

Microsoft Web Application Architecture Guide

Prepare for MCPD Exam 70-519—and help demonstrate your real-world mastery of web application design and development—with this official Microsoft Exam Ref. Written for experienced, MCTS-certified professionals ready to advance their status—this guide focuses on the critical-thinking and decision-making acumen needed for success at the MCPD level. With concise, objective-by-objective reviews, strategic case scenarios, and "Thought Experiments", you get professional-level preparation for the professional-level exam. Optimize your exam-prep by focusing on the expertise needed to: Design the application architecture Choose the right server-side and client-side technologies Design the user experience Design data access and presentation Plan for security Choose a testing methodology Plan for scalability and reliability —making this book an exceptional value and a great career investment.

Discover the powerful capabilities of Dapr by implementing a sample application with microservices leveraging the actor model to foster its strengths. Find out how Dapr helps you simplify the creation of resilient and portable microservices with this book.

- This is the latest practice test to pass the AZ-301 Microsoft Azure Architect Design Exam. - It contains 226 Questions and Answers. - All the questions are 100% valid and stable. - You can reply on this practice test to pass the exam with a good mark and in the first attempt.

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.

Compete with the big players in today's E-commerce marketplace Electronic Data Interchange (EDI) has long been the standard for large business enterprises to communicate in the B2B

marketplace. However, EDI is a difficult technology - the cost and support of EDI standards is often too much for a small or medium business enterprise to bear. To compete in the current E-commerce marketplace, many organizations are beginning to take an interest in the interoperability that exists between XML (Extensible Markup Language) and EDI. XML .NET Developers Guide is written for information technology professionals responsible for supporting data management in both small and large organizations. This book appeals to both individuals working with an existing EDI environment, and small to medium businesses looking to increase their market presence by competing with current EDI players using XML/EDI. XML/EDI is quickly becoming an industry standard, however there is a noticeable lack of quality reference material for programmers looking to adopt these standards. You can take it with you. The book comes with Syngress' revolutionary Wallet CD containing a printable HTML version of the book, all of the source code, and demo versions of popular XML/EDI translation tools Up to the minute web-based support with solutions@syngress.com

Learn the basics of serverless computing and how to develop event-driven architectures with the three major cloud platforms: Amazon Web Services, Microsoft Azure, and Google Cloud. This hands-on guide dives into the foundations of serverless computing, its use cases, and how to apply it using developer tools such as Node.js, Visual Studio Code, Postman, and Serverless Framework. You will apply the fundamentals of serverless technology from the ground up, and come away with a greater understanding of its power and how to make it work for you. This book teaches you how to quickly and securely develop applications without the hassle of configuring and maintaining infrastructure. You will learn how to harness serverless technology to rapidly reduce production time and minimize your costs, while still having the freedom to customize your code, without hindering functionality. Upon completion, you will have the knowledge and resources to build your own serverless application hosted in AWS, Azure, or Google Cloud and will have experienced the benefits of event-driven technology for yourself. What You'll Learn Gain a deeper understanding of serverless computing and when to use it Use development tools such as Node.js, Postman, and VS code to quickly set up your serverless development environment and produce applications Apply triggers to your serverless functions that best suit the architecture for the problem the functions are solving Begin building applications across cloud providers that utilize the power of serverless technology Understand best development practices with serverless computing to maintain scalable and practical solutions Code with an agnostic approach to cloud providers to minimize provider dependency Who This Book Is For Any developer looking to expand current knowledge of serverless computing, its applications, and how to architect serverless solutions, or someone just beginning in these areas

This thoroughly revised and updated Second Edition provides an in-depth information that readers need to fully exploit the functionality of Microsoft's ASP.NET framework and Oracle's Database Server to build dynamic and interactive web applications that can handle a large number of simultaneous users. The book provides readers with information pertaining to ASP.NET 4.0 architecture; its installation, web controls, master pages, themes, state management, AJAX and deployment of web applications. It includes the Hypertext Markup Language (HTML) and the Cascading Style Sheet (CSS), which are used for designing the web pages. In order to facilitate an easy learning of intricate concepts involved in the development of data-driven dynamic web applications, the book provides a detailed treatment on the Oracle Structured Query Language (SQL) and Oracle PL/SQL. It also introduces the distributed architecture and discusses how ASP.NET framework, Oracle database and Internet Information Services (IIS) can be used to develop and deploy the solutions for distributed environment. After going through this book, the students/professionals will be able to:

