

ASP.NET Core Application Development: Building An Application In Four Sprints (Developer Reference (Paperback))

Build robust modern web applications using .NET 5, Entity Framework Core, and Angular 11 Key FeaturesUpdated with the latest features and additions in ASP.NET Core 5 and Angular 11Design, build, and deploy a Single Page Application or Progressive Web AppAdopt a full stack approach to handle data management, Web APIs, application design, testing, SEO, security, and deploymentBook Description Learning full-stack development calls for knowledge of both front-end and back-end development. ASP.NET Core and Angular will enhance your ability to create, debug, and deploy efficient web applications using ASP.NET Core and Angular. The revised edition includes coverage of the Angular routing module, expanded discussion on the Angular CLI, and detailed instructions for deploying apps on Azure, as well as both Windows and Linux. Taking care to explain and challenge design choices made throughout the text, Valentin will show you how to build a data model with Entity Framework Core, catalog data with Fluent API and Entity Type Configuration class. You'll learn how to teach and display data and handle user input with Angular reactive forms and front-end and back-end validators for maximum effect. Later, you will perform advanced debugging and explore the unit testing features provided by xUnit.net (.NET 5) and Jasmine, as well as Karma for Angular. After developing authentication and authorization to your app, you will explore progressive web applications (PWAs), learning about their technical requirements, testing, and converting SWAs to PWAs. By the end of this book, you will understand how to tie together the front end and back end to build and deploy secure and robust web applications. What you will learnImplement a web API interface with ASP.NET Core and consume it with Angular using RxJS observablesSet up an SQL database server using a local instance or a cloud data storePerform C# and TypeScript debugging using Visual Studio 2019Create TDD and BDD unit tests using xUnit, Jasmine, and KarmaPerform DBMS structured logging using third-party providers such as SerilogDeploy web apps to Windows and Linux web servers, or Azure App Service, using IIS, Kestrel, and nginWho this book is for This book is for experienced ASP.NET developers who already possess some familiarity with ASP.NET Core and Angular and are looking to learn how to use them effectively together. The fully completed examples (also available on GitHub) and the step-by-step implementation tutorials make this book easy to follow.

Design, develop, and deploy a real-world web application by leveraging modern open source technologies. This book shows you how to use ASP.NET Core to build cross-platform web applications along with SignalR to enrich the application by enabling real-time communication between server and clients. You will use Docker to containerize your application, integrate with GitHub to package the application, and provide continuous deployment to Azure's Iaas platform. After building a real-world application, you will explore how to modernize existing ASP.NET Core applications using ASP.NET Core 5 and Angular. This book provides a top-to-bottom understanding of the technology, you will learn logging and exception handling; navigation using view components; and how to work with forms and validation. The rich code samples from this book can be used to retrofit or upgrade existing ASP.NET Core applications. What You Will Learn Design and develop a real-world web application using SignalR Use GitHub and Travis CI for continuous integration of code Master Docker containerization and continuous deployment with Docker Cloud to Azure Linux virtual machines Who This Book Is For Developers and software engineers interested in learning an end-to-end approach to application development using Microsoft technologies.

In ASP.NET Core, seasoned authors Simone Chieretta and Ugo Lattanzi apply you on all the advances provided by Microsoft's landmark framework. By learning the foundations of the library and understanding the new versions of ASP.NET MVC and Web API, you'll be equipped with everything you need to build .NET web applications on Windows, Mac, and Linux. 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.

The complete, pragmatic guide to building high-quality solutions with ASP.NET Core Programming ASP.NET Core is the definitive guide to practical web-based application development with Microsoft's new ASP.NET Core framework. Microsoft MVP Dino Esposito introduces proven techniques and well-crafted example code for solving real problems with ASP.NET Core. Step by step, he guides you through using all key ASP.NET Core technologies, including MVC for .NET Core, and Application Development covers topics including design, Materialize CSS theme, using a test-driven development approach with xUnit.net, and securing your application with OAuth2.0 protocol. ASP.NET Core MVC helps you build robust web applications using the Model-View-Controller design. This guide will help you in building applications that can be deployed on non-Windows platforms such as Linux. Set up and use the familiar MVC application model in ASP.NET Core. Write controller class code to govern all stages of request processing. Serve HTML from controllers, or directly via Razor Pages. Master the Razor language for quickly defining the layout of HTML views. Manage cross-cutting concerns such as global configuration data, error and exception handling, controller class design, and dependency injection. Secure applications with user authentication and ASP.NET Core's policy-based user authorization API. Design for efficient data access, and choose the right option for reading and writing data. Build ASP.NET Core Web APIs that return JSON, XML, or other data. Use data binding to programmatically update visual components with fresh information. Build device-friendly web views for iOS and Android. Explore the radically new ASP.NET Core runtime environment and Dependency Injection (DI) infrastructure (ASP.NET Core Application Development)

Full-stack web development using .NET 5, React 17, and TypeScript 4, 2nd Edition
Enhance your C# and .NET Core skills by learning the process of developing professional-grade web applications

Modern Web Development with ASP.NET Core 3
C# 10 and .NET 6.0 Modern Cross-Platform Development

A Craftsman's Guide to Software Structure and Design

Building an application in four sprints

Create fast, scalable, and high-performance applications with C# and ASP.NET Core About This Book Get first-principle coverage of the latest ASP.NET Core MVC Find out how to bring together the capabilities and features of both Angular 2 and ASP.NET Core Discover common areas you might encounter performance problems with and areas you don't need to worry about Who This Book Is For This book is for developers who want to learn to build web applications using ASP.NET Core, those who want to make a career building web applications using Microsoft technology, and those who are working on other web frameworks and want to learn ASP.NET Core. What You Will Learn Get to know the concepts of ASP.NET MVC Create a Controller with action methods Build a view using several features of the Razor View engine

Construct a Model for ASP.NET Core Application Find out how the features of ASP.NET Core and Angular 2 perfectly complement each other Handle requests and actions using server-side and client-side Routing Create a Data Model using Entity Framework Core Learn how to use Angular 2 components and master directives Improve performance at the network level, and I/O level, and how to optimize the application as a whole Monitor performance as part of Continuous Integration and regression testing In Detail ASP.NET Core is the new, open source, and modern web application framework from Microsoft. ASP.NET Core helps you build robust web applications using the Model-View-Controller design. This guide will help you in building applications that can be deployed on non-Windows platforms such as Linux. Starting with an overview of the MVC pattern, you will quickly dive into the aspects that you need to know to get started with ASP.NET. You will learn about the core architecture of model, view, and control. Integrating your application with Bootstrap, validating user input, interacting with databases, and deploying your application are some of the things that you will learn to execute with this fast-paced guide. You will test your knowledge as you build a fully working sample application using the skills you've learned throughout the book. Moving forward, this guide will teach you to combine the impressive capabilities of ASP.NET Core and Angular 2. Not only will you learn how Angular 2 can complement your .NET skills and toolkit, you'll also learn everything you need to build a complete, dynamic single-page application. Find out how to get your data model in place and manage an API, before styling and designing your frontend for an exceptional user experience. You will find out how to optimize your application for SEO, identify and secure vulnerabilities, and how to successfully deploy and maintain your application. From here, you will delve into the latest frameworks and software design patterns to improve your application performance. The course offers premium, highly practical content on the recently released ASP.NET Core, and includes material from the following Packt books: Learning ASP.NET Core MVC Programming, ASP.NET Core and Angular 2, and ASP.NET Core 1.0 High Performance. Style and approach This learning path takes a first-principles approach to help you understand and implement ASP.NET MVC solutions.

