

Asp Net Core And Angular 2

Stay ahead of the web evolution with elegant combination front-end development Front-End Development with ASP.NET Core, Angular, and Bootstrap is the professional's guide to fast, responsive web development. Utilizing the most popular combination of web technologies for Microsoft developers, this guide provides the latest best practices and ASP.NET MVP guidance to get you up to speed quickly. The newest ASP.NET - now called ASP.NET Core - is leaner, easier to use, and less bound to the operating system and IDE, giving you the perfect opportunity to leverage third-party frameworks and libraries that provide functionalities not native to ASP.NET Core and Visual Studio. This book shows you how to integrate ASP.NET Core with Angular, Bootstrap, and similar frameworks, with a bit of jQuery Mobile, Nuget, continuous deployment, Bower dependencies, and Gulp/Grunt build systems, including development beyond Windows on Mac and Linux. With clear, concise instruction and expert insight, this guide is an invaluable resource for meeting the demands of modern web development. Combine ASP.NET Core with different tools, frameworks, and libraries Utilize third-party libraries with non-native functionalities Adopt the most up-to-date best practices for front-end development Develop flexible, responsive design sites The world of web development is evolving faster than ever before, and the trend is toward small, focused frameworks with modular capabilities. Microsoft has noticed, and upgraded ASP.NET Core to align with the latest industry expectations. Front-End Development with ASP.NET Core, Angular, and Bootstrap helps you elegantly integrate these technologies to develop the sites that the industry demands.

This book teaches you all the essential knowledge required to learn and apply time-proven SOLID principles of object-oriented design and important design patterns in ASP.NET Core 1.0 (formerly ASP.NET 5) applications. You will learn to write server-side as well as client-side code that makes use of proven practices and patterns. SOLID is an acronym popularized by Robert Martin used to describe five basic principles of good object-oriented design--Single Responsibility, Open/Closed, Liskov Substitution, Interface Segregation and Dependency Inversion. This book covers all five principles and illustrates how they can be used in ASP.NET Core 1.0 applications. Design Patterns are time proven solutions to commonly occurring software design problems. The most well-known catalog of design patterns comes from Erich Gamma, Richard Helm, Ralph Johnson and John Vlissides, the so-called as GoF patterns (Gang of Four patterns). This book contains detailed descriptions of how to apply Creational, Structural and Behavioral GoF design patterns along with some Patterns of Enterprise Application Architecture. Popular JavaScript patterns are covered, along with working examples of all these patterns in ASP.NET Core 1.0 and C# are included. What You Will Learn: How to apply SOLID principles to ASP.NET applications How to use Gang of Four (GoF) design patterns in ASP.NET applications Techniques for applying Patterns of Enterprise Application Architecture cataloged by Martin Fowler in ASP.NET applications How to organize code and apply design patterns in JavaScript Who This Book Is For: This book is for ASP.NET developers familiar with ASP.NET Core 1.0, C# and Visual Studio.

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.

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 repeatably than ever before.