- Develop data-driven web applications using Oracle as back-end.
- Present data through data-bound controls.
- Manage consistent look and fill using master pages and themes.
- Develop

stateful e-commerce applications. • Develop rich interactive web applications using AJAX. • Embed Microsoft Reports to produce dynamic printable output. • Debug, deploy and secure web applications. The book is intended to serve as a guide for the undergraduate and postgraduate students of Computer Science, Computer Applications and Information Technology. Besides, it would also be useful to IT professionals to enhance their technical skills. Key Features More than 100 worked-out examples and 20 assignments. Around 200 objective and subjective type questions. Two real-world case studies with solutions. Project development work following the complete SDLC process model. Three appendices, namely Integrating Microsoft Reports in ASP.NET, Installation of Visual Studio 2010, and Answers to Chapter-end Practice Questions. New to the Second Edition Provides information for designing and developing the web applications using Visual Studio. Includes two new chapters—one on Master Pages, Themes and State Management and the other on AJAX in ASP.NET and Web Deployment of Application. Includes the new features of ASP.NET 4.0. Gives additional questions in each chapter. Includes a CD-ROM, which contains programs (tested with ASP.NET 4.0 and compatible with Oracle 10g) corresponding to all the examples, assignments, case studies and the project included in the book. The installation processes of programs are described in the relevant chapters of the book.

This Fifth Edition is completely revised and expanded to cover JavaScript as it is used in today's Web 2.0 applications. This book is both an example-driven programmer's guide and a keep-on-your-desk reference, with new chapters that explain everything you need to know to get the most out of JavaScript, including: Scripted HTTP and Ajax XML processing Client-side graphics using the canvas tag Namespaces in JavaScript--essential when writing complex programs Classes, closures, persistence, Flash, and JavaScript embedded in Java applications Part I explains the core JavaScript language in detail. If you are new to JavaScript, it will teach you the language. If you are already a JavaScript programmer, Part I will sharpen your skills and deepen your understanding of the language. Part II explains the scripting environment provided by web browsers, with a focus on DOM scripting with unobtrusive JavaScript. The broad and deep coverage of client-side JavaScript is illustrated with many sophisticated examples that demonstrate how to: Generate a table of contents for an HTML document Display DHTML animations Automate form validation Draw dynamic pie charts Make HTML elements draggable Define keyboard shortcuts for web applications Create Ajax-enabled tool tips Use XPath and XSLT on XML documents loaded with Ajax And much more Part III is a complete reference for core JavaScript. It documents every class, object, constructor, method, function, property, and constant defined by JavaScript 1.5 and ECMAScript Version 3. Part IV is a reference for client-side JavaScript, covering legacy web browser APIs, the standard Level 2 DOM API, and emerging standards such as the XMLHttpRequest object and the canvas tag. More than 300,000 JavaScript programmers around the world have made this their indispensable reference book for building JavaScript applications. "A must-have reference for expert JavaScript programmers...well-organized and detailed." -- Brendan Eich, creator of JavaScript

Become a certified Azure Architect and learn how to design effective solutions that span compute, security, networking, and development Key Features: Discover how you can design and architect powerful and cost-effective solutions on Microsoft Azure Prepare to achieve AZ-303 certification with the help of mock tests and practice questions Enhance your computing, networking, storage, and security skills to design modern cloud-based solutions Book Description: From designing solutions on Azure to configuring and managing virtual networks, the AZ-303 certification validates your knowledge and skills for all this and much

more. Whether you want to take the certification exam or gain hands-on experience in administering, developing, and architecting Azure solutions, this study guide will help you get started. Divided into four modules, this book systematically takes you through the wide range of concepts and features covered in the AZ-303 exam. The first module demonstrates how to implement and monitor infrastructure. You'll develop the skills required to deploy and manage core Azure components such as virtual machines, networking, storage, and Active Directory (AD). As you progress, you'll build on that knowledge and learn how to create resilient and secure applications before moving on to working with web apps, functions, and containers. The final module will get you up to speed with data platforms such as SQL and Cosmos DB, including how to configure the different high availability options. Finally, you'll solve mock tests and assess yourself with the answers provided to get ready to take the exam with confidence. By the end of this book, you'll have learned the concepts and techniques you need to know to prepare for the AZ-303 exam and design effective solutions on Microsoft Azure.

What You Will Learn:

- Manage Azure subscriptions and resources
- Ensure governance and compliance with policies, roles, and blueprints
- Build, migrate, and protect servers in Azure
- Configure, monitor, and troubleshoot virtual networks
- Manage Azure AD and implement multi-factor authentication
- Configure hybrid integration with Azure AD Connect
- Find out how you can monitor costs, performance, and security
- Develop solutions that use Cosmos DB and Azure SQL Database

Who this book is for: ?This book is for solution architects and experienced developers who advise stakeholders and translate business requirements into secure, scalable, and reliable solutions. Technical architects interested in learning more about designing cloud solutions will also find this book useful. Prior experience and knowledge of various aspects of IT operations, including networking, security, business continuity, disaster recovery, budgeting, and governance, will assist with understanding the concepts covered in the book.

