KOENIG step forward

Microsoft Solutions Partner
Microsoft Cloud Training Services

KOENIG SOLUTIONS · COURSE OUTLINE

.NET Core Microservices - The Complete Guide (.NET 6 MVC)

Learn to design, build, connect and deploy microservices using .NET Core 6 MVC, Entity Framework Core and Azure.

5 MODULES

20 TOPICS

COURSE OVERVIEW

This course examines microservices architecture in contrast with monolithic approaches and introduces .NET Core 6 as a platform for building them. It covers designing service boundaries using domain-driven design, data consistency, and building services with MVC and Entity Framework Core. It then addresses communication between microservices through RESTful APIs, HttpClient and API versioning, before covering deployment of microservices to Azure Web Apps, environment security, and continuous deployment with Git and Azure DevOps.

WHO THIS COURSE IS FOR

Backend Developers | **.NET Developers** | **Software Architects** | **Cloud Engineers** | **DevOps Engineers**

LEARNING OBJECTIVES

- Compare microservices architecture with monolithic architecture
- Explain domain-driven design and bounded contexts
- Plan service boundaries, interfaces and data consistency
- Build microservices using .NET Core 6 MVC
- Implement Entity Framework Core for database connectivity
- Apply RESTful API communication patterns between microservices
- Configure API versioning and documentation
- Deploy microservices to Azure Web Apps with continuous deployment

COURSE SYLLABUS

5 Modules, 20 Topics

01

Introduction to Microservices

TOPICS

What are microservices? · Microservices vs monolithic architecture · Advantages and disadvantages of microservices · Overview of .NET Core 6

02

Designing Microservices Architecture

TOPICS

- Principles of microservices design
- Domain-driven design (DDD) and bounded contexts
- Service boundaries and interfaces
- Data consistency and transactions

03

Building Microservices with .NET Core 6

TOPICS

- Setting up a new .NET Core 6 project
- Implementing the service layer with MVC
- Using Entity Framework Core to connect to a database
- Testing individual microservices

04

Communication between Microservices

TOPICS

Communication patterns between microservices · RESTful APIs and HTTP requests · Using the HttpClient class in .NET Core · Versioning and documentation of APIs

05

Deploying Microservices to Azure

TOPICS

- Creating an Azure account and setting up a new Azure Web App
- Deploying microservices to Azure
- Configuring and securing the production environment
- Continuous deployment with Git and Azure DevOps

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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