Build a simple, yet fully functional modern web application using .NET 5, Entity Framework Core, and Angular 11 Key Features Comprehensively updated with the latest features and additions in ASP.NET Core 5 and Angular 11 Design, build, and deploy a Single Page Application or Progressive Web App with ASP.NET Core and Angular Adopt a full stack approach to handle data management, Web APIs, application design, testing, SEO, security, and deployment Book Description Learning full-stack development calls for knowledge of both front-end and back-end web development. ASP.NET Core 5 and Angular, Fourth Edition will get you started with Angular to build robust web applications as well as the ASP.NET Core 5 and Web API Controllers to implement API calls and server-side routing in the back-end. This fully revised edition includes a side-by-side comparison of the Visual Studio Angular app versus NG App and coverage of the Angular routing module. You will learn how to build a data model with Entity Framework Core, alongside utilizing the Entity Core Fluent API and EntityTypeConfiguration class. As you progress, you will learn how to handle user input with Angular reactive forms and front-end and back-end validators for maximum effect. You will later explore the advanced debugging and unit testing features provided by xUnit.net (.NET 5) and Jasmine, as well as Karma for Angular. Further, you will dive deep into progressive web applications (PWAs), learning about their technical requirements, testing, and converting SWAs to PWAs. Finally, you will learn how to deploy apps on Windows, Linux, and Azure using IIS, Kestrel, and nginx. By the end of this book, you will be equipped with the skills you need to create, debug, and deploy efficient web applications using ASP.NET Core and Angular. What you will learn Implement a Web API interface with ASP.NET Core and consume it with Angular using RxJS Observables Set up a SQL database server using a local instance or a cloud data store Perform C# and TypeScript debugging using Visual Studio 2019 Create TDD and BDD unit tests using xUnit, Jasmine, and Karma Explore the EF Core Fluent API and EntityTypeConfiguration classes Perform DBMS structured logging using third-party providers such as SeriLog Deploy a Web application to Windows and Linux web servers, or to cloud-based PaaS solutions such as Azure App Service Who this book is for This book is for experienced ASP.NET developers who already possess some experience with ASP.NET Core and Angular and are looking to learn how to use them together to create production-ready Single Page Applications (SPAs) or Progressive Web Applications (PWAs). However, the fully documented code samples (also available on GitHub) and the step-by-step implementation tutorials make this book easy-to-understand - even for beginners.

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.

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.

Discover how to use Angular, ASP.NET Core, and Entity Framework Core to develop a full-stack application.

Presents practical advice on the disciplines, techniques, tools, and practices of computer programming and how to approach software development with a sense of pride, honor, and self-respect.

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 MVC 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 cross-platform, web-application framework from Microsoft. 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. 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.

Build a simple, yet fully-functional modern web application using .NET Core 3.1, Entity Framework Core and Angular 9 Key Features Explore the latest edition of the bestselling book ASP.NET Core 2 and Angular 5 Design, build and deploy a Single Page Application or Progressive Web App with ASP.NET Core and Angular Adopt a full stack approach to handle data management, Web APIs, application design, testing, SEO, security and deployment Book Description Learning full stack development calls for knowledge of both frontend and backend web development. By covering the impressive capabilities of ASP.NET Core 3.1 and Angular 9, right from project setup through to the deployment phase, this book will help you to develop your skills effectively. The book will get you started with using the .NET Core framework and Web API Controllers to implement API calls and server-side routing in the backend. Next, you will learn to build a data model with Entity Framework Core and configure it using either a local SQL Server instance or cloud-based data stores such as Microsoft Azure. The book will also help you handle user input with Angular reactive forms and frontend and backend validators for maximum effect. You will later explore the advanced debugging and unit testing features provided by xUnit.net (.NET Core) and Jasmine, as well as Karma for Angular. Finally, you will implement various authentication and authorization techniques with the ASP.NET Core Identity system and the new IdentityServer, as well as deploy your apps on Windows and Linux servers using IIS, Kestrel, and Nginx. By the end of this book, you will be equipped with the skills you need to create efficient web applications using ASP.NET Core and Angular. What you will learn Implement a Web API interface with ASP.NET Core and consume it with Angular using RxJS Observables Create a data model using Entity Framework Core with code-first approach and migrations support Set up and configure a SQL database server using a local instance or a cloud data store on Azure Perform C# and JavaScript debugging using Visual Studio 2019 Create TDD and BDD unit test using xUnit, Jasmine, and Karma Implement authentication and authorization using ASP.NET Identity, IdentityServer4, and Angular API Build Progressive Web Apps and explore Service Workers Who this book is for This book is for experienced ASP.NET developers who already know about ASP.NET Core and Angular and are looking to learn more about them and understand how to use them together to create production-ready Single Page Applications (SPAs) or Progressive Web Applications (PWAs). However, the fully-documented code samples (also available on GitHub) and the step-by-step implementation tutorials make this book easy-to-understand - even for beginners and developers who are just getting started.

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 Git Book 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.