ASP.NET Web Developer's Guide provides information to make use of Microsoft's newest Web development platform. ASP.NET is a revolutionary programming framework that enables the rapid development of powerful web applications and services. Part of the emerging Microsoft .NET Platform, it provides the easiest and most scalable way to build, deploy and run distributed web applications that can target any browser or device. ASP.NET (formerly referred to as ASP+) is more than the next version of Active Server Pages (ASP); it is a unified Web development platform that provides the services necessary for developers to build enterprise-class Web applications. ASP .net Web Developer's Guide assists Web developers to quickly and easily build solutions for the Microsoft .NET platform. Programmers who are expert in asp and other languages will find this book invaluable. This book will appeal to all web developers - regardless of what language they are using or what platform they will be using. Comprehensive Coverage of the Entire .net Framework for B2B commerce.

InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects.

This book constitutes the proceedings of the 4th International Conference on Network Security and Applications held in Chennai, India, in July 2011. The 63 revised full papers presented were carefully reviewed and selected from numerous submissions. The papers address all technical and practical aspects of security and its applications for wired and wireless networks and are organized in topical sections on network security and applications, ad hoc, sensor and ubiquitous computing, as well as peer-to-peer networks and trust management. This book constitutes the thoroughly refereed proceedings of ten international workshops held in London, UK, in conjunction with the 23rd International Conference on Advanced Information Systems Engineering, CAiSE 2011, in June 2011. The 59 revised papers were carefully selected from 139 submissions. The ten workshops included Business/IT Alignment and Interoperability (BUSITAL), Conceptualization of Modelling Methods (CMM), Domain Specific Engineering (DsE@CAiSE), Governance, Risk and Compliance (GRCIS), Integration of IS Engineering Tools (INiSET), System and Software Architectures (IWSSA), Ontology-Driven Information Systems Engineering (ODISE), Ontology, Models, Conceptualization and Epistemology in Social, Artificial and Natural Systems (ONTOSE), Semantic Search (SSW), and Information Systems Security Engineering (WISSE).

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 .NET Core is required. However, basic programming knowledge is assumed. Additionally, previous Visual Studio experience will be helpful but is not required, since detailed instructions will guide through 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

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.

A beginner's guide to building fully functioning web applications from scratch using the latest features of ASP.NET Core 3 and C# 8 Key Features Get to grips with the new features and APIs in ASP.NET Core 3, EF Core 3, and Blazor Create web APIs that integrate your applications with other systems and services Learn to deploy your web applications in new environments such as the cloud and Docker containers Book Description ASP.NET Core is an open source framework from Microsoft that makes it easy to build highly efficient and dynamic cross-platform web applications. Updated for the latest features of ASP.NET Core 3, this second edition will equip you with the skills you need to build powerful web applications. The book starts with an introduction to ASP.NET Core and its features, giving you a complete understanding of the framework. You will also learn how to set up your development environment with Visual Studio 2019 and build a fully functioning application from scratch. You'll then understand core concepts for building web applications such as Model View Controller (MVC), dependency injection, and WebSockets. As you advance, you'll discover how to use Entity Framework Core 3 to automate all database-related activities for your application. You will then build and document secure web APIs using security best practices to protect your web applications from threats and vulnerabilities. Finally, you will learn how to use Azure DevOps as a CI/CD tool to deploy and monitor your applications using Microsoft Azure, Amazon Web Services (AWS), and Docker. By the end of this book, you'll have the skills you need to develop efficient and robust web applications in ASP.NET Core 3. What you will learn Delve into basic and advanced ASP.NET Core 3 concepts with the help of examples Build an MVC web application and use Entity Framework Core 3 to access data Add web APIs to your web applications using RPC, REST, and HATEOAS Create a fully automated continuous integration and continuous delivery (CI/CD) pipeline using Azure DevOps Use Azure, Amazon Web Services, and Docker to deploy and monitor your applications Secure your web application from common attacks such as Cross-Site Scripting and SQL injection Explore client-side development using C# Razor components Who this book is for This book is for developers who want to build modern web applications with ASP.NET Core. The book will also be helpful for anyone working in infrastructure

engineering and operations to monitor and diagnose problems during the runtime of ASP.NET Core 3.0 web applications. Although no prior understanding of ASP.NET or .NET Core is required, basic C# programming knowledge is assumed.

With Azure security, you can build a prosperous career in IT security. **KEY FEATURES**

- ? In-detail practical steps to fully grasp Azure Security concepts.
- ? Wide coverage of Azure Architecture, Azure Security services, and Azure Security implementation techniques.
- ? Covers multiple topics from other Azure certifications (AZ-303, AZ-304, and SC series).

