



## Document History

Date	Course Version No.	Software Version No.	Developer / SME	Reviewer(s)	Approver	Change Record Remarks
9/7/2014	1.0	MVC 4.0	Karthik Muthukrishnan			
2/9/2015	2.0	MVC 5.0	Shashank Saudagar			Version upgrade from 4.0 to 5.0
5/23/2015	3.0	MVC 5.0	Ganesh Desai	Vaishali Kasture	Mahima Sharma	Material revamped as per the Cppgemiini integrated Course Curriculum .

## Course Goals and Non Goals

### ■ Course Goals

- To get familiar with fundamentals of ASP.NET MVC 5.0
- Develop web applications using ASP.NET MVC 5.0

### ■ Course Non Goals

- Bootstrap and AngularJS will not be covered as part of this training.
- Develop ASP.NET MVC 5.0 using jQuery Mobile is not part of this training

## Pre-requisites

- HTML, CSS, ASP.NET, C# & jQuery basics

## Intended Audience

- Web application developers



## Day Wise Schedule

### ■ Day 1

- Lesson 1: Fundamentals of ASP.NET MVC 5.0
- Lesson2: Working with Views
- Lesson 3: Exploring Controllers

### ■ Day 2

- Lesson 4: Exploring Models & working with data
- Lesson 5: Entity Framework 6 Features and Asp.net Scaffolding

### ■ Day 3

- Lesson 6 : Web Optimization with ASP.NET MVC
- Lesson 7: Using AJAX In ASP.NET MVC

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- Lesson 1: Fundamentals of ASP.NET MVC 5.0

- 1.1 ASP.NET MVC Introduction
  - 1.1.1 ASP.NET MVC Framework
  - 1.1.2 ASP.NET vs. ASP.NET MVC
  - 1.1.3 ASP.NET MVC Model
  - 1.1.4 Model
  - 1.1.5 Controller
  - 1.1.6 View
  - 1.1.7 ASP.NET MVC – Application Folders
- 1.2 One ASP.Net with Visual Studio 2013
- 1.3 View Engine
  - 1.2.1 Introduction to Razor View Engine
- 1.4 Routing
  - 1.3.1 Introduction to routing
- 1.5 Scaffolding
  - 1.4.1 Scaffolding in MVC

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- Lesson 2: Working with Views
  - 2.1 ASP.NET MVC View Engines
    - 2.1.1 View Engines
    - 2.1.2 Razor View engine
    - 2.1.3 Razor Syntax
  - 2.2 Working with Layout
    - 2.2.1 Introduction to Layout
    - 2.2.2 Render Body, Render Page & Render Section
  - 2.3 HTML Helpers
    - 2.3.1 HTML Helper
  - 2.4 Working with Partial Views
    - 2.4.1 Partial Views



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- Lesson 3: Exploring Controllers
  - 3.1 Working with Controllers
    - 3.1.1 Controllers
  - 3.2 Routing
    - 3.2.1 Routing
    - 3.2.2 Default Route
  - 3.3 Attribute Routing in MVC 5
  - 3.4 Passing Data from controller to view
    - 3.3.1 ViewData
    - 3.3.2 ViewBag
    - 3.3.3 TempData
  - 3.5 Action Methods
    - 3.4.1 Introduction to Action Methods
    - 3.4.2 Action Results
    - 3.4.3 Action Selectors
    - 3.4.4 Action Filters
    - 3.4.5 Filter Overrides in MVC 5

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- Lesson 4: Exploring Models & working with data
  - 4.1 Model Binding
  - 4.2 Data Annotation
- Lesson 5: Entity Framework 6 Features with Asp. Net Scaffolding
  - 5.1 Code First Model
  - 5.2 Multiple Migrations
  - 5.3 Scaffolding
  - 5.4 Async Queries
  - 5.5 Logging
  - 5.6 Moving schemas
- Lesson 6: Web Optimization with ASP.NET MVC
  - 6.1 Web Optimization
  - 6.2 Bundling & Minification
  - 6.3 Configuring bundles

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### ■ Lesson 7: Using AJAX In ASP.NET MVC

- 7.1 AJAX Introduction
  - 7.1.1 AJAX Introduction
  - 7.1.2 Raw AJAX Drawbacks
  - 7.1.3 AJAX in ASP.NET MVC
- 7.2 AJAX Helpers
  - 7.2.1 AJAX Helpers
  - 7.2.2 AJAX Helpers properties
- 7.3 Partial Page rendering
- 7.4 JSON
  - 7.4.1 JSON Introduction
  - 7.4.2 JSON In ASP.NET MVC
- 7.5 AJAX using jQuery

## References

- Professional ASP.NET MVC 5 – Wrox Pub.
- Programming ASP.Net MVC – Microsoft Press
- Pro MVC 5 - Apress



## Next Step Courses (if applicable)

- ASP.NET Web API



## Other Parallel Technology Areas

- Spring MVC
- Struts 2.X
- JSF