"In this course, we will straight jump into the development of Single Page Application with ASP.NET Core & Angular. Step by step seeing the application being developed will give us the real development flow of single page application. We will cover the important topics of Angular like modules, components, services, and routing. On the other hand, learning the use of ASP.NET Core will give us the freedom to be platform independent. It doesn't matter whether it is Windows, MacOS or Linux, the application will run everywhere. We will create angular services which will help us communicate with the web services in the backend. We will also learn how to use the HTTP Client of Angular. and how we can make different HTTP calls. We will use Web API in the backend and Entity Framework Core to generate our database automatically from our code. We will see the use of popular software named 'Postman' in this course as well. How to use Angular CLI is also an important topic that will be covered. At the end of this video course, we will be able to build a complete single page app with two of the most impressive frameworks of this time."--Resource description page.

This book provides comprehensive details of developing ultra-modern, responsive single-page applications (SPA) for quantitative finance using ASP.NET Core and Angular. It pays special attention to create distributed web SPA applications and reusable libraries that can be directly used to solve real-world problems in quantitative finance. The book contains: Overview of ASP.NET Core and Angular, which is necessary to create SPA for quantitative finance. Step-by-step approaches to create a variety of Angular compatible real-time stock charts and technical indicators using ECharts and TA-Lib. Introduction to access market data from online data sources using .NET Web API and Angular service, including EOD, intraday, real-time stock quotes, interest rates. Detailed procedures to price equity options and fixed-income instruments using QuantLib, including European/American/Barrier/Bermudan options, bonds, CDS, as well as related topics such as cash flows, term structures, yield curves, discount factors, and zero-coupon bonds. Detailed explanation to linear analysis and machine learning in finance, which covers linear regression, PCA, KNN, SVM, and neural networks. In-depth descriptions of trading strategy development and back-testing for crossover and z-score based trading signals.

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. If you want to build cross-platform web applications using the robust Angular web framework, this book is for you. Learning Angular will cover the core concepts of frontend web development using easy-to-follow instructions to help you get up and running with Angular web development in no time.

Angular 5 updates for this book are now available. Follow the Download source code link for this book on the Apress website. Get the most from Angular 2, the leading framework for building dynamic JavaScript applications. Best-selling author Adam Freeman begins by describing the MVC pattern and the benefits it can offer and then shows you how to use Angular in your projects, starting from the nuts-and-bolts and building up to the most advanced and sophisticated features, going in-depth to give you the knowledge you need. Each topic is covered clearly and concisely and is packed with the details you need to learn to be truly effective. The most important features are given a no-nonsense in-depth treatment and chapters include common problems and details of how to avoid them. What you'll learn Gain a solid architectural understanding of the MVC Pattern Learn how to create rich and dynamic web app clients using Angular 2 Learn how to extend and customize Angular 2 Learn how to test your Angular 2 projects Who this book is for Web developers with a foundation knowledge of HTML and JavaScript who want to create rich client-side applications. Now in its 7th edition, the best selling book on MVC is updated for ASP.NET Core MVC 2. It contains detailed explanations of the 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. The book includes a fully worked case study of a functioning web application that readers can use as a template for their own projects. What's New in This Edition Fully updated for Visual Studio 2017, C# 7 and .NET Core 2 Coverage of new features such as view filters Wider platform and tooling coverage than ever before, with more on Visual Studio Code and working with .NET Core on non-Windows platforms Docker-based application deployment 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 2 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 ASP.NET Core MVC 2 Framework.