Visual Studio 2017 updates for this book are now available. Follow the Download Source Code link for this book on the Apress website. Now in its 6th edition, the best selling book on MVC is now updated for ASP.NET Core MVC. It contains detailed explanations of the new Core MVC functionality which enables developers to produce leaner, cloud optimized and mobile-ready applications for the .NET platform. This book puts ASP.NET Core MVC into context and dives deep into the tools and techniques required to build modern, cloud optimized extensible web applications. All the new MVC features are described in detail and the author explains how best to apply them to both new and existing projects. The ASP.NET Core MVC Framework is the latest evolution of Microsoft's ASP.NET web platform, built on a completely new foundation. It represents a fundamental change to how Microsoft constructs and deploys web frameworks and is free of the legacy of earlier technologies such as Web Forms. ASP.NET Core MVC provides a "host agnostic" framework and a high-productivity programming model that promotes cleaner code architecture, test-driven development, and powerful extensibility. Best-selling author Adam Freeman has thoroughly revised this market-leading book and explains how to get the most from ASP.NET Core MVC. He starts with the nuts-and-bolts and shows you everything through to advanced features, going in-depth to give you the knowledge you need. This book follows the same format and style as the popular previous editions but brings everything up to date for the new ASP.NET Core MVC release. It presents a fully worked case study of a functioning ASP.NET MVC application that readers can use as a template for their own projects. What You Will Learn: Gain a solid architectural understanding of ASP.NET Core MVC Explore the entire ASP.NET MVC Framework as a cohesive whole See how MVC and test-driven development work in action Learn what's new in ASP.NET Core MVC and how best to apply these new features to your own work See how to create RESTful web services and Single Page Applications Build on your existing knowledge of previous MVC releases to get up and running with the new programming model quickly and effectively Who This Book Is For: This book is for web developers with a basic knowledge of ASP.NET and C# who want to incorporate the latest improvements and functionality in the new ASP.NET Core MVC Framework.

Learn how to build web applications efficiently using ASP.NET Core 5 with the C# programming language and related frameworks Key FeaturesBuild web apps and services and cross-platform applications using .NET and C#Understand different web programming concepts with the help of real-world examplesExplore the new features and APIs in ASP.NET Core 5, EF Core, Visual Studio, and BlazorBook Description ASP.NET Core 5 for Beginners is a comprehensive introduction for those who are new to the framework. This condensed guide takes a practical and engaging approach to cover everything that you need to know to start using ASP.NET Core for building cloud-ready, modern web applications. The book starts with a brief introduction to the ASP.NET Core framework and highlights the new features in its latest release, ASP.NET Core 5. It then covers the improvements in cross-platform support, the view engines that will help you to understand web development, and the new frontend technologies available with Blazor for building interactive web UIs. As you advance, you'll learn the fundamentals of the different frameworks and capabilities that ship with ASP.NET Core. You'll also get to grips with securing web apps with identity implementation, unit testing, and the latest in containers and cloud-native to deploy them to AWS and Microsoft Azure.

Throughout the book, you'll find clear and concise code samples that illustrate each concept along with the strategies and techniques that will help to develop scalable and robust web apps. By the end of this book, you'll have learned how to leverage ASP.NET Core 5 to build and deploy dynamic websites and services in a variety of real-world scenarios. What you will learnExplore the new features and APIs introduced in ASP.NET Core 5 and BlazorPut basic ASP.NET Core 5 concepts into practice with the help of clear and simple sample work with Entity Framework Core and its different workflows to implement your application's data accessDiscover the different web frameworks that ASP.NET Core 5 offers for building web appsGet to grips with the basics of building RESTful web APIs to work with real dataDeploy your web apps in AWS, Azure, and Docker containersWork with SignalR to add real-time notifications to your appWho this book is for This book is for developers who want to learn how to develop web-based applications using the ASP.NET Core framework. Familiarity with the C# language and a basic understanding of HTML and CSS is required to get the most out of this book.

Practical Software Architecture solutions from the legendary Robert C. Martin ("Uncle Bob") by applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin ("Uncle Bob") reveals those rules and helps you apply them. Martin's Clean Architecture doesn't merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you've come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you'll face—the ones that will make or break your projects. Learn what software architects need to achieve—and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what's critically important and what's merely a "detail" Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager—and for every programmer who must execute someone else's designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.

Enterprise Application Development with C# 9 and .NET 5

ASP.NET Core 5 for Beginners

Full-Stack Web Development with .NET Core and Angular

ASP.NET Core 6 and Angular

Creating ASP.NET Core Web Applications

Learning ASP.NET Core MVC Programming

Build cross-platform mobile applications with Xamarin.Forms 5 and ASP.NET Core 5, 2nd Edition

A mobile applications development masterclass for .NET and C# developers Key FeaturesUncover the new features and capabilities of the .NET 5 framework in this updated and improved second editionOptimize the time required to develop highly performant cross-platform applicationsUnderstand the architectural patterns and best practices for mobile application developmentBook Description Are you a .NET developer who wishes to develop mobile solutions without delving into the complexities of a mobile development platform? If so, this book is a perfect solution to help you build professional mobile apps without leaving the .NET ecosystem. Mobile Development with .NET will show you how to design, architect, and develop robust mobile applications for multiple platforms, including iOS, Android, and UWIP using Xamarin, .NET Core, and Azure. With the help of real-world scenarios, you'll explore different phases of application development using Xamarin, from environment setup, design, and architecture to publishing. Throughout the book, you'll learn how to develop mobile apps using Xamarin and .NET Standard.

You'll even be able to implement a view-based backend composed of microservices with .NET Core using various Azure services including, but not limited to, Azure Active Directory, Azure Functions. As you advance, you'll create data stores using popular database technologies such as Cosmos DB and data models such as the relational model and NoSQL. By the end of this mobile application development book, you'll be able to create cross-platform mobile applications that can be deployed as cloud-based PaaS and SaaS. What you will learnDiscover the latest features of .NET 5 that can be used in mobile application developmentExplore Xamarin.Forms Shell for building cross-platform mobile UIsUnderstand the technical design requirements of a consumer appGet to grips with mobile development concepts such as user data management, push notifications, and graph APIsManage app data with Entity Framework CoreUse Microsoft's Project Rome for creating cross-device experiences with XamarinBecome well-versed with implementing machine learning in your mobile appsWho this book is for This book is for ASP.NET Core developers who want to get started with mobile development using Xamarin and other Microsoft technologies. Working knowledge of C# programming is necessary to get started.

Become a professional .NET developer by learning expert techniques for building enterprise-grade applications Key FeaturesExplore the advanced features of C# and .NET 5 to enhance your code and productivityFollow clear and easy instructions for building an end-to-end enterprise applicationLearn how to build scalable web applications and host them on the cloudBook 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 learn 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 learnDiscover enterprise apps by making the most of the latest features of .NET 5Discover different layers of an app, such as the data layer, API layer, and web layerExplore end-to-end architecture, implement an enterprise web app using .NET and C# 9, and deploy the app on AzureFocus on the core concepts of web application development such as dependency injection, caching, logging, configuration, and authentication, and implement them in .NET 5Integrate the new .NET 5 health and performance check APIs with your appUnderstand how .NET 5 works and contribute to the .NET 5 platformWho 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 gross 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.