DESCRIPTION 'Microsoft Azure Security Technologies (AZ-500) - A Certification Guide' is a certification guide that helps IT professionals to start their careers as Azure Security Specialists by clearing the AZ-500 certification and proving their knowledge of Azure security services. Authored by an Azure security professional, this book takes readers through a series of steps to gain a deeper insight into Azure security services. This book will help readers to understand key concepts of the Azure AD architecture and various methods of hybrid authentication. It will help readers to use Azure AD security solutions like Azure MFA, Conditional Access, and PIM. It will help readers to maintain various industry standards for an Azure environment through Azure Policies and Azure Blueprints. This book will also help to build a secure Azure network using Azure VPN, Azure Firewall, Azure Front Door, Azure WAF, and other services. It will provide readers with a clear understanding of various security services, including Azure Key vault, Update management, Microsoft Endpoint Protection, Azure Security Center, and Azure Sentinel in detail. This book will facilitate the improvement of readers' abilities with Azure Security services to sprint to a rewarding career. **WHAT YOU WILL LEARN**

- ? Configuring secure authentication and authorization for Azure AD identities.
- ? Advanced security configuration for Azure compute and network services.
- ? Hosting and authorizing secure applications in Azure.
- ? Best practices to secure Azure SQL and storage services.
- ? Monitoring Azure services through Azure monitor, security center, and Sentinel.
- ? Designing and maintaining a secure Azure IT infrastructure.

WHO THIS BOOK IS FOR This book is for security engineers who want to enhance their career growth in implementing security controls, maintaining the security posture, managing identity and access, and protecting data, applications, and networks of Microsoft Azure. Intermediate-level knowledge of Azure terminology, concepts, networking, storage, and virtualization is required. **TABLE OF CONTENTS**

1. Managing Azure AD Identities and Application Access
2. Configuring Secure Access by Using Azure Active Directory
3. Managing Azure Access Control
4. Implementing Advance Network Security
5. Configuring Advance Security for Compute
6. Configuring Container Security
7. Monitoring Security by Using Azure Monitor
8. Monitoring Security by Using Azure Security Center
9. Monitoring Security by Using Azure Sentinel
10. Configuring Security for Azure Storage
11. Configuring Security for Azure SQL Databases

New concepts and technologies are being introduced continuously for application development in the World-Wide Web. Selecting the right implementation strategies and tools when building a Web application has become a tedious task, requiring in-depth knowledge and significant experience from both software developers and software managers. The mission of this book is to guide the reader through the opaque jungle of Web technologies. Based on their long industrial and academic experience, Stefan

Jablonski and his coauthors provide a framework architecture for Web applications which helps choose the best strategy for a given project. The authors classify common technologies and standards like .NET, CORBA, J2EE, DCOM, WSDL and many more with respect to platform, architectural layer, and application package, and guide the reader through a three-phase development process consisting of preparation, design, and technology selection steps. The whole approach is exemplified using a real-world case: the architectural design of an order-entry management system.

An expert guide for IT administrators needing to create and manage a public cloud and virtual network using Microsoft Azure With Microsoft Azure challenging Amazon Web Services (AWS) for market share, there has been no better time for IT professionals to broaden and expand their knowledge of Microsoft's flagship virtualization and cloud computing service. Microsoft Azure Infrastructure Services for Architects: Designing Cloud Solutions helps readers develop the skills required to understand the capabilities of Microsoft Azure for Infrastructure Services and implement a public cloud to achieve full virtualization of data, both on and off premise. Microsoft Azure provides granular control in choosing core infrastructure components, enabling IT administrators to deploy new Windows Server and Linux virtual machines, adjust usage as requirements change, and scale to meet the infrastructure needs of their entire organization. This accurate, authoritative book covers topics including IaaS cost and options, customizing VM storage, enabling external connectivity to Azure virtual machines, extending Azure Active Directory, replicating and backing up to Azure, disaster recovery, and much more. New users and experienced professionals alike will: Get expert guidance on understanding, evaluating, deploying, and maintaining Microsoft Azure environments from Microsoft MVP and technical specialist John Savill Develop the skills to set up cloud-based virtual machines, deploy web servers, configure hosted data stores, and use other key Azure technologies Understand how to design and implement serverless and hybrid solutions Learn to use enterprise security guidelines for Azure deployment Offering the most up to date information and practical advice, Microsoft Azure Infrastructure Services for Architects: Designing Cloud Solutions is an essential resource for IT administrators, consultants and engineers responsible for learning, designing, implementing, managing, and maintaining Microsoft virtualization and cloud technologies.