Build efficient web apps and deliver great results by integrating Angular and the .NET framework About This Book Become a more productive developer and learn to use frameworks that implement good development practices Achieve advanced autocompletion, navigation, and refactoring in Angular using Typescript Follow a gradual introduction to the concepts with a lot of examples and explore the evolution of a production-ready application Who This Book Is For If you are a .NET developer who now wants to efficiently build single-page applications using the new features that Angular 4 has to offer, then this book is for you. Familiarity of HTML, CSS, and JavaScript is assumed to get the most from this book. What You Will Learn Create a standalone Angular application to prototype user interfaces Validate complex forms with Angular version 4 and use Bootstrap to style them Build RESTful web services that work well with single-page applications Use Gulp and Bower in Visual Studio to run tasks and manage JavaScript packages Implement automatic validation for web service requests to reduce your boilerplate code Use web services with Angular version 4 to offload and secure your application logic Test your Angular version 4 and web service code to improve the quality of your software deliverables In Detail Are you are looking for a better, more efficient, and more powerful way of building front-end web applications? Well, look no further, you have come to the right place! This book comprehensively integrates Angular version 4 into your tool belt, then runs you through all the new options you now have on hand for your web apps without bogging you down. The frameworks, tools, and libraries mentioned here will make your work productive and minimize the friction usually associated with building server-side web applications. Starting off with building blocks of Angular version 4, we gradually move into integrating TypeScript and ES6. You will get confident in building single page applications and using Angular for prototyping components. You will then move on to building web services and full-stack web application using ASP.NET WebAPI. Finally, you will learn the development process focused on rapid delivery and testability for all application layers. Style and approach This book covers everything there is to know about getting well-acquainted with Angular 4 and .NET without bogging you down. Everything is neatly laid out under clear headings for quick consultation, offering you the information required to understand a concept immediately, with short, relevant examples of each feature.

Building Single Page App using ASP.NET Core and Angular is not at all meant for freshers or for those who just started programming. This Book covers tons of client-server side technologies. For example it uses ASP.NET Core, Entity Framework Core, WebAPI, Repository Pattern, Unit of Work Pattern, Angular, Responsive design principles, HTML 5, Solid Principles, Design Patterns, etc. to name a few. Now to illustrate each and every concept right from the scratch is fairly impossible as it kills the purpose of writing this book. This book is for my readers who regularly ask me to write something combining all these principles. There are tons of developers and professionals around the world who know these concepts in bits and pieces but don't know how to connect the dots to build as an application. This book is entirely written around industry & coding standard, design principles.

Hence, if you are fresher or just started your job, I would recommend to understand basics first and then refer this book.

Otherwise, this will appear overwhelming at the beginning. From the second chapter, you will find questions section at the end of every chapter. If you are following this book precisely, you should be able to answer these questions on your own. These are project specific questions which are generally asked in any technical interviews. CONTENTS Chapter 1: Getting Started Chapter 2: Creating Solution From The Blank Slate Chapter 3: Creating Data Context Chapter 4: Implementing Web API Chapter 5: Getting Started with Angular Chapter 6: Deeper into Angular Chapter 7: Adding More Features Using Angular Chapter 8: Adding More Features to the App Chapter 9: Authentication & Authorisation Chapter 10: Introduction to Azure and CosmosDb

ASP.NET Core is a powerful framework for architecting a resilient backend for scalable web applications. When combined with the solid frontend development capabilities of React, it enables you to build robust full-stack web applications. This book shows .NET developers how to harness the full potential of React using ASP.NET Core as the backbone.

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.

Microsoft's ASP.NET Core is a powerful web framework full of hidden features that this book will help you to understand. You'll get hands-on with customizing ASP.NET Core to suit your application development needs with the help of practical examples and best practices.

Writing clean, object-oriented code in JavaScript gets trickier and complex as the size of the project grows. This is where Typescript comes into the picture; it lets you write pure object-oriented code with ease, giving it the upper hand over JavaScript. This book introduces you to basic TypeScript concepts by gradually modifying standard ...

Angular 5 and .NET Core 2 updates for this book are now available. Follow the Download Source Code link for this book on the Apress website. Discover Angular, the leading client-side web framework, from the point of view of an ASP.NET Core MVC developer. Best-selling author Adam Freeman brings these two key technologies together and explains how to use ASP.NET Core MVC to provide back-end services for Angular applications. This fast-paced, practical guide starts from the nuts and bolt and gives you the knowledge you need to combine Angular (from version 2.0 up) and ASP.NET Core MVC in your projects. What You'll Learn Gain a solid understanding of how ASP.NET Core MVC and Angular can work together Use Visual Studio 2017 to develop Angular/ASP.NET Core MVC projects Create ASP.NET Core RESTful web services to support Angular applications Expose data from Entity Framework Core to Angular applications Use ASP.NET Core Identity to provide security services to Angular applications Each topic is covered clearly and concisely and is packed with the essential details you need to learn to be truly effective. Who This Book Is For This book is for developers with a knowledge of ASP.NET Core MVC who are introducing Angular into their projects.

