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