRT networking, and new deployment and sideloading options. Drawing on their pioneering experience, they illuminate key areas of the Windows Runtime API, offering uniquely detailed coverage of encryption, cloud connectivity, devices, printers, and media integration. You'll find cutting-edge tips and tricks available in no other book. This is an indispensable resource for all intermediate-to-advanced Windows developers, and for any architect building desktop, tablet, or mobile solutions with Microsoft technologies. Its focus on both C# and XAML will make it valuable to millions of Windows developers already familiar with Silverlight, WPF, and/or .NET. Coverage includes

- Creating robust app interfaces with the newest XAML controls, including flyouts and command bars
- Saving data in a persistent "roaming zone" for syncing across Windows 8.1 devices
- Using Visual State Manager (VSM) to build apps that adapt to various device resolutions and orientations
- Integrating virtually any form of data into your apps
- Connecting with web services, RSS, Atom feeds, and social networks
- Securing apps via authentication, encrypting, signing, and single sign-on with Microsoft Account, Facebook, Google, and more
- Leveraging Windows 8.1 media enhancements that improve battery life and app performance
- Networking more effectively with Windows 8.1's revamped HTTP

implementation and new location APIs • Using Tiles and Toasts to keep apps alive and connected, even when they aren't running • Enabling users to send content between devices via NFC tap and send • Ensuring accessibility and globalizing your apps • Efficiently debugging, optimizing, packaging, and deploying your apps • Building sideloadable apps that don't have to be published in Windows Store "This book doesn't just focus on singular concepts, it also provides end-to-end perspective on building an app in WinRT. It is one of those essential tools for Windows developers that will help you complete your software goals sooner than without it!" —Tim Heuer, Principal Program Manager Lead, XAML Platform, Microsoft Corporation

Develop AI-powered apps and games for HoloLens and mixed reality headsets This is a complete guide to programming AI-powered mixed reality apps with the Windows Mixed Reality platform. Step by step, Dawid Borycki guides you through every type of mixed reality development, from simple 2D to cutting-edge apps for Microsoft HoloLens and immersive headsets. First, you'll learn to write UWP 2D apps that adapt for any Windows 10 device, transfer camera images to machine learning services, and use mobile sensor readings to control headset content. Then, building on these skills, you'll master every facet of building cross-platform 3D apps that link augmented reality content to real objects. Advanced Microsoft technology expert Dawid Borycki shows how to: Set up a mixed reality development environment with all the tools you'll need, including HoloLens and Mixed Reality simulators Write Universal Windows 2D apps for all Windows 10 devices, and adjust their views and capabilities to specific hardware Render media streams, acquire video from world-facing cameras, and detect human faces in those images Generate descriptions of what the user sees, and present them via text or speech Build AI-powered voice-controlled apps with Microsoft Cognitive Services (MCS) Master core concepts and techniques for building 3D mixed reality apps with Unity Format 3D objects with materials to create holograms Add interactions to holograms based on user input Integrate HoloLens capabilities, including air gestures, spatial sound, and mapping

Microsoft's Windows Presentation Foundation (WPF) provides you with a development framework for building high-quality user experiences for the Windows operating system. It blends together rich content from a wide range of sources and allows you unparalleled access to the processing power of your Windows computer. Pro WPF 4.5 in C# provides a thorough, authoritative guide to how WPF really works. Packed with no-nonsense examples and practical advice you'll learn everything you need to know in order to use WPF in a professional setting. The book begins by building a firm foundation of elementary concepts, using your existing C# skills as a frame of reference, before moving on to discuss advanced concepts and demonstrate them in a hands-on way that emphasizes the time and effort savings that can be gained.

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