

Microsoft Net Architecting Applications For The Enterprise

Make the right architectural decisions up front—and improve the quality and reliability of your results. Led by two enterprise programming experts, you'll learn how to apply the patterns and techniques that help control project complexity—and make systems easier to build, support, and upgrade—right from the start. Get pragmatic architectural guidance on how to: Build testability, maintainability, and security into your system early in the design Expose business logic through a service-oriented interface Choose the best pattern for organizing business logic and behavior Review and apply the patterns for separating the UI and presentation logic Delve deep into the patterns and practices for the data access layer Tackle the impedance mismatch between objects and data Minimize development effort and avoid over-engineering—and deliver more robust results Get code samples on the Web.

Rethink the way you plan, design, and build Web applications—with expert guidance from Web development luminary Dino Esposito. Whether giving legacy sites a much-needed tune-up—or architecting rich Internet applications from the ground up—you'll learn pragmatic approaches to AJAX development that you can employ today. Discover how to: Delve into the mechanics and design goals of partial rendering—such as improving page-refresh speed Use AJAX-enabled server controls to bring desktop-like functionality to Web solutions Apply design patterns to common Web development issues, including client-side data binding Manipulate JavaScript more easily using the jQuery and Microsoft AJAX libraries Examine the interoperability and security models in Microsoft Silverlight Weigh the tradeoffs when architecting Web applications for richness (Silverlight) vs. reach (AJAX)—and deliver the right solution for your audience

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

Build your expertise as you move beyond the basics--and delve into the core topics of programming with ASP.NET 2.0. Useful to both experienced developers and those developing new skills, this ultimate reference is packed with expert guidance, hands-on programming instruction, and practical examples to help you advance your mastery of developing applications for the Web. Discover how to: Author rich, visually consistent pages and manage layout with themes and Master pages Create personalized pages that persist user preferences Retrieve, modify, and manage data with Microsoft ADO.NET Configure the HTTP pipeline to serve ASP.NET 2.0 pages Control program flow by tracing and handling exceptions Design caching layers and learn state management techniques to optimize application performance Manage users with membership control, registration, and authentication capabilities Build real-world data access layers using common design patterns Use custom collections with data source controls Learn the internals of grid controls PLUS--Get code samples on the Web Microsoft .NET - Architecting Applications for the EnterpriseArchitecting Applications for the EnterprisePearson Education

Integrate proven performance and scalability techniques throughout the .NET application life cycle—and gain an edge in building better-performing products. This guide presents a robust framework organized by task and role, helping developers, architects, testers, and administrators prioritize and implement the best options at the appropriate time. It offers focused, end-to-end guidance—including processes for modeling performance and techniques for measuring, testing, and fine-tuning your applications. You'll also get tips direct from Microsoft development teams for improving the performance and scalability of managed code; Microsoft ASP.NET, ADO.NET, and SQL Server; Web services; .NET Remoting; XML; and more. The book features a "How To" section that details the steps for a number of specific performance-related tasks, such as adding performance counters and using the common language runtime (CLR) profiler. PATTERNS & PRACTICES guides are reviewed and approved by Microsoft engineering teams, consultants, partners, and customers—delivering accurate, real-world information that's been technically validated and tested.