Imagine the boom in built-to-order, rich web applications with little code and built-in Windows authentication. With this book, you can gain skills to develop real-world applications with ASP.NET Core 2. Key FeaturesAdopts the application-centric approach to explain core concepts Covers industry-best practices to build flexible, robust applications Shows how to enhance your applications by adding more functionalities Book Description The book sets the stage with an introduction to web applications and helps you build an understanding of the tried-and-true MVC architecture. You learn all about views, from what is the Razor view engine to tagging helpers. You gain insight into what models are, how to bind them, and how to migrate database using the correct model. As you get comfortable with the world of ASP.NET, you learn about validation and routing. You also learn the advanced concepts, such as designing Rest Buy (a RESTful shopping cart application), creating entities for it, and creating EF context and migrations. By the time you are done reading the book, you will be able to optimally use ASP.NET to develop, unit test, and deploy applications like a pro. What you will learn Work with basic programming constructs using the Razor view engine Use flexibility and data compartmentalization of ViewModel Build a custom route for ASP.NET MVC applications for SEO Optimize applications with performance analysis and improvement steps Improve application performance, security, and data access to optimize the overall development process Deploy an ASP.NET MVC application in a non-Windows environment Who this book is for If you are looking to build web applications using ASP.NET Core or you want to become a pro in building web applications using the Microsoft technology, this is the ideal book for you. Prior exposure and understanding of C#, JavaScript, HTML, and CSS syntax is assumed.

Learn to develop secure, optimized, well-designed web applications in ASP.NET Core and get ready for job interviews. KEY FEATURES ● Simplified demonstration of ASP.NET Core UI and service development, with expert-led implementation. ● In-depth coverage on async programming, application security, and performance optimization. ● Interview guide with extensive questions based on concepts and techniques around application development. DESCRIPTION ASP.NET Core for JobSeekers is a practical resource for application developers and web developers who want to advance their careers. This book teaches you how to use ASP.NET Core to create web applications without a prior understanding of web application development. We develop our first web application and demonstrate how to execute, debug, and deploy them using ASP.NET Core. We'll start by creating our first web pages with the Razor and then create a simple phonebook application. Next, you will be exposed to the MVC design pattern and explore the simplicity of developing web pages using Razor. Moving on, you learn to construct and consume restful services with ASP.NET Core. This book also covers dependency injection techniques, action filters, accessing data using Entity Framework Core, and proven approaches for creating databases. Toward the end, you'll learn about the most important components such as improving performance, choosing the right architecture for an application program, and answering a slew of interview questions about ASP.NET Core and application development. WHAT YOU WILL LEARN Learn to set up the application development environment around ASP.NET Core and other frameworks ● Expert tips for debugging and deploying ASP.NET Core projects. ● Create UI applications with Razor and service APIs. ● Workaround middleware and filters for programming the ASP.NET Core pipeline. ● Create asynchronous programming code and configure dependency injection services. WHO THIS BOOK IS FOR If you're interested in building cross-platform, web, and cloud-native apps, you must learn ASP.NET Core and start building your programs. Readers should have basic knowledge of HTML and C#. TABLE OF CONTENTS 1. Introduction to ASP.NET Core 2. Setting Up the Development Environment 3. Running, Debugging, and Deploying ASP.NET Core Applications 4. Introduction to HTTP, HTML, CSS, and JavaScript 5. Developing ASP.NET Core web applications with Razor 6. Developing Restful services with ASP.NET Core 7. Asynchronous pattern and middleware in ASP.NET Core 8. Dependency injection and action filters in ASP.NET Core 9. State Management in ASP.NET Core 10. Introducing Accessing Data with ASP.NET Core 11. Optimizing ASP.NET Core Applications 12. Securing ASP.NET Core Applications 13. Introducing Software Architectures 14. Landing a job

ASP.NET CORE APPLICATION DEVELOPMENT.

ASP.NET Core 5 and React

Build applications with C#, .NET Core, Entity Framework Core, ASP.NET Core, and ML.NET using Visual Studio Code, 4th Edition

ASP.NET Core 5 and Angular

Clean Architecture

Build Career in Designing Cross-Platform Web Applications Using Razor and Entity Framework Core (English Edition)

Build apps, websites, and services with ASP.NET Core 6, Blazor, and EF Core 6 using Visual Studio 2022 and Visual Studio Code

A comprehensive guide for beginners to learn the key concepts, real-world applications, and latest features of C# 10 and .NET 6 with hands-on exercises using Visual Studio 2022 and Visual Studio Code Key FeaturesExplore the newest additions to C# 10, the .NET 6 class library, and Entity Framework Core 6Create professional websites and services with ASP.NET Core 6 and BlazorBuild cross-platform apps for Windows, macOS, Linux, iOS, and AndroidBook Description Extensively revised to accommodate all the latest features that come with C# 10 and .NET 6, this latest edition of our comprehensive guide will get you coding in C# with confidence. You'll learn object-oriented programming, writing, testing, and debugging functions, implementing interfaces, and inheriting classes. The book covers the .NET APIs for performing tasks like managing and querying data, monitoring and improving performance, and working with the filesystem, async streams, and serialization. You'll build and deploy cross-platform apps, such as websites and services using ASP.NET Core. Instead of distracting you with unnecessary application code, the first twelve chapters will teach you about C# language constructs and many of the .NET libraries through simple console applications. In later chapters, having mastered the basics, you'll then build practical applications and services using ASP.NET Core, the Model-View-Controller (MVC) pattern, and Blazor. What you will learnBuild rich web experiences using Blazor, Razor Pages, the Model-View-Controller (MVC) pattern, and other features of ASP.NET CoreBuild your own types with object-oriented programmingWrite, test, and debug functionsQuery and manipulate data using LINQIntegrate and update databases in your apps using Entity Framework Core, Microsoft SQL Server, and SQLiteBuild and consume powerful services using the latest technologies, including gRPC and GraphQLBuild cross-platform apps using XAMLWho this book is for Designed for both beginners and C# and .NET programmers who have worked with C# in the past and want to catch up with the changes made in the past few years, this book doesn't need you to have any C# or .NET experience. However, you should have a general understanding of programming before you jump in.

Time to plan your next steps. This book takes you step-by-step through the new cross-platform web apps with ASP.NET Core, and make them available on the Internet. You won't just master Microsoft's revolutionary open source ASP.NET Core technology; you'll learn how to integrate the immense power of MVC, Docker, Azure Web Apps, Visual Studio and Visual Studio Code, C#, JavaScript, TypeScript, and Entity Framework. Working through the authors' carefully designed sprints, you'll start with a blank canvas, move through software architecture and design, adjusting to user feedback, recovering from mistakes, builds, testing, deployment, maintenance, refactoring, and more. Along the way, you'll learn techniques for delivering state-of-the-art software to users more rapidly and repeatedly than ever before."

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Through four complete sprints, this book takes you through every step needed to build brand new cross-platform web apps with ASP.NET Core, and make them available on the Internet. You won't just master Microsoft's revolutionary open source ASP.NET Core technology; you'll learn how to integrate the immense power of MVC, Docker, Azure Web Apps, Visual Studio and Visual Studio Code, C#, JavaScript, TypeScript, and Entity Framework. Working through the authors' carefully designed sprints, you'll start with a blank canvas, move through software architecture and design, adjusting to user feedback, recovering from mistakes, builds, testing, deployment, maintenance, refactoring, and more. Along the way, you'll learn techniques for delivering state-of-the-art software to users more rapidly and repeatedly than ever before.

This book shows you how to integrate ASP.NET Core with Angular, Bootstrap, and similar frameworks, with a bit of NuGet, continuous deployment, Bower dependencies, and Gulp build systems, including development beyond Windows on Mac and Linux.

