

Kurs-Dokumentation



Zentrum für Informatik ZFI AG

Developing ASP.NET MVC 4 Web Applications (NMVC)

<http://www.zfi.ch/NMVC>

Weitere Infos finden Sie unter www.zfi.ch oder via Adresse:

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Titel	Developing ASP.NET MVC 4 Web Applications
Untertitel	
Einleitung	In this course, students will learn to develop advanced ASP.NET MVC applications using .NET Framework 4.5 tools and technologies. The focus will be on coding activities that enhance the performance and scalability of the Web site application. ASP.NET MVC will be introduced and compared with Web Forms so that students know when each should/could be used. This course will also prepare the student for exam 70-486.
Ihr Nutzen	After completing this course, students will be able to: <ul style="list-style-type: none">- Describe the Microsoft Web Technologies stack and select an appropriate technology to use to develop any given application.- Design the architecture and implementation of a web application that will meet a set of functional requirements, user interface requirements, and address business models.- Create MVC Models and write code that implements business logic within Model methods, properties, and events.- Add Controllers to an MVC Application to manage user interaction, update models, and select and return Views.- Create Views in an MVC application that display and edit data and interact with Models and Controllers.- Run unit tests and debugging tools against a web application in Visual Studio 2017 and configure an application for troubleshooting.- Develop a web application that uses the ASP.NET routing engine to present friendly URLs and a logical navigation hierarchy to users.- Implement a consistent look and feel, including corporate branding, across an entire MVC web application.

- Use partial page updates and caching to reduce the network bandwidth used by an application and accelerate responses to user requests.

 - Write JavaScript code that runs on the client-side and utilizes the jQuery script library to optimize the responsiveness of an MVC web application.

 - Implement a complete membership system in an MVC 4 web application.

 - Build an MVC application that resists malicious attacks and persists information about users and preferences.

 - Describe how to write a Windows Azure web service and call it from an MVC application.

 - Describe what a Web API is and why developers might add a Web API to an application.

 - Modify the way browser requests are handled by an MVC application.

 - Describe how to package and deploy an ASP.NET MVC 4 web application from a development computer to a web server for staging or production.
- Voraussetzungen** Before attending this course, students must have:
- A minimum of two to three years of experience developing web-based applications by using Microsoft Visual Studio and Microsoft ASP.NET, proficiency in using the .NET Framework, and some familiarity with the C# language.
- Teilnehmerkreis** This course is intended for professional web developers who use Microsoft Visual Studio in an individual-based or team-based, small-sized to large development environment. Candidates for this course are interested in developing advanced web applications and want to manage the rendered HTML comprehensively. They want to create websites that separate the user interface, data access, and application logic.

Unterlagen
Folgekurse
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Module 1: Exploring ASP.NET MVC 4
Overview of Microsoft Web Technologies

Overview of ASP.NET 4.5

Introduction to ASP.NET MVC 4

Module 2: Designing ASP.NET MVC 4 Web Applications
Planning in the Project Design Phase

Designing Models, Controllers, and Views

Module 3: Developing ASP.NET MVC 4 Models
Creating MVC Models

Working with Data

Module 4: Developing ASP.NET MVC 4 Controllers
Writing Controllers and Actions

Writing Action Filters

Module 5: Developing ASP.NET MVC 4 Views
Creating Views with Razor Syntax

Using HTML Helpers

Reusing Code in Views

Module 6: Testing and Debugging ASP.NET MVC 4 Web Applications
Unit Testing MVC Components

Implementing an Exception Handling Strategy

Module 7: Structuring ASP.NET MVC 4 Web Applications Analyzing Information Architecture

Configuring Routes

Creating a Navigation Structure

Module 8: Applying Styles to ASP.NET MVC 4 Web Applications Using Template Views

Applying CSS to an MVC Application

Creating an Adaptive User Interface

Module 9: Building Responsive Pages in ASP.NET MVC 4 Web Applications Using AJAX and Partial Page Updates

Implementing a Caching Strategy

Module 10: Using JavaScript and jQuery for Responsive MVC 4 Web Applications Rendering and Running JavaScript Code

Using jQuery and jQueryUI

Module 11: Controlling Access to ASP.NET MVC 4 Web Applications Implementing Authentication and Authorization

Assigning Roles and Membership

Module 12: Building a Resilient ASP.NET MVC 4 Web Application Developing Secure Sites

State Management

Module 13: Using Windows Azure Web Services in ASP.NET MVC 4 Web Applications Introduction to Windows Azure

Designing and Writing Windows Azure Services

Consuming Windows Azure Services in a Web Application

Module 14: Implementing Web APIs in ASP.NET MVC 4 Web Applications Developing a Web API

Calling a Web API from Mobile and Web Applications

Module 15: Handling Requests in ASP.NET MVC 4 Web Applications Using HTTP Modules and HTTP Handlers

Using Web Sockets

Module 16: Deploying ASP.NET MVC 4 Web Applications Deploying Web Applications

Deploying MVC 4 Applications

Beitrag

Der Teilnehmerbeitrag versteht sich rein netto. Das ZFI ist (gemäss MwSt-Gesetz) nicht Mehrwertsteuerpflichtig und erhebt somit keine MwSt. Bei länger als einen Monat dauernden Lehrgängen ist die Zahlung des Teilnehmerbeitrages in mehreren Raten möglich (pro rata temporis).