ASP .NET Core is a powerful framework to architect a powerful backend for scalable web applications. Combined with the solid front-end development capabilities of React, you will be reinforced to build a solid full-stack web. With this book, we will teach .NET developers how to harness the full potential of React using ASP.NET Core as the backbone.

The framework of choice to build reactive, feature-rich Single Page Applications that just workAbout This Book*Learn how to design Single Page Applications (SPAs) with the latest versions of the popular frameworks Angular 2 and ASP.NET Web API*An explicit focus on understanding how the two tools fit together gives this book a unique insight on how to make SPAs for you and your clients that just work*This book covers all the major topics you need to create SPAs with ASP.NET Web API and Angular 2: routing, creating clean URLs, handling data (OData), and authenticationWho This Book Is ForThis book is for seasoned ASP.NET developers who already know how to use ASP.NET Web API and AngularJS, but want to blend them together to craft a production-ready SPA.What You Will Learn*Get to know the MVC 6 core aspects such as Model and Web API Controller*Gain the required resources and configure the MVC 6 interface*See how to client-route requests*Set-up the data model using entity framework*Extend the client controllers*Secure your application against various security threatsIn DetailFor most developers, writing code is a balance between maintainability and productivity-how quickly can you write it versus how much more you have to write in the future. Writing APIs goes some way to striking a balance, as you can have an API that feeds data from your back-end to front-end service for consumption. Now, this front-end can change to a mobile app, a website, desktop app, but what you do at the back doesn't change and remains ASP.NET Web API.This book focuses on blending and connecting ASP.NET Web API and AngularJS. We'll guide you through building a fully-featured, potentially shippable SPA project with all its core aspects in place: readable URIs, OData retrieval, authentication patterns, RESTful interfaces, and more.By the end of the book, you will be able to make impressive SPAs using ASP.NET Web API and Angular 2.This book focuses about blending/connecting together the two topic technologies: ASP.NET WebAPI and AngularJS. The book aims to be a guide to the readers throughout by building a fully-featured, potentially shippable SPA project with all its core aspects in place: readable URIs, OData retrieval, authentication

patterns, RESTful interfaces and more.

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.

Combine the strengths of Angular, the leading framework for developing complex client-side applications, and ASP.NET Core MVC 3, the latest evolution of Microsoft's framework for server-side applications. This new edition offers updated Angular, ASP.NET Core 3, Entity Framework Core 3 examples, an all-new chapter on interoperability with Blazor, and more!

Best-selling author Adam Freeman brings together these two key technologies and explains how to use ASP.NET Core MVC 3 to provide back-end services for Angular applications. This fast-paced and practical guide starts from the nuts and bolts and gives you the knowledge you need to combine Angular and ASP.NET Core MVC 3 in your projects. Each topic is covered clearly and concisely and is packed with the essential details you need to learn to be truly effective.

What You Will Learn

- Gain a solid understanding of how ASP.NET Core MVC 3 and Angular can work together
- Utilize both Visual Studio and Visual Studio Code to develop Angular/ASP.NET Core MVC projects
- Create ASP.NET Core RESTful web services to support Angular applications
- Expose data from Entity Framework Core to Angular applications
- Use ASP.NET Core Identity to provide security services to Angular applications
- Understand how Angular and Blazor applications can work together

Who This Book Is For

This book is for developers with knowledge of ASP.NET Core MVC who are introducing Angular into their projects.

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.