"Whether this is the first time or the fifty-first time you're using WCF, you'll learn something new by reading this book." --Nicholas Allen, Program Manager, Web Services, Microsoft Windows Communication Foundation (WCF) is the easiest way to produce and consume Web services on the Microsoft platform. With .NET 3.5, WCF has been extensively revamped--and Visual Studio 2008 gives developers powerful new tools for utilizing it. Essential Windows Communication Foundation shows developers exactly how to make the most of WCF with .NET 3.5 and Visual Studio 2008. Drawing on extensive experience working with early adopters, three Microsoft insiders systematically address the topics developers ask about WCF. The authors approach each subject with practical advice and present best practices, tips, and tricks for solving problems. Throughout, you'll find detailed explanations, solutions for the "pain points" of WCF development, and an extensive collection of reusable code examples. Coverage includes Using WCF contracts to define complex structures and interfaces Understanding WCF's channel stacks and channel model architecture Configuring the WCF communication stack to use only the protocols you need Using standard and custom service behaviors to manage concurrency, instances, transactions, and more Serializing data from .NET types to XML Infosets and representing Infosets "on the wire" Hosting WCF services via IIS, managed .NET applications, and Windows Activation Services WCF security, in depth: authentication; transport and message-level security; and Internet and intranet scenarios Improving reliability: exception handling, diagnostics, and more Workflow services: new integration points between WCF 3.5 and Windows Workflow Foundation Building client-to-client, peer network-based applications Utilizing WCF for non-SOAP Web services: AJAX and JSON examples and .NET 3.5 hosting classes Microsoft's Steve Resnick, Richard Crane, and Chris Bowen are technology experts at the Microsoft Technology Center in Boston. They specialize in helping customers improve their technical agility by applying WCF and related technologies. Resnick has specialized in Internet technologies and distributed computing at Microsoft since 1995. He is a frequent speaker at Microsoft events and is now technology director for the U.S. Microsoft Technology Centers. Crane has more than 15 years of experience in senior software development roles. He specializes in large-scale Web sites, distributed computing, transactional systems, and performance analysis. Bowen has been an architect and developer for more than 15 years at companies such as Monster.com and Staples and is co-author of Professional Visual Studio 2005 Team System. Foreword xxv Preface xxvii Chapter 1: Basics 1 Chapter 2: Contracts 33 Chapter 3: Channels 91 Chapter 4: Bindings 111 Chapter 5: Behaviors 181 Chapter 6: Serialization and Encoding 241 Chapter 7: Hosting 287 Chapter 8: Security 315 Chapter 9: Diagnostics 375 Chapter 10: Exception Handling 403 Chapter 11: Workflow Services 423 Chapter 12: Peer Networking 459 Chapter 13: Programmable Web 503 Appendix: Advanced Topics 537 Index 553

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

and threading

Master machine learning concepts and develop real-world solutions Machine learning offers immense opportunities, and Introducing Machine Learning delivers practical knowledge to make the most of them. Dino and Francesco Esposito start with a quick overview of the foundations of artificial intelligence and the basic steps of any machine learning project. Next, they introduce Microsoft's powerful ML.NET library, including capabilities for data processing, training, and evaluation. They present families of algorithms that can be trained to solve real-life problems, as well as deep learning techniques utilizing neural networks. The authors conclude by introducing valuable runtime services available through the Azure cloud platform and consider the long-term business vision for machine learning.

- 14-time Microsoft MVP Dino Esposito and Francesco Esposito help you
- Explore what's known about how humans learn and how intelligent software is built
- Discover which problems machine learning can address
- Understand the machine learning pipeline: the steps leading to a deliverable model
- Use AutoML to automatically select the best pipeline for any problem and dataset
- Master ML.NET, implement its pipeline, and apply its tasks and algorithms
- Explore the mathematical foundations of machine learning
- Make predictions, improve decision-making, and apply probabilistic methods
- Group data via classification and clustering
- Learn the fundamentals of deep learning, including neural network design
- Leverage AI cloud services to build better real-world solutions faster

About This Book · For professionals who want to build machine learning applications: both developers who need data science skills and data scientists who need relevant programming skills · Includes examples of machine learning coding scenarios built using the ML.NET library

Learn about the responsibilities of a .NET solution architect and explore solution architecture principles, DevOps solutions, and design techniques and standards with hands-on examples of design patterns

Key Features Find out what are the essential personality traits and responsibilities of a solution architect Become well-versed with architecture principles and modern design patterns with hands-on examples Design modern web solutions and make the most of Azure DevOps to automate your development life cycle

Book Description Understanding solution architecture is a must to build and integrate robust systems to meet your client's needs. This makes it crucial for a professional .NET software engineer to learn the key skills of a .NET solution architect to create a unique digital journey and build solutions for a wide range of industries, from strategy and design to implementation. With this handbook, developers working with the .NET technology will be able to put their knowledge to work. The book takes a hands-on approach to help you become an effective solution architect. You'll start by learning the principles of the software development life cycle (SDLC), the roles and responsibilities of a .NET solution architect, and what makes a great .NET solution architect. As you make progress through the chapters, you'll understand the principles of solution architecture and how to design a solution, and explore designing layers and microservices. You'll complete your learning journey by uncovering modern design patterns and techniques for designing and building digital solutions. By the end of this book, you'll have learned how to architect your modern web solutions with ASP.NET Core and Microsoft Azure and be ready to automate your development life cycle with Azure DevOps.