Mobile Development with .NET

Understanding Game Application Development

ASP.NET Core 2.0 Examples

With ASP.NET Core, SignalR, Docker, and Azure

Building Microservices with ASP.NET Core

Pro ASP.NET Core 6

Building an Application in Four Sprints

At a time when nearly every vertical, regardless of domain, seems to need software running in the cloud to make money, microservices provide the ability 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-driven, 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

Publisher's Note: Microsoft ceased support for .NET Core 3.0 in March 2020. A new edition of this book is available that uses .NET 6 (an LTS release with support up until November 2024), C# 10, and Visual Studio 2022, as well as Visual Studio Code. Key FeaturesBuild modern, cross-platform applications with .NET Core 3.0Get up to speed with C#, and up to date with all the latest features of C# 8.0Start creating professional web applications with ASP.NET Core 3.0Book 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 file system, and working with databases. Part 3 provides examples of cross-platform applications you can build and deploy, for as web apps using ASP.NET Core or mobile apps using Xamarin.Forms. The book introduces three technologies for building 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 learnBuild cross-platform applications for Windows, macOS, Linux, iOS, and AndroidExplore application development with C# 8.0 and .NET Core 3.0Explore ASP.NET Core 3.0 and create professional web applicationsLearn object-oriented programming and C# multitaskingQuery and manipulate data using LINQUse Entity Framework Core and work with relational databasesDiscover Windows app development using the Universal Windows Platform and XAMLBuild mobile applications for iOS and Android using Xamarin.FormsWho 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.

Learn how web applications can be built efficiently using ASP.NET Core 2.0 and related frameworks About This Book Get to grips with the new features and APIs introduced in ASP.NET Core 2.0 Leverage the MVC framework and Entity Framework Core 2 to build efficient applications Learn to deploy your web applications in new environments such as the cloud and Docker Who This Book Is For This book is for developers who would like to build modern web applications with ASP.NET Core 2.0. No prior knowledge of ASP.NET or Visual Core is required. However, basic programming knowledge is assumed. Additionally, previous Visual Studio experience will be helpful but not required. The samples of the book this book can also help people who work in infrastructure engineering and operations, to monitor and diagnose problems during the runtime of ASP.NET Core 2.0 web applications. What You Will Learn Set up your development environment using Visual Studio 2017 and Visual Studio Code Create a fully automated continuous delivery pipeline using Visual Studio Team Services Get to know the basic and advanced concepts of ASP.NET Core 2.0 with detailed examples Build an MVC web application and use Entity Framework Core 2 to access data Add Web APIs to your web applications using RPC, REST, and HATEOAS Authenticate and authorize users with built-in ASP.NET Core 2.0 features Use Azure, Amazon Web Services, and Docker to deploy and monitor your applications In Detail The ability to develop web applications that are highly efficient but also easy to maintain has become imperative to many businesses. ASP.NET Core 2.0 is an open source framework from Microsoft, which makes it easy to build cross-platform web applications that are modern and dynamic. This book will take you through all of the essential concepts in ASP.NET Core 2.0, so you can learn how to build powerful web applications. The book starts with a brief introduction to the ASP.NET Core framework and the improvements made in the latest release, ASP.NET Core 2.0. You will then build, test, and debug your first web application very quickly. Once you understand the basic structure of ASP.NET Core 2.0 web applications, you'll dive deeper into more complex concepts and scenarios. Moving on, we'll explain how to take advantage of widely used frameworks such as Model View Controller and Entity Framework Core 2, and you'll learn how to secure your applications. Finally, we'll show you how to deploy and monitor your applications using Azure, AWS, and Docker. After reading the book, you'll be able to develop efficient and robust web applications in ASP.NET Core 2.0 that have high levels of customer satisfaction and adoption. Style and approach Start an exciting journey to building high performance web applications using ASP.NET Core 2.0 and MVC.

Design and develop an ASP.NET Core web application using .NET Core 3.0. This book shows you how to publish a web application to a web server and connect the published web application to a production database. Creating ASP.NET Core Web Applications starts by setting up the Visual Studio project where you will learn about Razor pages, Entities, and creating a data service. You will create models along with methods to use a query string and handle bad requests. Modifying data with Tag helpers is discussed as well as installation of Entity Framework, working with database migrations, and implementing a data access service. You will learn how to use layout pages and sections with Partial Views, .ViewImports, and .ViewStart files. You also will create custom middleware and log application events. You will be able to deploy the web application as well as connect it to a SQL Server database. What You Will Learn Work with models Modify data with the new EF Core classes and Partial Views Use separate scripts for production vs development Trace client-side errors using Chrome Developer tools Create cascading style sheets (CSS) with Sassy CSS (SCSS) Explore middleware Deploy your web application to IIS Who This Book Is For Software developers on the .NET stack who want to create ASP.NET Core web applications

Programming ASP.NET Core, Programming ASP.NET Core

C# 8.0 and .NET Core 3.0 - Modern Cross-Platform Development

Pro ASP.NET Core MVC

Develop Cloud-Ready Web Applications Using MVC, Blazor, and Razor Pages

ASP.NET Core 2.0 Examples

Learn to program in C# and .NET Core by building a series of practical, cross-platform projects

Kick-start your ASP.NET web development journey with the help of step-by-step tutorials and examples

Now in its 8th edition, Pro ASP.NET Core has been thoroughly updated for ASP.NET Core 3 and online for ASP.NET Core 5 and .NET 5.0. This comprehensive, full-color guide is the only book you need to learn ASP.NET Core development. Professional developers get ready to produce leaner applications for the ASP.NET Core platform. This edition puts ASP.NET Core 3 into context, and takes a deep dive into the tools and techniques required to build modern, extensible web applications. New features and capabilities such as MVC 3, Razor Pages, Blazor Server, and Blazor WebAssembly are covered, along with demonstrations of how they can be applied in practice. Following the same popular format and style found in previous editions, author Adam Freeman explains how to get the most out of ASP.NET Core 3. Starting with the nuts-and-bolts topics, he teaches readers about middleware components, built-in services, request model binding, and more. Moving along, he introduces increasingly more complex and advanced features, including endpoint routing and dependency injection. Written for professionals wanting to incorporate the latest functionality of ASP.NET Core 3 into their projects, this book also serves as complete reference on ASP.NET Core. Beginners with some background in Microsoft web development will also greatly benefit from the in-depth coverage provided throughout. What You Will Learn: Build a solid foundation and skill set for working with the entire ASP.NET Core platformApply ASP.NET Core 3 and ASP.NET Core 5 features in your developer environment; plentiful reusable templatesSee how to create RESTful web services, web applications, and client-side applicationsLeverage existing knowledge to efficiently get up and running with new programming models Adam Freeman is an experienced IT professional who has held senior positions in a range of companies, most recently serving as chief technology officer and chief operating officer of a global bank. Now retired, he spends his time writing and long-distance running. "The Rolls-Royce of ASP.NET books, (or if you're American, the Cadillac). Very thorough!" Les Jackson, MCKSD, DotNet Playbook "The author's instruction is direct, easy to understand and supplemented with clear code examples... Whether you are a beginner learning ASP.NET Core 3.1 app development, or an experienced professional ready to master advanced concepts, I consider this book a 'must have' for you!" Jeremy Likness, Senior Program Manager, Microsoft "...the best single resource for teaching MVC web apps using ASP.NET..." Charles Carter, MCSM, MSW, JD, Cloud Application Development Instructor, Microsoft Software and Systems Academy

Find solutions to common web development problems and the most popular problem-solving format. Look up the problem that you want to solve. Read the solution. Apply the solution directly in your own code. Problem solved! ASP.NET Core Recipes is a practical guide for developers creating modern web applications, cutting through the complexities of ASP.NET, jQuery, React, and HTML5 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 MVC framework and development tools, presenting typical challenges, along with code solutions and clear, concise explanations, to accelerate application development. Solve problems immediately by pasting in code from the recipes, or put multiple recipe solutions together to overcome challenging development obstacles. What You'll Learn Take advantage of MVC's streamlined syntax Discover how to take full control over HTML deployment a simple API for creating RESTful web services Understand test-driven development Migrate a project from ASP.NET web forms to Core MVC, including recipes for converting DataGrids, Forms, Web Parts, Master Pages, and navigation controls Use Core MVC in combination with popular JavaScript libraries, including jQuery, React, Bootstrap, and more Write unit tests for your MVC controllers, views, custom filters, and HTML helpers Utilize the latest features in Visual Studio 2017 to accelerate your Core MVC projects Identify performance bottlenecks in your MVC application Who This Book Is For Web developers of all skill levels who are looking for a programming reference for ASP.NET Core MVC and would like to gain an understanding of how things are working on the platform. In addition, parts of this book provide guidance to developers familiar with ASP.NET Web Forms who would like to update their skill set to include Core MVC.

