

Hands-on course , 4  
day(s)  
Ref : ASA

## Participants

Experienced .NET developers who want to acquire techniques and reflexes for developing all types of Web applications with ASP.NET MVC5.

## Pre-requisites

Good knowledge of C#, HTML, and JavaScript. Experience in software development required.

## Next sessions

# Web Application Development with ASP.NET MVC 5

## OBJECTIVES

*In this course, you'll learn how to develop Web applications based on the ASP.NET MVC 5 framework. In particular, you'll apply the MVC programming model, design adaptable user interfaces, and integrate jQuery into your Visual Studio 2013 and One ASP.NET development environments.*

### 1) Introduction

### 2) Model and controllers.

### 3) Views

### 4) URL Routing

### 5) Ajax and jQuery

### 6) Validation and security

### 7) Web API and development

## 1) Introduction

- Summary of Web technologies of the .NET framework.
- Overview of the MVC5 model.
- .NET MVC5 projects in VS2013.

### Workshop

*Creating an MVC5 application.*

## 2) Model and controllers.

- Modeling your domain.
- Using strongly typed views. Data linking.
- Using Entity Framework 6 in MVC5.
- Implementing actions. Managing models.
- Filter management. Displaying and publishing data.

### Workshop

*Development of MVC4 models. Creating MVC5 controllers.*

## 3) Views

- Razor view engine. Dynamic content.
- View model. Application of CSS styles.

### Workshop

*Creating MVC5 views, using Bootstrap in MVC5.*

## 4) URL Routing

- URL patterns. Designing the routing.
- Routing customization, Routing attributes in MVC5.

### Workshop

*Routing scenarios and MVC5 navigation structures.*

## 5) Ajax and jQuery

- Ajax Helper and jQuery/jQueryUI.
- Partial updates. Cache management.
- Other optimization techniques.

### Workshop

*Creating JavaScript pages and MVC5 Ajax*

## 6) Validation and security

- Server-side validation. DataAnnotations, alternative techniques, client-side validation.
- Alternative techniques. Client-side validation. Authentication modes.
- Implementing ASP.Net authentication and role management. Auditing the code's security.
- ASP.NET Identity in MVC 5, Authentication filters.

### Workshop

*Implementing security in an MVC 5 application.*

## 7) Web API and development

- Implementing Web API. Managing REST requests. Web and Mobile clients.
- HTTP modules and HTTP managers. Unit tests and exception management.
- Deployment to a test server. Deployment to Azur. Types of deployment via VSTO.

### Workshop

*Managing application deployment.*