What you will learn Understand the role and core responsibilities of a .NET solution architect Study popular UML (Unified Modeling Language) diagrams for solution architecture Work with modern design patterns with the help of hands-on examples Become familiar with microservices and designing layers Discover how to design modern web solutions Automate your development life cycle with Azure DevOps

Who this book is for This book is for intermediate and advanced .NET developers and software engineers who want to advance their careers and expand their knowledge of solution architecture and design principles. Beginner or intermediate-level solution architects looking for tips and tricks to build large-scale .NET solutions will find this book useful.

Dino Esposito's Programming ASP.NET Core is the definitive guide to practical software development with Microsoft's exciting new ASP.NET Core technologies. Unlike competitive books that focus primarily on ASP.NET Core's cross-platform capabilities or only what's changed from earlier versions, Esposito offers a complete learning path for every developer who wants to build production solutions. Esposito's expert coverage includes:

- Applying all key ASP.NET Core components, including MVC for HTML generation, .NET Core, EF Core, ASP.NET Identity, dependency injection, and more
- Integrating ASP.NET Core with leading client-side frameworks, including Bootstrap
- ASP.NET Core code for implementing business logic and data transformations
- Handling configuration, routing, controllers, views, and common tasks (including posting forms and presenting data)
- Performing complementary tasks: error handling, logging, application design, authentication, localization, and more
- Front-end development: ensuring responsiveness, creating mobile views, and providing advanced interactivity
- Middleware, data access, runtime architecture, and deployment
- Taking full advantage of the brand-new ASP.NET Core runtime

Get the definitive guide on designing applications on the Microsoft application platform—straight from the Microsoft patterns & practices team. Learn how to choose the most appropriate architecture and the best implementation technologies that the Microsoft application platform offers applications developers. Get critical design recommendations and guidelines organized by application type—from Web, mobile, and rich Internet applications to Office Business Applications. You'll also get links to additional technical resources that can help with your application development. Master powerful new approaches to web architecture, design, and user experience This book presents a pragmatic, problem-driven, user-focused approach to planning, designing, and building dynamic web solutions. You'll learn how to gain maximum value from Domain-Driven Design (DDD), define optimal supporting architecture, and succeed with modern UX-first design approaches. The author guides you through choosing and implementing specific technologies and addresses key user-experience topics, including mobile-friendly and responsive design. You'll learn how to gain more value from existing Microsoft technologies such as ASP.NET MVC and SignalR by using them alongside other technologies such as Bootstrap, AJAX, JSON, and JQuery. By using these techniques and understanding the new ASP.NET Core 1.0, you can quickly build advanced web solutions that solve today's problems and deliver an

outstanding user experience. Microsoft MVP Dino Esposito shows you how to: Plan websites and web apps to mirror real-world social and business processes Use DDD to dissect and master the complexity of business domains Use UX-Driven Design to reduce costs and give customers what they want Realistically compare server-side and client-side web paradigms Get started with the new ASP.NET Core 1.0 Simplify modern visual webpage construction with Bootstrap Master practical, efficient techniques for running ASP.NET MVC projects Consider new options for implementing persistence and working with data models Understand Responsive Web Design's pros, cons, and tradeoffs Build truly mobile-friendly, mobile-optimized websites About This Book For experienced developers and solution architects who want to plan and develop web solutions more effectively Assumes basic familiarity with the Microsoft web development stack