In just 24 sessions of one hour or less, Sams Teach Yourself ASP.NET Core in 24 Hours, will help you build professional-quality, cloud-based, web-connected solutions with ASP.NET Core. This book's straightforward, step-by-step approach guides you from the basics to advanced techniques, using practical examples to help you make the most of Microsoft's radically revamped ASP.NET Core framework. ASP.NET Program Manager Jeffrey T. Fritz guides you from jumpstarting development with templates to implementing cutting-edge security and containerization. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Step-by-step instructions carefully walk you through the most common ASP.NET Core tasks and techniques

Practical, hands-on examples show you how to apply what you learn

Notes and Tips point out shortcuts, solutions, and problems to avoid

Learn how to... Set up your work environment on Windows or non-Windows operating systems

Develop solutions more quickly by starting with project templates Configure ASP.NET Core, services, and applications Access data with Entity Framework Core Build modern architectures, controllers, and views with the new version of MVC Scaffold user interfaces and incorporate reusable UI components Read and write data using web API end-points Manage client-side packages with npm and bower Integrate Angular with ASP.NET Core Authenticate users, and protect your website with ASP.NET Core Authorization Deploy ASP.NET Core solutions into production Work with Docker containers in the ASP.NET Core environment Learn how to build full-stack Angular and ASP.NET Core applications.

ASP.NET Core 5 and Angular Full-stack web development with .NET 5 and Angular 11, 4th Edition Packt Publishing Ltd

This full-stack guide will help you become fluent in both frontend and backend web development by combining the impressive capabilities of ASP.NET Core 3.1 and Angular 9 from project setup right through the deployment. Furthermore, you will learn to add capabilities like security, testability, and scalability to your apps using expert techniques.

Use ASP.NET Core 2 to create durable and cross-platform web APIs through a series of applied, practical scenarios. Examples in this book help you build APIs that are fast and scalable. You'll progress from the basics of the framework through to solving the complex problems encountered in implementing secure RESTful services. The book is packed full of examples showing how Microsoft's ground-up rewrite of ASP.NET Core 2 enables native cross-platform applications that are fast and modular, allowing your cloud-ready server applications to scale as your business grows. Major topics covered in the book include the fundamentals and core concepts of ASP.NET Core 2. You'll learn about building RESTful APIs with the MVC pattern using proven best practices and following the six principles of REST. Examples in the book help in learning to develop world-class web APIs and applications that can run on any platform, including Windows, Linux, and MacOS. You can even deploy to Microsoft Azure and automate your delivery by implementing Continuous Integration and Continuous Deployment pipelines. What You Will Learn Incorporate automated API tooling such as Swagger from the OpenAPI specification Standardize query and response formats using Facebook's GraphQL query language Implement security by applying authentication and authorization using ASP.NET Identity Ensure the safe storage of sensitive data using the data protection stack Create unit and integration tests to guarantee code quality Who This Book Is For Developers who build server applications such as web sites and web APIs that need to run fast and cross platform; programmers who want to implement practical solutions for real-world problems; those who want in-depth knowledge of the latest bits of ASP.NET Core 2.0

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.

Hit the ground running with this book to quickly learn the fundamentals of HTML form processing, user authentication, and database CRUD (Create, Read, Update, and Delete) operations using the ASP.NET Core family of technologies. You will utilize cutting-edge and popular technology options from both the server side and client side to help you achieve your web application goals as quickly as possible.

Developers who want to learn ASP.NET Core and complementary technologies are often overwhelmed by the large number of options involved in building modern web applications. This book introduces you to the most popular options so that you can confidently begin working on projects in no time. You will learn by example, building a sample application that demonstrates how the same application can be built using different options. This experiential approach will give you the basic skills and knowledge to understand how the options work together so that you can make an informed decision about the available choices, their trade-offs, and code level comparison. After reading this book, you will be able to choose your selected learning path. What You Will Learn Develop data entry forms in ASP.NET Core, complete with validations and processing Perform CRUD operations using server-side options: ASP.NET Core MVC, Razor Pages, Web APIs, and Blazor Perform CRUD operations using client-side options: jQuery and Angular Secure web applications using ASP.NET Core Identity, cookie authentication, and JWT authentication Use RDBMS and NoSQL data stores: SQL Server, Azure SQL Database, Azure Cosmos DB, and MongoDB for CRUD operations Deploy ASP.NET Core web applications to IIS and Azure App Service Who This Book Is For Developers who possess a basic understanding of ASP.NET and how web applications work. Some experience with Visual Studio 2017 or higher, C#, and JavaScript is helpful.