A guide to discovering the hidden behaviors of ASP.NET Core that can be customized to optimize your .NET 5 applications Key FeaturesCustomize the default behavior of ASP.NET Core to get the most out of the frameworkEnhance the app configuration, change the default dependency injection, and build your own tag helpersDiscover best practices for configuring ASP.NET Core, from user interface design to hosting it on platformsBook Description ASP.NET Core is the most powerful Microsoft web framework. Although it's full of rich features, sometimes the default configurations can be a bottleneck and need to be customized to suit the nature and scale of your app. If you're an intermediate-level .NET developer who wants to extend .NET Core to multiple use cases, it's important to customize these features so that the framework works for you effectively. Customizing ASP.NET Core 5.0 covers core features that can be customized for developing optimized apps. The customization techniques are also updated to work with the latest .NET 5 framework. You'll learn essential concepts relating to optimizing the framework such as configuration, dependency injection, routing, action filters, and more. As you progress, you'll be able to create custom solutions that address the unique requirements of your app. The later chapters will cover advanced topics, such as how to create custom endpoints and add third-party endpoints to your web apps. By the end of this application development book, you'll have the skills you need to be able to customize ASP.NET Core to develop robust optimized apps. What you will learnExplore various application configurations and providers in ASP.NET Core Understand dependency injection in .NET and learn how to add third-party DI containersDiscover the concept of middleware and write your own middleware for ASP.NET Core appConfigure various API output formats in your API-driven projectsGet familiar with different hosting models for your ASP.NET Core appDevelop custom routing endpoints and add third-party endpointsConfigure WebHostBuilder effectively for your web applicationsWho this book is for This .NET 5 book is for .NET developers who need to change the default behaviors of the framework to help improve the performance of their applications. Intermediate-level knowledge of ASP.NET Core and C# is required before getting started with the book.

Professional developers will produce leaner applications for the ASP.NET Core platform using the guidance in this best-selling book, now in its 9th edition and updated for ASP.NET Core for .NET 6. It contains detailed explanations of the ASP.NET Core platform and the application frameworks it supports. This condensed guide takes a practical and engaging approach to cover everything that you need to know to start using ASP.NET Core for building cloud-ready, modern web applications. The book starts with a brief introduction to the ASP.NET Core framework and highlights the new features in its latest release, ASP.NET Core 6. It then covers the improvements in cross-platform support, the view engines that will help you to understand web development, and the new frontend technologies available with Blazor for building interactive web UIs. As you advance, you'll learn the fundamentals of the different frameworks and capabilities that ship with ASP.NET Core. You'll also get to grips with securing web apps with identity implementation, unit testing, and the latest in containers and cloud-native to deploy them to AWS and Microsoft Azure.

Throughout the book, you'll find clear and concise code samples that illustrate each concept along with the strategies and techniques that will help to develop scalable and robust web apps. By the end of this book, you'll have learned how to leverage ASP.NET Core 5 to build and deploy dynamic websites and services in a variety of real-world scenarios. What you will learnExplore the new features and APIs introduced in ASP.NET Core 5 and BlazorPut basic ASP.NET Core 5 concepts into practice with the help of clear and simple sample work with Entity Framework Core and its different workflows to implement your application's data accessDiscover the different web frameworks that ASP.NET Core 5 offers for building web appsGet to grips with the basics of building RESTful web APIs to work with real dataDeploy your web apps in AWS, Azure, and Docker containersWork with SignalR to add real-time notifications to your appWho this book is for This book is for developers who want to learn how to develop web-based applications using the ASP.NET Core framework. Familiarity with the C# language and a basic understanding of HTML and CSS is required to get the most out of this book.

Practical Software Architecture solutions from the legendary Robert C. Martin ("Uncle Bob") by applying universal rules of software architecture, you can dramatically improve developer productivity throughout the life of any software system. Now, building upon the success of his best-selling books Clean Code and The Clean Coder, legendary software craftsman Robert C. Martin ("Uncle Bob") reveals those rules and helps you apply them. Martin's Clean Architecture doesn't merely present options. Drawing on over a half-century of experience in software environments of every imaginable type, Martin tells you what choices to make and why they are critical to your success. As you've come to expect from Uncle Bob, this book is packed with direct, no-nonsense solutions for the real challenges you'll face—the ones that will make or break your projects. Learn what software architects need to achieve—and core disciplines and practices for achieving it Master essential software design principles for addressing function, component separation, and data management See how programming paradigms impose discipline by restricting what developers can do Understand what's critically important and what's merely a "detail" Implement optimal, high-level structures for web, database, thick-client, console, and embedded applications Define appropriate boundaries and layers, and organize components and services See why designs and architectures go wrong, and how to prevent (or fix) these failures Clean Architecture is essential reading for every current or aspiring software architect, systems analyst, system designer, and software manager—and for every programmer who must execute someone else's designs. Register your product for convenient access to downloads, updates, and/or corrections as they become available.

