

Course : Blazor, Web development

Practical course - 3d - 21h - Ref. BLZ

Price : 2020 CHF E.T.

 3,9 / 5

This training course will enable you to understand and master Blazor, the free, open-source Web framework developed by Microsoft. You'll build Web applications using HTML and C#, and be able to interoperate with Javascript using .Net methods. You'll secure your applications with authentication.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Understanding Blazor's architecture
- ✓ Communicating in Websockets mode
- ✓ Creating forms with validations
- ✓ Setting up authentication with Blazor

Intended audience

Developers, project managers, architects

Prerequisites

Knowledge of .Net or good knowledge of an object-oriented language and the Web

Course schedule

1 Overview of technologies used

- .NET Core features.
- Web Api and Framework MVC.
- Web browser security.
- The Design Pattern: MVVM.
- Web assembly, Websockets, SignalR.

Hands-on work

Creation of a first Blazor application

PARTICIPANTS

Developers, project managers, architects

PREREQUISITES

Knowledge of .Net or good knowledge of an object-oriented language and the Web

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

2 Blazor architecture

- Blazor, Razor's convergence adapted to the browser.
- Blazor Server on the server side for compatibility.
- Using SignalR web sockets for communication.
- Blazor Web assembly on the client side.
- Techniques for sharing code between server and client.
- DOM interaction, Javascript Interop and sandbox security.

Hands-on work

Implementation of code sharing and integration of JavaScript to manipulate the DOM of a Web page.

3 Les bases de Razor

- Structure of a Razor project.
- Routing and navigation to reach components.
- Different configurations depending on the runtime environment.
- Razor dependency injection container.
- Blazor Net 5 components. Virtualization for performance.
- Razor class Libraries for sharing GUI code.
- Hosting and deployment of Razor applications.

Hands-on work

Creation of a first Blazor component with parameter and method management.

4 Communication with the server

- Blazor server: server-side execution.
- Through HTTP REST API.
- CORS safety.
- Using SignalR for Websockets communication.

Hands-on work

REST Webservice consumption and Web sockets implementation with SignalR.

5 Razor's best practices

- Forms, bindings and validation.
- Globalization / Localization.
- Inter-session status management.
- Layouts to factorize page structure.
- Template-based components.
- Virtualization of components for high performance.

Hands-on work

Form creation with field validation

6 Safety with Blazor

- Blazor Server security with AuthorizeView.
- Blazor Client security with AuthenticationStateProvider.
- Providing an OpenId identity and WebAssembly Authentication Library.

Hands-on work

Server-side security with AuthorizeView

TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

Dates and locations

REMOTE CLASS

2026: 30 Mar., 22 June, 5 Oct., 14 Dec.