Apply your expertise to the .NET Framework with the guidance of programming expert Jeffrey Richter—on video, through his award-winning book, and with a set of posters containing complete, at-a-glance reference to .NET Framework Class Library namespace details. Richter is well-known to the developer community as an author, an instructor, and a contributing editor for MSDN® Magazine. He has been consulting with the .NET Framework team at Microsoft since 1999, and is the cofounder of Wintellect, a premier training, debugging, and consulting firm. This must-have collection includes Richter's highly respected Applied Microsoft .NET Framework Programming book, which describes .NET Framework architecture, the common language runtime, and core types in the .NET Framework Class Library—deftly presenting the concepts, insights, and examples needed to begin developing robust, .NET Framework-based applications. You can experience Richter in action through his video lecture on Exception Handling, which covers implicit assumptions about Exceptions, key benefits of exception handling, and tips for managing unhandled exceptions with Windows® Forms, Web Forms, and XML Web services. You also get the .NET Framework 1.1 Class Library poster pack—four, full-color wall posters that clearly display the namespace details essential to every developer working with the .NET Framework—including System, System.Web, System.XML, System.Data, System.Windows.Forms, and System.Drawing. Each poster provides an easy-to-scan class derivation hierarchy of the most useful types, a comprehensive list of value types, an interface cross-reference map, and more. Together, this collection delivers the hands-on resources you need to advance your expertise—and your productivity—with the .NET Framework.

Summary .NET Core in Action shows .NET developers how to build professional software applications with .NET Core. Learn how to convert existing .NET code to work on multiple platforms or how to start new projects with knowledge of the tools and capabilities of .NET Core. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology .NET Core is an open source framework that lets you write and run .NET applications on Linux and Mac, without giving up on Windows. Built for everything from lightweight web apps to industrial-strength distributed systems, it's perfect for deploying .NET servers to any cloud platform, including AWS and GCP. About the Book .NET Core in Action introduces you to cross-platform development with .NET Core. This hands-on guide concentrates on new Core features as you walk through familiar tasks like testing, logging, data access, and networking. As you go, you'll explore modern architectures like microservices and cloud data storage, along with practical matters like performance profiling, localization, and signing assemblies. What's Inside Choosing the right tools Testing, profiling, and debugging Interacting with web services Converting existing projects to .NET Core Creating and using NuGet packages About the Reader All examples are in C#. About the Author Dustin Metzgar is a seasoned developer and architect involved in numerous .NET Core projects. Dustin works for Microsoft. Table of Contents Why .NET Core? Building your first .NET Core applications How to build with .NET Core Unit testing with xUnit Working with relational databases Simplify data access with object-relational mappers Creating a microservice Debugging Performance and profiling Building world-ready applications Multiple frameworks and runtimes Preparing for release appendix A - Frameworks and runtimes appendix B - xUnit command-line options appendix C - What's in the .NET Standard Library? appendix D - NuGet cache locations

Completely reengineered for ASP.NET 4—this definitive guide deftly illuminates the core architecture and programming features of ASP.NET 4 in a single, pragmatic volume. Web development expert Dino Esposito provides essential, architectural-level guidance, along with the in-depth technical insights designed to take you—and your solutions—to the next level. The book covers Dynamic Data, AJAX, Microsoft Silverlight, ASP.NET MVC, Web forms, LINQ, and security strategies—and features extensive code samples in Microsoft Visual C#(R) 2010.

Provides information on designing and building effective enterprise solutions, covering such topics as UML, the business layer, the service layer, and the data access layer.

Describes ways to incorporate domain modeling into software development.

The book covers the best practices and approaches for software architects to follow when developing .NET and C# solutions, along with the most up to date cloud environments and tools to enable effective app development, delivery, and deployment.

Blazor is the new way to build interactive web apps using C# and .NET. This Blazor C# book starts by helping you discover Blazor and its features for building your first application, which will show you how Blazor can be used on both the client-side and server-side.