Enterprise Application Development with C# 9 and .NET 5

ASP.NET Core 5 for Beginners

Full-Stack Web Development with .NET Core and Angular

ASP.NET Core 6 and Angular

Creating ASP.NET Core Web Applications

Learning ASP.NET Core MVC Programming

Develop a simple, yet fully-functional modern web application using ASP.NET Core MVC, Entity Framework and Angular 5. About This Book Based on the best-selling book ASP.NET Core and Angular 2 Easily build a complete single page application with two of the most impressive frameworks in modern development, ASP.NET Core and Angular Bring together the capabilities and features of both Angular 5 and ASP.NET Core 2 for full stack development Discover a comprehensive approach to building your next web project-From managing data, to application design, through to SEO optimization and security Who This Book is For This book is for seasoned ASP.NET developers who already know about ASP.NET Core and Angular in general, but want to know more about them and/or understand how to blend them together to craft a production-ready SPA. What You Will Learn Use ASP.NET Core to its full extent to create a versatile backend layer based on RESTful APIs Consume backend APIs with the brand new Angular 5 HttpClient and use RxJS Observers to feed the frontend UI asynchronously Implement an authentication and authorization layer using ASP.NET Identity to support user login with integrated and third-party OAuth 2 providers Configure a web application in order to accept user-defined data and persist it into the database using server-side APIs Secure your application against threats and vulnerabilities in a time-efficient way Connect different aspects of the ASP.NET Core framework ecosystem and make them interact with each other for a Full-Stack web development experience In Detail Become fluent in both frontend and backend web development by combining the impressive capabilities of ASP.NET Core 2 and Angular 5 from project setup right through the deployment phase. Full-stack web development means being able to work on both the frontend and backend portions of an application. The frontend is the part that users will see or interact with, while the backend is the underlying engine that handles the logical flow, server configuration, data storage and retrieval, database interactions, user authentication, and more. Use the ASP.NET Core MVC framework to implement the backend with API calls and server-side routing. Learn how to put the frontend together using top-notch Angular 5 features such as two-way binding, Observables, and Dependency Injection, build the Data Model with Entity Framework Core, style the frontend with CSS/LESS for a responsive and mobile-friendly UI, handle user input with Forms and Validators, explore different authentication techniques, including the support for third-party OAuth2 providers such as Facebook, and deploy the application using Windows Server, SQL Server, and the IIS/Kestrel reverse proxy. Style and approach More than just a technical manual, this guide takes you through the most important technical facets of developing with these two hugely popular frameworks and then demonstrates how to put those skills into practice. It's a book that recognizes that what's really important is the end product. Publisher's Note: Microsoft will stop supporting .NET 5 in early May 2022. A new edition of this book is available that uses .NET 6 (an LTS release with support up until November 2024), C# 10, and Visual Studio 2022, as well as Visual Studio 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. The best type of application for learning the C# language constructs and many of the .NET libraries is one that does not distract with unnecessary application code. For that reason, the C# and .NET topics covered in Chapters 1 to 13 feature console applications. In Chapters 14 to 20, having mastered the basics of the language and libraries, you will build practical applications using ASP.NET Core, Model-View-Controller (MVC), and Blazor. 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 best for C# and .NET beginners, or programmers who have worked with C# in the past but fell 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. Table of Contents [] Hello, C#! Welcome. .NET Core! [] Speaking C# [] Controlling Flow and Converting Types [] Writing, Debugging, and Testing Functions [] Building Your Own Types with Object-Oriented Programming [] Implementing Interfaces and Inheriting Classes [] Understanding and Packaging .NET Types [] Working with Common .NET Types [] Working with Files, Streams, and Serialization (N.B. Please use the Look Inside option to see further chapters) Review "Mark Price's extraordinary book covers every aspect of C# 9 and .NET 5. It is filled with step-by-step demonstrations and will be of tremendous value both to those who want to learn C# and to more experienced C# programmers making the transition to C# 9. Highly recommended!" -- Jesse Liberty - author of Programming C# and Learning C# (O'Reilly Media)

Build cross-platform solutions with .NET Core 2.0 through real-life scenarios Key Features Bridges the gap between learning and doing and improves your software development skills Covers the best practices of .NET development to improve your productivity Example-based approach to get you started quickly with software programming Book Description With the rise in the number of tools and technologies available today, developers and architects are always exploring ways to create better and smarter solutions. Before, the differences between target platforms was a major roadblock, but that's not the case now. .NET Core 2.0 By Example will take you on an exciting journey to building better software. This book provides fresh and relevant content to .NET Core 2.0 in a succinct format that's enjoyable to read. It also delivers concepts, along with the implications, design decisions, and potential pitfalls you might face when targeting Linux and Windows systems, in a logical and simple way. With the .NET framework at its center, the book comprises of five varied projects: a multiplayer Tic-tac-toe game, a real-time chat application, Let'sChat, a chatbot, a microservice-based buying-selling application, and a movie booking application. You will start each chapter with a high-level overview of the content, followed by the above example applications described in detail. By the end of each chapter, you will not only be proficient with the concepts, but you'll also have created a tangible component in the application. By the end of the book, you will have built five solid projects using all the tools and support provided by the .NET Core 2.0 framework. What you will learn Build cross-platform applications with ASP.NET Core 2.0 and its tools Integrate, host, and deploy web apps with the cloud (Microsoft Azure) Leverage the nurses native library to extend console capabilities in .NET Core on Linux and interop with native code .NET Core on Linux and learn how to interop with existing native code Reuse existing .NET Framework and Mono assemblies from .NET Core 2.0 applications Develop real-time web applications using ASP.NET Core Learn the differences between SOA and microservices and get started with microservice development using ASP.NET Core 2.0 Walk through functional programming with F# and .NET Core from scratch Who this book is for If you are a developer or architect and want to learn how to build cross-platform solutions using Microsoft .NET Core, this book is for you. It is assumed that you have some knowledge of the .NET Framework, OOP, and C# (or a similar programming language).

Design, build and deploy robust web applications using ASP.NET 6, Angular 13, and Entity Framework Core Key Features The most up-to-date book that covers cutting-edge features released in ASP.NET Core 6 and Angular 13 Create a production-ready Single-Page Application (SPA) or Progressive Web Application (PWA) Adopt a full-stack approach to handle data management, API documentation, Web APIs, end-to-end testing, security, and deployment Book Description Every full-stack ninja needs the tools to operate on front-end and back-end application development. This web app development book takes a hands-on, project-based approach to provide you with all the tools and techniques that web developers need to create, debug, and deploy efficient web applications using ASP.NET Core and Angular. The fifth edition has been updated to cover advanced topics such as Minimal APIs, Web APIs with GraphQL, real-time updates with SignalR, and new features in .NET 6 and Angular 13. You begin by building a data model with Entity Framework Core, alongside utilizing the Entity Core Fluent API and EntityTypeConfiguration class. You'll learn how to fetch and display data and handle user input with Angular reactive forms and front-end and back-end validators for maximum effect. Later, you will perform advanced debugging and explore the unit testing features provided by xUnit.net (.NET 6) and Jasmine, as well as Karma for Angular. After adding authentication and authorization to your apps, you will explore progressive web applications, learning about their technical requirements, testing processes, and how to convert a standard web application to a PWA. By the end of this web development book, you will understand how to tie together the front-end and back-end to build and deploy secure and robust web applications. What you will learn Build a production-ready SPA or PWA using ASP.NET Core 6 and Angular 13 Implement and consume a Web API interface with ASP.NET Core Set up an SQL database server using a local instance of a cloud database Perform C# and TypeScript debugging using Visual Studio 2022 Create TDD and BDD unit tests using xUnit, Jasmine, and Karma Perform DBMS structured logging using providers such as Serilog Deploy web apps to Azure App Service using IIS, Kestrel, and NGINX Learn to develop fast and flexible Web APIs using GraphQL and real-time capabilities to Angular apps with ASP.NET Core SignalR Who this book is for This book is for experienced ASP.NET developers who already possess some familiarity with ASP.NET Core and Angular and are looking to learn how to use them effectively together. The fully documented code samples (also available on GitHub) and the step-by-step implementation tutorials make this book easy to follow.

A Problem-Solution Approach Learn end-to-end web development with leading frontend frameworks, such as Angular, React, and Vue ASP.NET Core 2 and Angular 5 ASP.NET Core Application Development Learn the secrets of developing high performance web applications using C# and ASP.NET Core 2 on Windows, Mac, and Linux Develop, Test, and Deploy Cross-Platform Services in the Cloud With Xamarin Forms and ASP.NET