Validate your AWS skills. This is your opportunity to take the next step in your career by expanding and validating your skills on the AWS cloud. AWS has been the frontrunner in cloud computing products and services, and the AWS Certified Solutions Architect Official Study Guide for the Associate exam will get you fully prepared through expert content, and real-world knowledge, key exam essentials, chapter review questions, access to Sybex's interactive online learning environment, and much more. This official study guide, written by AWS experts, covers exam concepts, and provides key review on exam topics, including: Mapping Multi-Tier Architectures to AWS Services, such as web/app servers, firewalls, caches and load balancers Understanding managed RDBMS through AWS RDS (MySQL, Oracle, SQL Server, Postgres, Aurora) Understanding Loose Coupling and Stateless Systems Comparing Different Consistency Models in AWS Services Understanding how AWS CloudFront can make your application more cost efficient, faster and secure Implementing Route tables, Access Control Lists, Firewalls, NAT, and DNS Applying AWS Security Features along

with traditional Information and Application Security Using Compute, Networking, Storage, and Database AWS services Architecting Large Scale Distributed Systems Understanding of Elasticity and Scalability Concepts Understanding of Network Technologies Relating to AWS Deploying and Managing Services with tools such as CloudFormation, OpsWorks and Elastic Beanstalk. Learn from the AWS subject-matter experts, review with proven study tools, and apply real-world scenarios. If you are looking to take the AWS Certified Solutions Architect Associate exam, this guide is what you need for comprehensive content and robust study tools that will help you gain the edge on exam day and throughout your career.

Gain a solid foundation for designing, building, and configuring security-enhanced, hack-resistant Microsoft® ASP.NET Web applications. This expert guide describes a systematic, task-based approach to security that can be applied to both new and existing applications. It addresses security considerations at the network, host, and application layers for each physical tier—Web server, remote application server, and database server—detailing the security configurations and countermeasures that can help mitigate risks. The information is organized into sections that correspond to both the product life cycle and the roles involved, making it easy for architects, designers, and developers to find the answers they need. All PATTERNS & PRACTICES guides are reviewed and approved by Microsoft engineering teams, consultants, partners, and customers—delivering accurate, real-world information that's been technically validated and tested.

Although integrating security into the design of applications has proven to deliver resilient products, there are few books available that provide guidance on how to incorporate security into the design of an application. Filling this need, *Security for Service Oriented Architectures* examines both application and security architectures and illustrates the relationship between the two. Supplying authoritative guidance on how to design distributed and resilient applications, the book provides an overview of the various standards that service oriented and distributed applications leverage, including SOAP, HTML 5, SAML, XML Encryption, XML Signature, WS-Security, and WS-SecureConversation. It examines emerging issues of privacy and discusses how to design applications within a secure context to facilitate the understanding of these technologies you need to make intelligent decisions regarding their design. This complete guide to security for web services and SOA considers the malicious user story of the abuses and attacks against applications as examples of how design flaws and oversights have subverted the goals of providing resilient business functionality. It reviews recent research on access control for simple and conversation-based web services, advanced digital identity management techniques, and access control for web-based workflows. Filled with illustrative examples and analyses of critical issues, this book provides both security and software architects with a bridge between software and service-oriented architectures and security architectures, with the goal of providing a means to develop software architectures that leverage security architectures. It is also a reliable source of reference on Web services standards. Coverage includes the four types of architectures, implementing and securing SOA, Web 2.0, other SOA platforms, auditing SOAs, and defending and detecting attacks.

Celebrate Thanksgiving with Annie and Snowball in this Level 2 Ready-to-Read story from the Theodor Seuss Geisel Award-winning creators of *Henry and Mudge*! Annie

loves fall and she especially loves Thanksgiving. There is a big table at Annie's house, and she wants lots of people around it for a yummy dinner. But Annie lives with just her dad and her bunny, Snowball. She doesn't have a big family of her own. Who can she invite to share Thanksgiving?