This bestselling comprehensive guide to ASP.NET Core is the only book you need for ASP.NET Core development. Period. Professional developers will produce leaner applications for the ASP.NET Core platform using the guidance in this full-color book, now in its 8th edition and updated for ASP.NET Core 3. It contains detailed explanations of the ASP.NET Core platform and the application frameworks it supports. This edition puts ASP.NET Core 3 into context and dives deep 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 are applied. ASP.NET Core 3 is the latest evolution of Microsoft's ASP.NET web platform and 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 3. He starts with the nuts-and-bolts topics, teaching you about middleware components, built-in services, request model binding, and more. As you gain knowledge and confidence, he introduces increasingly more complex topics and advanced features, including endpoint routing and dependency injection. He goes 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 3 release and broadens the focus to include the entire ASP.NET Core platform. You will appreciate the fully worked case study of a functioning ASP.NET Core application that you can use as a template for your own projects. What You Will Learn Build a solid foundation and skill set for working with the entire ASP.NET Core platform Apply the new ASP.NET Core 3 features in your developer environment See how to create RESTful web services, web applications, and client-side applications Build on your existing knowledge to get up and running with new programming models quickly and effectively Who This Book Is For This book is for Microsoft developers and assumes a basic knowledge of web development and C#. While written for professionals who want to incorporate the latest improvements and functionality of ASP.NET Core 3 into their own projects, it also serves as an in-depth and complete reference on the topic. Beginners with some background in Microsoft web development will also benefit from the comprehensive coverage of the topic.

This book provides all the tools you need to develop ultra-modern multiple-page applications (MPAs) using ASP.NET Core Razor Pages, Angular elements, WebPack, RxJS, and mini-SPAs (Single-Page Applications). It will be useful for web programmers, business developers, and students of all skill levels who are interested in web-application developments. This book teaches you how to build a modern web site/application using a hybrid approach – the simplest being host one or more mini-SPAs within a larger multiple-page web application. It shows how to split a web application into functional parts, and convert each functional part into its own SPA. These mini-SPAs together form a complete multiple-page application. For each mini SPA, we use a simple JavaScript routing system to organize the states of the application and switch between different views by watching changes on the URL. The technical stack for backend consists of operating system, web server, database, and programming logic. This book chooses ASP.NET Core Razor Pages and SQL Server as the backend framework. A Razor page consists of a Razor view and a code behind file. Each Razor page is self-contained with its own view and code organized together, resulting in a simpler app, which makes coding page-focused scenarios easier and more productive. The front-end components enable the user's interaction with the web application. In this book, we choose TypeScript, npm, WebPack, RxJS, and Angular as our front-end technical stack. TypeScript is a modern JavaScript development language that provides optional static type checking, classes, and interfaces. It also offers advanced Intellisense, auto-completion, navigation, and refactoring, which makes code easier to read and understand. WebPack is a bundler and it comes in handy when you need to pack multiple assets together into a dependency graph. There is a rising tendency to use WebPack because it can fulfil nearly all tasks that you would perform through a task runner. RxJS is a library for reactive programming using observables, which make it easier to compose asynchronous or callback-based code. This book will explain how to use all of these technologies together to create a modern web application. Angular is a popular front-end JavaScript framework. Even though it is used for SPA development, we can still take advantage of this framework in building modern multiple-page web applications, i.e., we can use Angular in a non-SPA way via Angular elements. Angular elements are Angular components packaged as custom elements, a web standard for defining new HTML elements in a framework-agnostic way. This book shows how to embed Angular elements into our modern MPA project without having to migrate an entire application to Angular. This book also includes the other selected topics, including how to use Microsoft ML.NET to solve machine learning problems, such as classification, regression, and clustering; how to create various charts and graphics using ECharts; how to use SignalR to add real-time features to your web apps; how to use dependency injection, and how to create custom tag helpers and Razor Class Libraries in Razor Pages.

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 IHttpConnectionFactory 22 Building background tasks and services 23 Testing your application By covering the impressive capabilities of ASP.NET Core 5 and Angular 11, right from project setup through to the deployment phase, this fully revised and updated edition will help you develop your skills effectively.

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