ASP.NET Core in Action, Second Edition is a comprehensive guide to creating web applications with ASP.NET Core 5.0. Go from basic HTTP concepts to advanced framework customization. Summary Fully updated to ASP.NET 5.0, ASP.NET Core in Action, Second Edition is a hands-on primer to building cross-platform web applications with your C# and .NET skills. Even if you've never worked with ASP.NET you'll start creating productive cross-platform web apps fast. And don't worry about late-breaking changes to ASP.NET Core. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Build full-stack web applications that run anywhere. Developers love ASP.NET Core for its libraries and pre-built components that maximize productivity. Version 5.0 offers new features for server-side apps, as well as background services for cross-platform development. About the book **ASP.NET Core in Action, Second Edition is a comprehensive guide to creating web applications with ASP.NET Core 5.0. Go from basic HTTP concepts to advanced framework customization. Illustrations and annotated code make learning visual and easy. Master logins, dependency injection, security, and more. This updated edition covers the latest features, including Razor Pages and the new hosting paradigm. What's inside** Developing apps for Windows and non-Windows servers Configuring applications Building custom components Logging, testing, and security About the reader For intermediate C# developers. About the author **Andrew Lock is a Microsoft MVP who has worked with ASP.NET Core since before its first release. Table of Contents PART 1 – GETTING STARTED WITH ASP.NET CORE 1 Getting started with ASP.NET Core 2 Your first application 3 Handling requests with the middleware pipeline 4 Creating a website with Razor Pages 5 Mapping URLs to Razor Pages using routing 6 The binding model: Retrieving and validating user input 7 Rendering HTML using Razor views 8 Building forms with Tag Helpers 9 Creating a Web API for mobile and client applications using MVC PART 2 – BUILDING COMPLETE APPLICATIONS 10 Service configuration with dependency injection 11 Configuring an ASP.NET Core application 12 Saving data with Entity Framework Core 13 The MVC and Razor Pages filter pipeline 14 Authentication: Adding users to your application with Identity 15 Authorization: Securing your application 16 Publishing and deploying your application PART 3 – EXTENDING YOUR APPLICATIONS 17 Monitoring and troubleshooting errors with logging 18 Improving your application's security 19 Building custom components 20 Building custom MVC and Razor Pages components 21 Calling remote APIs with IHttpClientFactory 22 Building background tasks and services 23 Testing your application**

Become a full-stack developer by learning popular Microsoft technologies and platforms such as .NET Core, ASP.NET Core, Entity Framework, and Azure Key Features Bring static typing to web development with features compatible in TypeScript 3 Implement a slim marketplace single page application (SPA) in Angular, React, and Vue Modernize your web apps with Microsoft Azure, Visual Studio, and GitBook Description Today, full-stack development is the name of the game. Developers who can build complete solutions, including both backend and frontend products, are in great demand in the industry, hence being able to do so a desirable skill. However, embarking on the path to becoming a modern full-stack developer can be overwhelmingly difficult, so the key purpose of this book is to simplify and ease the process. This comprehensive guide will take you through the journey of becoming a full-stack developer in the realm of the web and .NET. It begins by implementing data-oriented RESTful APIs, leveraging ASP.NET Core and Entity Framework. Afterward, it describes the web development field, including its history and future horizons. Then, you'll build webbased Single-Page Applications (SPAs) by learning about numerous popular technologies, namely TypeScript, Angular, React, and Vue. After that, you'll learn about additional related concerns involving deployment, hosting, and monitoring by leveraging the cloud; specifically, Azure. By the end of this book, you'll be able to build, deploy, and monitor cloud-based, data-oriented, RESTful APIs, as well as modern web apps, using the most popular frameworks and technologies. What you will learn Build RESTful APIs in C# with ASP.NET Core, web APIs, and Entity Framework See the history and future horizons of the web development field Bring static-typing to web apps using TypeScript Build web applications using Angular, React, and Vue Deploy your application to the cloud Write web applications that scale, can adapt to changes, and are easy to maintain Discover best practices and real-world tips and tricks Secure your backend server with Authentication and Authorization using OAuth 2.0 Who this book is for This book is for developers who are keen on strengthening their skills in the field of cloud-based full-stack web development. You need basic knowledge of web-related pillars, including HTML, CSS, and JavaScript, as well as C# and REST. This book targets novice developers in the realm of Web development and ASP.NET who desire to advance to modern Web and ASP.NET Core development and leverage the Cloud to manage and bring everything together.

Learn to build a simple data-driven mobile game application using the power of Xamarin.Forms, ASP.NET, the Web API, and SignalR with this short book. In it you will build a cross-platform mobile application that targets both iOS and Android, connect your app with your database using Entity Framework, and implement real-time syncing functionality using SignalR. Understanding Game Application Development starts by giving you an overview of the development tools, an installation guide, and a list of prerequisites. You will learn how to manage application flow, create your workspace, and set up your database. Next, you will see how to access data for handling CRUD operations and define the necessary API endpoints. Further, you will build a mobile application with Xamarin.Forms, both in iOS and in Android. You will also understand the deployment and testing process as well as how to build a real-time leader board using ASP.NET MVC and SignalR. Finally, you will understand how to publish your source code on GitHub from Visual Studio 2017. What You Will Learn Understand the basic concept and fundamentals of the technologies used for building the applications Set up your development environment Create a SQL database from scratch Implement a data access layer Define REST service endpoints using the Web API Deploy, test, and debug iOS and Android applications Push your source code to GitHub Who This Book Is For .NET developers who want to jump on mobile application development with Xamarin and learn with practical examples.

Learn how to develop web applications that deploy cross-platform and are optimized for high performance using ASP.NET Core 2 About This Book Master high-level web app performance improvement techniques using ASP.NET Core 2.0 Find the right balance between premature optimization and inefficient code Design workflows that run asynchronously and are resilient to transient performance issues Who This Book Is For This book is aimed for readers who can build a web application and have some experience with ASP.NET or some other web application framework (such as Ruby on Rails or Django). They can be people who are happy learning details independently but who struggle to discover the topics that they should be researching. The reader should be interested in improving the performance of their web app and in learning about ASP.NET Core and modern C#. What You Will Learn Understand ASP.NET Core 2 and how it differs from its predecessor Address performance issues at the early stages of development Set up development environments on Windows, Mac, and Linux Measure, profile and find the most significant problems Identify the differences between development workstations and production infrastructures, and how these can exacerbate problems Boost the performance of your application but with an eye to how it affects complexity and maintenance Explore a few cutting-edge techniques such as advanced hashing and custom transports In Detail The ASP.NET Core 2 framework is used to develop high-performance and cross-platform web applications. It is built on .NET Core 2 and includes significantly more framework APIs than version 1. This book addresses high-level performance improvement techniques. It starts by showing you how to locate and measure problems and then shows you how to solve some of the most common ones. Next, it shows you how to get started with ASP.NET Core 2 on Windows, Mac, Linux, and with Docker containers. The book illustrates what problems can occur as latency increases when deploying to a cloud infrastructure. It also shows you how to optimize C# code and choose the best data structures for the job. It covers new features in C# 6 and 7, along with parallel programming and distributed architectures. By the end of this book, you will be fixing latency issues and optimizing performance problems, but you will also know how this affects the complexity and maintenance of your application. Finally, we will explore a few highly advanced techniques for further optimization. Style and approach A step-by-step practical guide filled with real-world use cases and examples

ASP.NET Core Recipes Hands-On full stack web development using ASP.NET Core, React, and TypeScript 3 Building an Application in Four Sprints (Developer Reference) C# 9 and .NET 5 - Modern Cross-Platform Development Pro ASP.NET Core 3 ASP.NET Core 2 High Performance ASP.NET Core: Cloud-ready, Enterprise Web Application Development Explore the tools and techniques to build scalable and secured RESTful web services and web applications using C# 8 and ASP.NET Core 3.1 Key Features Delve into MVC patterns, configuration, routing, and deployment to build professional-grade applications Learn how to integrate ASP applications with the JavaScript frameworks React, Vue, and Angular Improve the performance of applications and the development team by implementing advanced ASP.NET Core concepts Book Description ASP.NET has been the preferred choice of web developers for a long time. With ASP.NET Core 3, Microsoft has made internal changes to the framework along with introducing new additions that will change the way you approach web development. This second edition has been thoroughly updated to help you make the most of the latest features in the framework, right from gRPC and conventions to Blazor, which has a new chapter dedicated to it. You'll begin with an overview of the essential topics, exploring the Model-View-Controller (MVC) pattern, various platforms, dependencies, and frameworks. Next, you'll learn how to set up and configure the MVC environment, before delving into advanced routing options. As you advance, you'll get to grips with controllers and actions to process requests, and later understand how to create HTML inputs for models. Moving on, you'll discover the essential aspects of syntax and processes when working with Razor. You'll also get up to speed with client-side development and explore the testing, logging, scalability, and security aspects of ASP.NET Core. Finally, you'll learn how to deploy ASP.NET Core to several environments, such as Azure, Amazon Web Services (AWS), and Docker. By the end of the book, you'll be well versed in development in ASP.NET Core and will have a deep understanding of how to interact with the framework and work cross-platform. What you will learn Understand the new capabilities of ASP.NET Core 3.1 Become well versed in how to configure ASP.NET Core to use it to its full potential Create controllers and action methods, and understand how to maintain state Implement and validate forms and retrieve information from them Improve productivity by enforcing reuse, process forms, and effective security measures Delve into the new Blazor development model Deploy ASP.NET Core applications to new environments, such as Microsoft Azure, AWS, and Docker Who this book is for If you are a developer with basic knowledge of ASP.NET MVC and want to build powerful applications, then this book is for you. Developers who want to explore the latest changes in ASP.NET Core 3.1 to build professional-level applications will also find this book useful. Familiarity with C#, ASP.NET Core, HTML, and CSS is expected to get the most out of this book.