Covers SharePoint 2013, Office 365's SharePoint Online, and Other Office 365 Components In SharePoint 2013 Field Guide, top consultant Errin O'Connor and the team from EPC Group bring together best practices and proven strategies drawn from hundreds of successful SharePoint and Office 365 engagements. Reflecting this unsurpassed experience, they guide you through deployments of every type, including the latest considerations around private, public, and hybrid cloud implementations, from ECM to business intelligence (BI), as well as custom development and identity management. O'Connor reveals how world-class consultants approach, plan, implement, and deploy SharePoint 2013 and Office 365's SharePoint Online to maximize both short- and long-term value. He covers every phase and element of the process, including initial "whiteboarding"; consideration around the existing infrastructure; IT roadmaps and the information architecture (IA); and planning for security and compliance in the new IT landscape of the hybrid cloud. SharePoint 2013 Field Guide will be invaluable for implementation team members ranging from solution architects to support professionals, CIOs to end-users. It's like having a team of senior-level SharePoint and Office 365 hybrid architecture consultants by your side, helping you optimize your success from start to finish! Detailed Information on How to... Develop a 24-36 month roadmap reflecting initial requirements, longterm strategies, and key unknowns for organizations from 100 users to 100,000 users Establish governance that reduces risk and increases value, covering the system as well as information architecture components, security, compliance, OneDrive, SharePoint 2013, Office 365, SharePoint Online, Microsoft Azure, Amazon Web Services, and identity management Address unique considerations of large, global, and/or multilingual enterprises Plan for the hybrid cloud (private, public, hybrid, SaaS, PaaS, IaaS) Integrate SharePoint with external data sources: from Oracle and SQL Server to HR, ERP, or document management for business intelligence initiatives Optimize performance across multiple data centers or locations including US and EU compliance and regulatory considerations (PHI, PII, HIPAA, Safe Harbor, etc.) Plan for disaster recovery, business continuity, data replication, and archiving Enforce security via identity management and authentication Safely support mobile devices and apps, including BYOD Implement true records management (ECM/RM) to support legal/compliance requirements Efficiently build custom applications, workflows, apps and web parts Leverage Microsoft Azure or Amazon Web Services (AWS)

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.

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

presented in the popular problem-solution 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 Develop 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 the inner workings of 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.

"This book provides an integrated approach and guidelines to performance testing of Web based systems"--Provided by publisher.

ASP.NET Core 5 for Beginners is a practical guide for developers for building dynamic and powerful web applications with the ASP.NET Core framework and C#. From basic ASP terminologies to creating a single-page application, and from testing and maintaining the app to deploying it on the cloud, this book covers everything you need to get started.

This volume constitutes the proceedings of the 5th International Conference on E-Technologies, MCETECH 2011, held in Les Diablerets, Switzerland, January 23-26, 2011. Originally 10 papers were selected from a total of 32 submissions. Seven additional papers were included following a second round of reviewing and improvement. The papers in this volume cover topics such as process modeling, organizational transformation, e-Business, e-Government, e-Education, and e-Health.

This guide provides everything you need to get started with Prism and to use it to create flexible, maintainable Windows® Presentation Foundation (WPF) and

Microsoft Silverlight® 4.0 applications. It can be challenging to design and build WPF or Silverlight client applications that are flexible, maintainable, and that can evolve over time based on changing requirements. These kinds of applications require a loosely coupled modular architecture that allows individual parts of the application to be independently developed and tested, allowing the application to be modified or extended later on. Additionally, the architecture should promote testability, code re-use, and flexibility. Prism helps you to design and build flexible and maintainable WPF and Silverlight applications by using design patterns that support important architectural design principles, such as separation of concerns and loose coupling. This guide helps you understand these design patterns and describes how you can use Prism to implement them in your WPF or Silverlight applications. This guide will show you how to use Prism to implement the Model-View-View-Model (MVVM) pattern in your application, and how to use it along with commands and interaction requests to encapsulate application logic and make it testable. It will show you how to split an application into separate functional modules that can communicate through loosely coupled events, and how to integrate those modules into the overall application. It will show you how to dynamically construct a flexible user interface by using regions, and how to implement rich navigation across a modular application. Prism allows you to use these design patterns together or in isolation, depending on your particular application requirements.

Develop microservice-based enterprise applications with expert guidance to avoid failures and technological debt with the help of real-world examples

Key Features

- Implement the right microservices adoption strategy to transition from monoliths to microservices
- Explore real-world use cases that explain anti-patterns and alternative practices in microservices development
- Discover proven recommendations for avoiding architectural mistakes when designing microservices

Book Description

Microservices have been widely adopted for designing distributed enterprise apps that are flexible, robust, and fine-grained into services that are independent of each other. There has been a paradigm shift where organizations are now either building new apps on microservices or transforming existing monolithic apps into microservices-based architecture. This book explores the importance of anti-patterns and the need to address flaws in them with alternative practices and patterns. You'll identify common mistakes caused by a lack of understanding when implementing microservices and cover topics such as organizational readiness to adopt microservices, domain-driven design, and resiliency and scalability of microservices. The book further demonstrates the anti-patterns involved in re-platforming brownfield apps and designing distributed data architecture. You'll also focus on how to avoid communication and deployment pitfalls and understand cross-cutting concerns such as logging, monitoring, and security. Finally, you'll explore testing pitfalls and establish a framework to address isolation, autonomy, and standardization. By the end of this book, you'll have understood critical mistakes to avoid while

building microservices and the right practices to adopt early in the product life cycle to ensure the success of a microservices initiative. What you will learn