Get introduced to the world of artificial intelligence with this accessible and practical guide. Build applications that make intelligent use of language and user interaction to better compete in today's marketplace. Discover how your application can deeply understand and interpret content on the web or a user's machine, intelligently react to direct user interaction through speech or text, or make smart recommendations on products or services that are tailored to each individual user. With Microsoft Cognitive Services, you can do all this and more utilizing a set of easy-to-use APIs that can be consumed on the desktop, web, or mobile devices. Developers normally think of AI implementation as a tough task involving writing

complex algorithms. This book aims to remove the anxiety by creating a cognitive application with a few lines of code. There is a wide range of Cognitive Services APIs available. This book focuses on some of the most useful and powerful ways that your application can make intelligent use of language. Artificial Intelligence for .NET: Speech, Language, and Search will show you how you can start building amazing capabilities into your applications today. What You'll Learn Understand the underpinnings of artificial intelligence through practical examples and scenarios Get started building an AI-based application in Visual Studio Build a text-based conversational interface for direct user interaction Use the Cognitive Services Speech API to recognize and interpret speech Look at different models of language, including natural language processing, and how to apply them in your Visual Studio application Reuse Bing search capabilities to better understand a user's intention Work with recommendation engines and integrate them into your apps Who This Book Is For Developers working on a range of platforms, from .NET and Windows to mobile devices. Examples are given in C#. No prior experience with AI techniques or theory is required.

A software architect's digest of core practices, pragmatically applied Designing effective architecture is your best strategy for managing project complexity—and improving your results. But the principles and practices of software architecting—what the authors call the “science of hard decisions”—have been evolving for cloud, mobile, and other shifts. Now fully revised and updated, this book shares the knowledge and real-world perspectives that enable you to design for success—and deliver more successful solutions. In this fully updated Second Edition, you will: Learn how only a deep understanding of domain can lead to appropriate architecture Examine domain-driven design in both theory and implementation Shift your approach to code first, model later—including multilayer architecture Capture the benefits of prioritizing software maintainability See how readability, testability, and extensibility lead to code quality Take a user experience (UX) first approach, rather than designing for data Review patterns for organizing business logic Use event sourcing and CQRS together to model complex business domains more effectively Delve inside the persistence layer, including patterns and implementation.

ASP.NET MVC 4 Recipes is a practical guide for developers creating modern web applications, cutting through the complexities of ASP.NET, jQuery, Knockout.js and HTML 5 to provide straightforward solutions to common web development problems using proven methods based on best practices. The problem-solution approach gets you in, out, and back to work quickly while deepening your understanding of the underlying platform and how to develop with it. Author John Ciliberti guides you through the framework and development tools, presenting typical challenges, along with code solutions and clear, concise explanations, to accelerate application development. Inside you will find recipes dealing with streamlined syntax, full control over HTML, a simple API for creating RESTful web services, writing support for test driven development, and more. Solve problems immediately by pasting in code from the recipes, or put multiple recipe solutions together to overcome challenging development obstacles. Dive head first into ASP.NET MVC web development with ASP.NET MVC 4 Recipes.

Become a professional .NET developer by learning expert techniques for building enterprise-grade applications Key Features Explore the advanced features of C# and .NET 5 to enhance your code and productivity Follow clear and easy instructions for building an end-to-end enterprise application Learn how to build scalable web applications and host them on the cloud Book Description .NET Core is one of the most popular programming platforms in the world for an increasingly large community of developers thanks to its excellent cross-platform support. This book will show you how to confidently use the features of .NET 5 with C# 9 to build robust enterprise applications. Throughout the book, you'll work on creating an enterprise app and adding a key component to the app with each chapter, before finally getting it ready for testing and deployment. You'll learn concepts relating to advanced data structures, the Entity Framework Core, parallel programming, and dependency injection. As you progress, you'll cover various authentication and authorization schemes provided by .NET Core to make your apps and APIs secure. Next, you'll build web apps using ASP.NET Core 5 and deploy them on the cloud while working with various cloud components using Azure. The book then shows you how to use the latest Microsoft Visual Studio 2019 and C# 9 to simplify developer tasks, and also explores tips and tricks in Visual Studio 2019 to improve your productivity. Later, you'll discover various testing techniques such as unit testing and performance testing as well as different methods to deploy enterprise apps. By the end of this book, you'll be able to create enterprise apps using the powerful features of .NET 5 and deploy them on the cloud. What you will learn Design enterprise apps by making the most of the latest features of .NET 5 Discover different layers of an app, such as the data layer, API layer, and web layer Explore end-to-end architecture, implement an enterprise web app using .NET and C# 9, and deploy the app on Azure Focus on the core concepts of web application development such as dependency injection, caching, logging, configuration, and authentication, and implement them in .NET 5 Integrate the new .NET 5 health and performance check APIs with your app Understand how .NET 5 works and contribute to the .NET 5 platform Who this book is for If you are a developer, architect, or senior programmer who wants to leverage the features of .NET 5 and the C# language, as well as grasp essential techniques to build your skills, then this C# .NET 5 book is for you. Beginner to intermediate-level knowledge of the .NET framework and C# programming is required to understand the concepts covered in this book more effectively.

