KOENIG · COURSE OUTLINE

# Introduction to Web Development with Blazor

Learn to build interactive web apps with Blazor, from components and data binding to routing, forms and JavaScript interoperability.

| 1 Day | 8 | 40 |
| --- | --- | --- |
| 8 HOURS A DAY | MODULES | TOPICS |

## COURSE OVERVIEW

This course introduces Blazor and explains how it works and when to use it, then guides learners through building a first web app with Razor components. It covers data binding and events through a to-do list exercise, and shows how to design user interfaces, access, share and bind data within Blazor applications. Coverage extends to navigation and routing with the Blazor router, NavLink and layouts, followed by forms, event handlers and client-side and server-side validation. The course finishes with JavaScript interoperability, component lifecycle events, templated components, and building and packaging reusable components as Razor class libraries.

## WHO THIS COURSE IS FOR

- **Web Developers**
- **Front-End Developers**
- **Software Engineers**
- **.NET Developers**
- **Application Developers**

## LEARNING OBJECTIVES

- Explain what Blazor is and when to use it
- Configure a development environment for Blazor development
- Build user interfaces using Razor components
- Apply data binding and events in Blazor applications
- Implement navigation using the Blazor router and route parameters
- Build reusable layouts to reduce code duplication
- Implement forms with client-side and server-side validation
- Apply JavaScript interoperability and component lifecycle events

COURSE SYLLABUS

# 8 Modules, 40 Topics

01

## Getting Started with Blazor

*Discover the key features of Blazor for building your next web app.*

**TOPICS**

What is Blazor? · How Blazor works · When to use Blazor

02

## Build Your First Web App with Blazor

*Learn how to build your first web app with Blazor.*

**TOPICS**

Configure your development environment · Exercise - Create and run a Blazor web app · Razor components · Exercise - Add a component

03

## Learn How to Build a To-Do List with Blazor

**TOPICS**

Data binding and events · Exercise - Create a to-do list

04

## Interact with Data in Blazor Web Apps

*Design user interface elements for a web app by using Blazor components. You'll also obtain data and display it to the user on dynamic webpages.*

**TOPICS**

- Create a user interface with Blazor components
- Exercise - Create a user interface with Blazor components
- Access data from a Blazor component
- Exercise - Access data from a Blazor component
- Share data in Blazor applications
- Exercise - Share data in Blazor applications
- Bind controls to data in Blazor applications
- Exercise - Bind controls to data in Blazor applications

05

## Navigation in Blazor

*Learn how to manage request routing by using the @page directive, Blazor routing, NavLink, and NavMenu components. Increase an app's flexibility by adding routing parameters in your Blazor components. Use layouts to improve your app by reducing duplicate code.*

**TOPICS**

- Use the Blazor router component to control your app's navigation
- Exercise - Change navigation in your Blazor app by using the @page directive
- Explore how route parameters affect your Blazor app's routing
- Exercise - Use route parameters to improve your apps navigation
- Build reusable Blazor components using layouts
- Exercise - Add a Blazor layout to reduce duplication in your code

06

## Improve How Forms and Validation Work in Blazor Web Apps

*Learn how to use forms in Blazor, add event handlers, and validate the data a user submits. By using Blazor form components you can validate client-side forms without writing client-side JavaScript to handle the validations.*

**TOPICS**

- Attach C# code to DOM events with Blazor event handlers
- Exercise - Create a Blazor event handler for onclick events
- Take advantage of the power of Blazor forms
- Exercise - Create an address form with Blazor components
- Validate user input implicitly without writing validation code
- Exercise - Add server-side and client-side data validation to the address form

07

## Build Rich Interactive Components with Blazor Web Apps

*Learn how to interoperate Blazor apps with JavaScript code, use templated components, and handle component lifecycle events.*

**TOPICS**

- JavaScript interoperability with Blazor
- Exercise - Use a JavaScript library in a Blazor app
- Understand the Blazor component lifecycle
- Exercise - Improve app interactivity with lifecycle events
- Understand template components
- Exercise - Reuse components by creating a template

08

### Build Reusable Components with Blazor

*By using Blazor components, you can reuse sections of HTML in your applications. Learn how to build a component, package it, and share it with other Blazor applications.*

**TOPICS**

Introduction to Razor class libraries · Razor class library creation and concepts · Create a Razor class library · Package a Razor class library · Create a NuGet package

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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