

ASP.NET Core MVC

Audience Course ASP.NET Core MVC

The course ASP.NET Core MVC is intended for Web Developers and Architects who want to learn how ASP.NET Core MVC web applications can be designed and developed.

Prerequisites Course ASP.NET Core MVC

To participate in the Course ASP.NET Core MVC good knowledge of basic Web Applications is desirable and basic knowledge of C# is required.

Realization Training ASP.NET Core MVC

The course has a hands-on character. The theory is discussed using presentation slides and demos and is interchanged with exercises.

Certificate course ASP.NET Core MVC

After successfully completing the course, the attendants will receive a certificate of participation in ASP.NET Core MVC.



Content Course ASP.NET Core MVC

In the course ASP.NET Core MVC participants learn to create dynamic and feature-rich web applications using the ASP.NET Core Model View Controller (MVC) framework. The course explains the emphasizes the benefits of MVC architecture with the use of separation of concerns and covers advanced topics such as routing, controllers, views, models and integrating with databases.

Intro ASP.NET Core MVC

The course ASP.NET Core MVC starts with an overview of ASP.NET Core MVC, covering its architecture, advantages, and how it differs from traditional ASP.NET.

Controllers and Actions

Next the role of controllers in the Model-View-Controller (MVC) pattern is explained Participants learn to define actions to handle HTTP requests, route them to the appropriate controller, and generate responses.

Views and Razor

Also the creation of dynamic views using Razor syntax is covered and how to generate HTML content dynamically, work with layouts, and create modular views for a consistent user interface.

Models and Data Binding

How to work with models to represent data in an application is treated as well as exploring data binding techniques to connect models to views and handle user input.

Routing and URL Patterns

Next routing in ASP.NET Core MVC is on the course schedule. Explained are URL patterns, route parameters, and constraints to control how URLs map to controller actions.

Entity Framework Core

Then the Entity Framework Core is discussed with performing CRUD (Create, Read, Update, Delete) operations and database migrations.

Security

Security concepts are treated as well like authentication and authorization mechanisms, and control access to resources.

IIS Hosting

Also hosting ASP.NET Core MVC applications in Internet Information Services (IIS) is treated and attention is paid to the configuration and deployment aspects of hosting on Windows servers.

ASP.NET SignalR

Finally real-time communication with ASP.NET SignalR is covered and participants learn to implement features like live chat and notifications.

Tel.: +31 (0) 30 - 737 0661



Modules Course ASP.NET Core MVC

Module 1 : Intro ASP.NET Core MVC	Module 2 : Controllers and Actions	Module 3 : Views and Razor
What is MVC Pattern?	Controllers in MVC	Data Presentation Views
MVC Architecture	Grouping Actions	User Interaction Views
Separation of Concerns	Controller Suffix	cshtml Files
Controllers	Request Handling	View Components
Models	Explicit Dependencies	Partial Views
Views	Action Injection	Razor Pages
Using Visual Studio	Model Instantiation	Embedded Razor Markup
ASP.NET Core Project	IActionResult	Razor Syntax
Service Classes	Task	Tag Helpers
Dependency Injection	Helper Methods	Model Validation
Project Structure	Redirect	CSS Isolation
Module 4 : Models and Data Binding	Module 5 : Routing and URL Patterns	Module 6 : Entity Framework Core
Model Binding	Routing in MVC	What is EF Core?
Data Sources	Configuring Routes	Object Relational Mapping
Mapping Requests	RouteConfig Class	Database Providers
Type Conversions	MapRoute Method	Context Object
Form Collection	RouteTable Class	Creating Connections
Input Values	URL Pattern Syntax	Generating Models
Binding Primitives	URL Mapping	EF Migrations
Binding Complex Types	Multiple Routes	Querying with LINQ
Searching for Parameters	Route Constraints	Saving Data
Value Providers	Registering Routes	Transactions
Module 7 : Security	Module 8 : IIS Hosting	Module 9 : ASP.NET SignalR
Security and Identity	IIS Manager	What is Signal R?
Authentication Methods	Application Pools	Real Time Functionality
User Credentials	Visual Studio Deployment	Server Push
Windows Authentication	Initial Deployment Stage	Supported Transports
OAuth2 Sign-on	Publishing	WebSockets
Login Forms	Adding a Website	Server-Sent Events
Two Factor Authentication	Choosing Local Domain	Long Polling
Role Based Authorization	Edit host File	Hubs
Cross Site Scripting	Set IP Address	JSON Protocol
		1