With .NET 5's ML.NET and Programming ML.NET, any Microsoft .NET developer can solve serious machine learning problems, increasing their value and competitiveness in some of today's fastest-growing areas of software development. World-renowned Microsoft development expert Dino Esposito covers everything you need to know about ML.NET, the machine learning pipeline, and real-world machine learning solutions development. Modeled on his popular Programming ASP.NET books, this guide takes the same scenario-based approach Microsoft's team used to build the ML.NET framework itself. Esposito presents and illuminates ML.NET's dedicated mini-frameworks ("ML Tasks") for specific classes of problems, and draws on personal experience to help developers apply these in the real world, where a problem's complexity can vary widely based on data availability or the specific results you need. In a full section on ML.NET neural networks, Esposito introduces key concepts and presents realistic examples you can reuse in your own applications. Along the way, Esposito also

shows how to leverage powerful Python-based machine learning tools in the .NET environment. Programming ML.NET will help you add machine learning and artificial intelligence to your tool belt, whether you have a background in these high-demand technologies or not. Your text simplified as the essential facts to prepare you for your exams. Over 2,000 highly probable test items.

At a time when nearly every vertical, regardless of domain, seems to need software running in the cloud to make money, microservices provide the agility and drastically reduced time to market you require. This hands-on guide shows you how to create, test, compile, and deploy microservices, using the ASP.NET Core free and open-source framework. Along the way, you'll pick up good, practical habits for building powerful and robust services. Building microservices isn't about learning a specific framework or programming language; it's about building applications that thrive in elastically scaling environments that don't have host affinity, and that can start and stop at a moment's notice. This practical book guides you through the process. Learn test-driven and API-first development concepts Communicate with other services by creating and consuming backing services such as databases and queues Build a microservice that depends on an external data source Learn about event sourcing, the event-centric approach to persistence Use ASP.NET Core to build web applications designed to thrive in the cloud Build a service that consumes, or is consumed by, other services Create services and applications that accept external configuration Explore ways to secure ASP.NET Core microservices and applications

This book introduces one of the most exciting and popular .NET-oriented initiatives; the Enterprise Application Library, which offers nine classes of reusable code used to solve a variety of common problem spaces. It is the first book to introduce all ten of the enterprise application blocks, which have been recently updated for .NET 2.0. It covers a number of topics, including configuration, data access, exception management, caching, application updates, UI separation, asynchronous invocation, logging, security, and XML-based information aggregation. With this book readers will be able to build .NET applications faster and more efficiently.

Design patterns are time-tested solutions to recurring problems, letting the designer build programs on solutions that have already proved effective Provides developers with more than a dozen ASP.NET examples showing standard design patterns and how using them helps build a richer understanding of ASP.NET architecture, as well as better ASP.NET applications Builds a solid understanding of ASP.NET architecture that can be used over and over again in many projects Covers ASP.NET code to implement many standard patterns including Model-View-Controller (MVC), ETL, Master-Master Snapshot, Master-Slave-Snapshot, Façade, Singleton, Factory, Single Access Point, Roles, Limited View, observer, page controller, common communication patterns, and more

Fully updated for ASP.NET MVC 3. Delve into the features, principles, and pillars of the ASP.NET MVC framework—deftly guided by web development luminary Dino Esposito. ASP.NET MVC forces developers to think in terms of distinct components—Model, View, Controller—that make it easier to manage application complexity, while allowing strict control over the markup. Plunge into the framework's internal mechanics and gain perspectives on how to use this programming model versus Web Forms, and begin building your own MVC-based applications quickly.