- Discover the responsibilities of different individuals involved in a microservices initiative
- Avoid the common mistakes in architecting microservices for scalability and resiliency
- Understand the importance of domain-driven design when developing microservices
- Identify the common pitfalls involved in migrating monolithic applications to microservices
- Explore communication strategies, along with their potential drawbacks and alternatives
- Discover the importance of adopting governance, security, and monitoring
- Understand the role of CI/CD and testing

Who this book is for This practical microservices book is for software architects, solution architects, and developers involved in designing microservices architecture and its development, who want to gain insights into avoiding pitfalls and drawbacks in distributed applications, and save time and money that might otherwise get wasted if microservices designs fail. Working knowledge of microservices is assumed to get the most out of this book.

Project Silk provides guidance for building maintainable cross-browser web applications that are characterized by an intentional design, rich interactivity, and a responsive user interface (UI). The result is an immersive and engaging user experience (UX). Such applications take advantage of the latest web standards, including HTML5, CSS3, and ECMAScript version 5, and modern web technologies such as jQuery and ASP.NET MVC 3. The concepts explained in this book are demonstrated via a real-world customer-facing web application called the Mileage Stats Reference Implementation (Mileage Stats). Mileage Stats allows users to track and compare their vehicles' fuel efficiency, usage, and operating costs, and to schedule vehicle maintenance reminders. The image below shows the Mileage Stats client-side objects and their implementation mapped to libraries or frameworks. Building a rich web application that reduces the number of full-page loads, includes animations, and is responsible for updating the UI dynamically requires a thoughtful approach to managing structure, modularity, communication, navigation, and data. This book details how the Project Silk team designed Mileage Stats and solved a number of challenges. This guidance is intended for web developers and assumes you have some hands-on experience with ASP.NET MVC, CSS, HTML, JavaScript, and jQuery.

Your roadmap to Microsoft Azure Azure is Microsoft's flagship cloud computing platform. With over 600 services available to over 44 geographic regions, it would take a library of books to cover the entire Azure ecosystem. Microsoft Azure For Dummies offers a shortcut to getting familiar with Azure's core product offerings used by the majority of its subscribers. It's a perfect choice for those looking to gain a quick, basic understanding of this ever-evolving public cloud platform. Written by a Microsoft MVP and Microsoft Certified Azure Solutions Architect, Microsoft Azure For Dummies covers building virtual networks, configuring cloud-based virtual machines, launching and scaling web applications, migrating on-

premises services to Azure, and keeping your Azure resources secure and compliant. Migrate your applications and services to Azure with confidence Manage virtual machines smarter than you've done on premises Deploy web applications that scale dynamically to save you money and effort Apply Microsoft's latest security technologies to ensure compliance to maintain data privacy With more and more businesses making the leap to run their applications and services on Microsoft Azure, basic understanding of the technology is becoming essential. Microsoft Azure For Dummies offers a fast and easy first step into the Microsoft public cloud.

This book gathers selected high-quality research papers presented at the Sixth International Congress on Information and Communication Technology, held at Brunel University, London, on February 25–26, 2021. It discusses emerging topics pertaining to information and communication technology (ICT) for managerial applications, e-governance, e-agriculture, e-education and computing technologies, the Internet of things (IoT) and e-mining. Written by respected experts and researchers working on ICT, the book offers a valuable asset for young researchers involved in advanced studies. The book is presented in four volumes.

Guide to designing and developing cloud native applications in Azure
DESCRIPTION The mainstreaming of Cloud Native Architecture as an enterprise discipline is well underway. According to the Forbes report in January 2018, 83% of the enterprise workloads will be in the cloud by 2020 and 41% of the enterprise workloads will run on public cloud platforms, while another 22% will be running on hybrid cloud platforms. Customers are embarking on the enterprise digital transformation journeys. Adopting cloud and cloud native architectures and microservices is an important aspect of the journey. This book starts with a brief introduction on the basics of cloud native applications, cloud native application patterns. Then it covers the cloud native options available in Azure. The objective of the book is to provide practical guidelines to an architect/designer/consultant/developer, who is a part of the Cloud application definition Team. The book articulates a methodology that the implementation team needs to follow in a step-by-step manner and adopt them to fulfil the requirements for enablement of the Cloud Native application. It emphasizes on the interpersonal skills and techniques for organizing and directing the Cloud Native definition, leadership buy-in, leading the transition from planning to implementation. It also highlights the steps to be followed for performing the cloud native applications, cloud native patterns in the development of Cloud native applications, Cloud native options available in Azure, Developing BOT, Microservices based on Azure. It also covers how to develop simple IoT applications, Machine learning based applications, server less architecture, using Azure with a practical and pragmatic approach. This book embraces a structured approach organized around the following key themes, which represent the typical phases that an enterprise traverses during its Cloud Native application journey: ?