Build modern, scalable, and cloud-ready single-page applications using ASP.NET Core, React, TypeScript, and Azure Key Features Explore the full potential and latest features of .NET Core 3.0, TypeScript 3, and React Learn how to manage data, application design, and packaging, and secure your web apps Discover best practices for using React and TypeScript to build a scalable frontend that interacts with REST APIs Book Description Microsoft's ASP.NET Core is a robust and high-performing cross-platform web API framework, and Facebook's React uses declarative JavaScript to drive a rich, interactive user experience on the client-side web. Together, they can be used to build full stack apps with enhanced security and scalability at each layer. This book will start by taking you through React and TypeScript components to build an intuitive single-page application. You'll understand how to design scalable REST APIs that can integrate with a React-based frontend. You'll get to grips with the latest features, popular patterns, and tools available in the React ecosystem, including function-based components, React Router, and Redux. The book shows how you can use TypeScript along with React to make the frontend robust and maintainable. You'll then cover important .NET Core features such as API controllers, attribute routing, and model binding to help you build a sturdy backend. Additionally, you'll explore API security with ASP.NET Core identity and authorization policies, and write reliable unit tests using both .NET Core and React before you deploy your app to the Azure cloud. By the end of the book, you'll have gained all the knowledge you need to enhance your C# and JavaScript skills and build full stack, production-ready applications with ASP.NET Core and React. What you will learn Build RESTful APIs with .NET Core using API controllers Create strongly typed, interactive, and function-based React components using Hooks Build forms efficiently using reusable React components Perform client-side state management with Redux and the React Context API Secure REST APIs with ASP.NET identity and authorization policies Run a range of automated tests on the frontend and backend Implement continuous integration (CI) and continuous delivery (CD) processes into Azure using Azure DevOps Who this book is for If you're a web developer looking to build solid full-stack web applications with .NET Core and React, this book is for you. Although this book does not assume any knowledge of React, you're expected to have a basic understanding of .NET Core.

Build fully functional, cloud-ready, and professional web applications using the latest features in the .NET 5 framework and React.js with Microsoft Azure Key Features Explore the new features of .NET 5 with this updated edition of ASP.NET Core 5 and React Discover strategies for adopting a full-stack development approach, clean architecture techniques, and development best practices Learn how to manage data, design and package applications, and secure your web apps Book Description Microsoft's .NET framework is a robust server-side framework, now even more powerful thanks to the recent unification of the Microsoft ecosystem with the .NET 5 framework. This updated second edition addresses these changes in the .NET framework and the latest release of React. The book starts by taking you through React and TypeScript components for building an intuitive single-page application and then shows you how to design scalable REST APIs that can integrate with a React-based frontend. Next, you'll get to grips with the latest features, popular patterns, and tools available in the React ecosystem, including function-based components, React Router, and Redux. As you progress through the chapters, you'll learn how to use React with TypeScript to make the frontend robust and maintainable and cover key ASP.NET 5 features such as API controllers, attribute routing, and model binding to build a sturdy backend. In addition to this, you'll explore API security with ASP.NET 5 identity and authorization policies and write reliable unit tests using both .NET and React, before deploying your app on Azure. By the end of this book, you'll have gained the knowledge you need to enhance your C# and JavaScript skills and build full-stack, production-ready applications with ASP.NET 5 and React. What you will learn Build RESTful APIs with .NET 5 using API controllers Secure REST APIs with identity and authorization policies Create strongly typed, interactive, and function-based React components using Hooks Understand how to style React components using Emotion.js Perform client-side state management with Redux Run a range of automated tests on the frontend and backend Implement continuous integration and continuous delivery (CI/CD) processes in Azure using Azure DevOps Who this book is for If you're a web developer looking to get up to speed with full-stack web application development with .NET Core and React, this book is for you. Although the book does not assume any knowledge of React, a basic understanding of .NET Core will help you to get to grips with the concepts covered.

Learn the fundamentals of ASP.NET MVC and build real-world web applications using ASP.NET Core MVC About This Book Get a first-principles coverage of ASP.NET MVC and the latest release, Core This book is uniquely designed for developers who are looking to transition their skills into the .NET development field The standalone chapter structure leaves you free to explore ASP.NET MVC to immediately solve your pain points Who This Book Is For This book is for developers who want to learn to build web applications using ASP.NET Core, developers who want to make a career building web applications using Microsoft technology, and developers who are working in Ruby on Rails or other web frameworks and want to learn ASP.NET Core MVC. No knowledge of the ASP.NET platform or the .NET platform is required. Even though you do not need to have experience in C#, an understanding of the basic constructs (loops, conditionals, classes, and objects) of any modern programming language would be helpful. What You Will Learn Get to know the concepts of ASP.NET MVC and build a new static web page using HTML, CSS, and jQuery Set up a development environment and run a sample application using the template Create a Controller with action methods Build a view using several features of the Razor View engine Construct a Model for ASP.NET Core MVC application Devise a custom mechanism to provide maximum flexibility to your application through routing Validate the user input on the client side using jQuery Enhance your applications using Bootstrap Explore new configuration and deployment scenarios-step by step guide to deploying ASP.NET Core web application in Linux In Detail ASP.NET Core MVC helps you build robust web applications using the Model-View-Controller design. This guide will help you in building applications which can be deployed on non-windows platforms such as Linux. In today's age, it is crucial that you possess the ability to separate the programming and business logic, and this is exactly what ASP.NET Core MVC application will help you achieve. This version comes with a number of improvements that enable fast, TDD-friendly development to create sophisticated applications. You would also learn the fundamentals of Entity Framework and on how to use the same in ASP.NET Core web applications. The book presents the fundamentals and philosophies of ASP.NET Core. Starting with an overview of the MVC pattern, we quickly dive into the aspects that you need to know to get started with ASP.NET. You will learn about the core architecture of model, view, and control. Integrating your application with Bootstrap, validating user input, interacting with databases, and deploying your application are some of the things that you will be able to execute with this fast-paced guide. The end of the book will test your knowledge as you build a fully working sample application using the skills you've learned throughout the book. Style and approach This book takes a first-principles approach to help you understand and implement ASP.NET MVC solutions. It is focused primarily on giving you practical skills rather than the old conventional theoretical teaching.

Turn the right screws in ASP.NET Core to get the most out of the framework Customizing ASP.NET Core 5.0 Real-Time Web Application Development Learning ASP.NET Core 2.0 Proven Approaches to Application Design and Development An end to end guide covering the latest features of Visual Studio 2019, Blazor and Entity Framework, 2nd Edition ASP.NET Core in Action