The author Kanalakis gives in-depth and detailed guidance on how to build a single, scalable enterprise application with C# and using .NET technologies.

Architect and design highly scalable, robust, clean and highly performant applications in .NET Core About This Book Incorporate architectural soft-skills such as DevOps and Agile methodologies to enhance program-level objectives Gain knowledge of architectural approaches on the likes of SOA architecture and microservices to provide traceability and rationale for architectural decisions Explore a variety of practical use cases and code examples to implement the tools and techniques described in the book Who This Book Is For This book is for experienced .NET developers who are aspiring to become architects of enterprise-grade applications, as well as software architects who would like to leverage .NET to create effective blueprints of applications. What You Will Learn Grasp the important aspects and best practices of application lifecycle management Leverage the popular ALM tools, application insights, and their usage to monitor performance, testability, and optimization tools in an enterprise Explore various authentication models such as social media-based authentication, 2FA and OpenID Connect, learn authorization techniques Explore Azure with various solution approaches for Microservices and Serverless architecture along with Docker containers Gain knowledge about the recent market trends and practices and how they can be achieved with .NET Core and Microsoft tools and technologies In Detail If you want to design and develop enterprise applications using .NET Core as the development framework and learn about industry-wide best practices and guidelines, then this book is for you. The book starts with a brief introduction to enterprise architecture, which will help you to understand what enterprise architecture is and what the key components are. It will then teach you about the types of patterns and the principles of software development, and explain the various aspects of distributed computing to keep your applications effective and scalable. These chapters act as a catalyst to start the practical implementation, and design and develop applications using different architectural approaches, such as layered architecture, service oriented architecture, microservices and cloud-specific solutions. Gradually, you will learn about the different approaches and models of the Security framework and explore various authentication models and authorization techniques, such as social media-based authentication and safe storage using app secrets. By the end of the book, you will get to know the concepts and usage of the emerging fields, such as DevOps, BigData, architectural practices, and Artificial Intelligence. Style and approach Filled with examples and use cases, this guide takes a no-nonsense approach to show you the best tools and techniques required to become a successful software architect.

Get hands-on guidance designed to help you put the newest .NET Framework component- Windows Identity Foundation, the identity and access logic for all on-premises and cloud development- to work.

Building upon the success of best-sellers *The Clean Coder* and *Clean Code*, legendary software craftsman Robert C. "Uncle Bob" Martin shows how to bring greater professionalism and discipline to application architecture and design. As with his other books, Martin's *Clean Architecture* doesn't merely present multiple choices and options, and say "use your best judgment": it tells you what choices to make, and why those choices are critical to your success. Martin offers direct, is essential reading for every software architect, systems analyst, system designer, and software manager-- and for any programmer who aspires to these roles or is impacted by their work.

Celebrate Thanksgiving with Annie and Snowball in this Level 2 Ready-to-Read story from the Theodor Seuss Geisel Award-winning creators of *Henry and Mudge!* Annie loves fall and she especially loves Thanksgiving. There is a big table at Annie's house, and she wants lots of people around it for a yummy dinner. But Annie lives with just her dad and her bunny, Snowball. She doesn't have a big family of her own. Who can she invite to share Thanksgiving?

This software will enable the user to learn about microsoft ASP.NET.

bull; bull;The .NET Compact Framework (CF) brings the power of .NET to mobile devices, yet there is very little information on how to use it effectively bull;The number of developers using the .NET CF over the next few years is anticipated to increase greatly bull;Covers related important topics such as SQL Server 2000 Windows CE edition

Your guide to planning and executing a complete mobile web strategy Revisit your approach to the mobile web—and deliver effective solutions that reach customers and clients on a variety of mobile devices. In this practical guide, web development luminary Dino Esposito shows you how to develop a solid mobile strategy for the enterprise, starting with an effective mobile website. You'll receive essential architectural and implementation guidance, as well as mobile-specific design patterns for building cross-platform and native applications. Discover how to: Architect a website accessible from many different mobile devices Implement design patterns specific to mobile app development Examine tools that enable you to write one codebase for many platforms Use technologies for building Windows Phone, iPhone, and Android apps

Develop cross-platform app features, such as localization and offline behavior

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