Updated on 04/10/2024

Sign up

Blazor training with ASP.Net Core

3 days (21 hours)

Presentation

Our Blazor training course will teach you how to speed up your web development with C#. It's a new SPA engine for building ASP.NET WebApps using C#/Razor and HTML. Blazor is an enhanced, component-based version of Razor.

Often used with WebAssembly, Azure or Visual Studio. Blazor lets you create high-performance applications on both client and server sides. You'll benefit from a wide range of features: MVVM pattern, data binding, layout, templates, validation and authentication system, Blazor CLI.

During this Blazor training course, you'll learn how to create interactive single page apps in C# instead of JavaScript (enabling code and library sharing, interaction with the client is via SignalR), from component presentation to page layout.

You'll also learn about authentication, form management, cascading and API integration. Finally, thanks to .NET MAUI Blazor, it will be possible to host Blazor components in a .NET MAUI application, offering a new approach to creating hybrid applications: sharing components between a Blazor application and .NET MAUI Blazor.

Our Blazor training will be taught with the latest version of .NET, .NET Core 8.

Objectives

- Developing web applications in C# and Blazor
- Using Azure DevOps to deploy Blazor applications
- Creating a database with Entity Framework Core
- Create a user system

Target audience

- Web developer, Lead developer

Prerequisites

- Knowledge of C# programming
- Have taken our ASP.Net training course

Software requirements

Visual Studio Code with ASP .NET Core installed.

Blazor training program: Asp.Net Core

Day 1

INTRODUCTION

- What is Blazor?
- Introduction to ASP.Net Core
- Introduction Blazor
- Machine installation
- Hosting models

BLAZOR WEB ASSEMBLY AND SERVER

- Difference between the two modes
- Advantages and disadvantages of Web Assembly
- Advantages and disadvantages Server
- Web Application Assembly Standalone or Hosted
- Debugging client applications

INITIATION TO BLAZOR

- Organizing a Blazor project
- Basic syntax
- The components
- Use of Code behind and non-Code behind files
- The roads
- Parameters
- Data Binding
- Links and events
- Practical: Creating a first WebAssembly project

DAY 2

THE COMPONENTS

- Component life cycle
- Component settings
- Mandatory data
- Nested components
- Using StateHasChanged
- Practical work: Creating the first

component USING CASCADES

- Using cascade values
- Multiple parameter cascading
- Cascade value event
- Using @key
- Using @attribute

MANAGING FORMS

- Using EditForm
- Validation model
- Use of attributes (Required, StringLength, Range, ErrorMessage)
- Event management
- Using @ref

DAY 3

WEB API

- Controllers creation
- Routing
- Adding and using services (Singleton, Scoped)
- Dependency injection
- REST API best practices
- HTTP verbs
- API versioning
- Swagger annotations for API schemas
- Practical work: Creating a controller

CONSUME AN API WITH BLAZOR

- HttpClient initialization
- Environment variables & Connection string
- Asynchronous calls (Async, Await, Task)
- Practical work: Making a page

dynamic JS INTEROP

- DI with Defaut Service
- Calling a JavaScript function from C# code
- Calling a C# function from JavaScript code

OPTIONAL DAY 4 - AUTHENTIFICATION BY JWT (only available for in-house training)

- ASP.NET Identity
- Model User
- Login to UserController
- Login page creation
- Register in UserController
- Signin page creation
- User in UserController
- Practical work: Creating the UserController and securing the API

REFERENCE ASSEMBLIES (only available in-house)

- Marking code separation
- Use of reference assemblies
- Class libraries

BLAZOR WITH RENDER TREE BUILDER (only available in-house)

- Raw HTML rendering
- Using RENDER TREE BUILDER
- Generic model

DTP (only available in-house)

- Main layout
- Routing
- List of HTTP instruments
- Bulma/Pagination component

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.