Basics of Cloud Native Applications: It covers basics of cloud native applications using .NET core. ? Cloud Native Application Patterns: The reader will understand the patterns for developing Cloud Native Applications. ? Cloud Native Options available in Azure: The reader will understand the different options available in Azure. ? Developing a Simple BOT using .NET Core: The reader will understand the Azure BOT framework basics and will learn how to develop a simple BOT. ? Developing cloud native applications leveraging Microservices: The reader will understand the concepts of developing micro services using the Azure API Gateway Manager. ? Developing Integration capabilities using serverless architecture: The reader will understand the integration capabilities and various options available in Azure ? Developing a simple IoT application: The reader will understand the basics of developing IoT applications. ? Developing a simple ML based application: The reader will understand Machine Learning basics and how to develop a simple ML application ? Different enterprise use cases, which enable digital transformation using the Cloud Native Applications: The reader will learn about different use cases that can be built using cloud native applications

KEY FEATURES (Add 5-7 key features only) ? Basics of Cloud Native Applications ? Designing Microservices ? Different cloud native options for developing Cloud Native Applications in Azure ? BOTs, Web Apps, Mobile Apps, Logic Apps, Service Bus, Azure Functions ? Azure IOT Applications ? Azure Machine Learning Basics ? Enterprise Digital Journeys

WHAT WILL YOU LEARN This book aims to: ? Demonstrate the importance of a Cloud Native application in elevating the effectiveness of organizational transformation programs and digital enterprise journeys, using MS Azure ? Disseminate current advancements and thought leadership in the area of Cloud Native architecture, in the context of digital enterprises ? Provide initiatives with evidence-based, credible, field tested and practical guidance in crafting their respective architectures; and ? Showcase examples and experiences of the innovative use of Cloud Native Applications in enhancing transformation initiatives.

WHO THIS BOOK IS FOR The book is intended for anyone looking for a career in Cloud technology, all aspiring Cloud Architects who want to learn Cloud Native Architectures, Microservices, IoT, BoT and Microsoft Azure platform and working professionals who want to switch their career in Cloud Technology. While no prior knowledge of Azure or related technologies is assumed, it will be helpful to have some .Net programming experience. In addition, the target audience of this book are, ? Business Leaders, Chief Architects, Analysts and Designers seeking better, quicker and easier approaches to respond to needs of their internal and external customers; ? CIOs/CTOs of business software companies interested in incorporating Cloud Native architecture to differentiate their products and services offerings and increasing the value proposition to their customers; ? Consultants and practitioners desirous of new solutions and technologies to improve productivity of their clients; ? Academic and consulting researchers looking to uncover and characterize new research problems and programmes ?

Practitioners and professionals involved with organizational technology strategic planning, technology procurement, management of technology projects, consulting and advising on technology issues and management of total cost of ownership. Table of Contents 1. Basics of Cloud Native Applications 2. Cloud Native Application Patterns 3. Cloud Native Options available in Azure – BOTs, Logic Apps, Service Bus, Azure Microservices, ML services 4. Developing a Simple BOT using .NET Core 5. Developing Cloud Native applications leveraging Microservices and Azure API Gateway 6. Developing Integration capabilities using serverless architecture 7. Developing a simple IoT application 8. Developing a simple ML based application 9. Different enterprise use cases which enable digital transformation using Cloud Native Applications

Essential Skills--Made Easy! Written by a Microsoft MVP and Visual Studio expert, this hands-on guide gets you started with the latest release of Microsoft's flagship Integrated Development Environment (IDE). Microsoft Visual Studio 2010: A Beginner's Guide shows you how to build applications from the ground up, covering C#, VB.NET, ASP.NET, Silverlight, Windows Presentation Foundation (WPF), and Windows Communication Foundation (WCF). You'll also learn how to customize the IDE, adding your own tools that integrate with Visual Studio 2010, and edit and debug your applications. Designed for Easy Learning

Key Skills & Concepts--Chapter-opening lists of specific skills covered in the chapter Notes--Extra information related to the topic being covered Tips--Helpful reminders or alternate ways of doing things Annotated Syntax--Example code with commentary that describes the programming techniques being illustrated

Joe Mayo is an independent consultant, specializing in Microsoft.NET technologies. He is the author of LINQ Programming and other books. Joe is also the recipient of multiple Microsoft MVP awards.

[Copyright: 2f8dc306cbc0c32369620cc16069ef2f](https://www.microsoft.com/en-us/download/details.aspx?id=54545)