

Developing ASP.NET Core MVC Web Applications

Module 1: Exploring ASP.NET Core MVC

Module Overview

Lesson 1: Overview of Microsoft Web Technologies

Lesson 2: Overview of ASP.NET 4.x

Lesson 3: Introduction to ASP.NET Core MVC

Lab: Exploring ASP.NET Core MVC

Module 2: Designing ASP.NET Core MVC Web Applications

Module Overview

Lesson 1: Planning in the Project Design Phase

Lesson 2: Designing Models, Controllers and Views

Lab: Designing ASP.NET Core MVC Web Applications

Module 3: Configure Middleware and Services in ASP.NET Core

Module Overview

Lesson 1: Configuring Middleware

Lesson 2: Configuring Services

Lab: Configuring Middleware and Services in ASP.NET Core

Module 4: Developing Controllers

Module Overview

Lesson 1: Writing Controllers and Actions

Lesson 2: Configuring Routes

Lesson 3: Writing Action Filters

Lab: Developing Controllers

Module 5: Developing Views

Module Overview

Lesson 1: Creating Views with Razor Syntax

Lesson 2: Using HTML Helpers and Tag Helpers

Lesson 3: Reusing Code in Views

Lab: Developing Views

Module 6: Developing Models

Module Overview

Lesson 1: Creating MVC Models

Lesson 2: Working with Forms

Lesson 3: Validating MVC Application

Lab: Developing Models

Module 7: Using Entity Framework Core in ASP.NET Core

Module Overview

Lesson 1: Introduction to Entity Framework Core

Lesson 2: Working with Entity Framework Core

Lesson 3: Using Entity Framework Core to Connect to Microsoft SQL Server

Lab: Using Entity Framework Core in ASP.NET Core

Module 8: Using Layouts, CSS and JavaScript in ASP.NET Core MVC

Module Overview

Lesson 1: Using Layouts

Lesson 2: Using CSS and JavaScript

Lesson 3: Using jQuery

Lab: Using Layouts, CSS and JavaScript in ASP.NET Core MVC

Module 9: Client-Side Development

Module Overview

Lesson 1: Applying Styles

Lesson 2: Using Task Runners

Lesson 3: Responsive Design

Lab: Client-Side Development

Module 10: Testing and Troubleshooting

Module Overview

Lesson 1: Testing MVC Applications

Lesson 2: Implementing an Exception Handling Strategy

Lesson 3: Logging MVC Applications

Lab: Testing and Troubleshooting

Module 11: Managing Security

Module Overview

Lesson 1: Authentication in ASP.NET Core

Lesson 2: Authorization in ASP.NET Core

Lesson 3: Defending from Attacks

Lab: Managing Security

Module 12: Performance and Communication

Module Overview

Lesson 1: Implementing a Caching Strategy

Lesson 2: Managing State

Lesson 3: Two-Way Communication

Lab: Performance and Communication

Module 13: Implementing Web APIs

Module Overview

Lesson 1: Introducing Web APIs

Lesson 2: Developing a Web API

Lesson 3: Calling a Web API

Lab: Implementing Web APIs

Module 14: Hosting and Deployment

Module Overview

Lesson 1: On-Premises Hosting and Deployment

Lesson 2: Deployment to Microsoft Azure

Lesson 3: Microsoft Azure Fundamentals

Lab: Hosting and Deployment