

Software Development Framework Using Core MVC

Course Objectives:

- To gain knowledge about the methodologies to develop .Net based application.
- Understand the benefits of MVC design over traditional ASP.NET Web Forms.
- To learn about Windows, Forms and Role-Based Authentication.
- To learn about the Razor Syntax Fundamentals, Layout View, Sections and Partial Views.
- To build and deploy ASP.NET MVC application to the server.

Unit I

Introduction : ASP.NET MVC-Introduction- First MVC Application- Exploring Controllers - Controller Viewdata & TempData - Controller Action Methods - Controller Action Method Parameter - Controller Action Filters - Controller Action Custom Filters.

Unit II

Exploring Razor Views: View Razor Syntax - View Layouts - View Partialviews - View Tightly Coupled Model. Digging into HTMLHelper Methods: Html Helpers Part-I - Html Helpers Part-II - Html Helper Model Binding - Html Helper Display and Editors Methods - Html Helper Viewdata Binding - Html Helper Custom Templates - Html Helper Reusing Helpers.

Unit III

Understanding Model Binders: Default Model Binder - Custom Model Binder. Validation and Annotations: Model Validation - Unobtrusive Client Validations - Metadata Validation. Using Entity Framework: MVC and EF Crud Operations - MVC and EF Crud Operation Using BO Class - MVC and EF Crud Operations Using Generic BO Class.

Unit IV

Authentication and Authorization: Windows Authentication - Forms Authentication - Role Based Authentication - Anti Forgery Token - URL Routing - Working with Areas. JQuery and Ajax: Ajax Helper Methods Controller - JQuery UI - JQuery Template.

Unit V

Bundling and Minification - Mobile Compatibility - Web API: Web API First Example - Performing Crud Using Web API.

Books for Study:

1. Nimit Joshi , “Programming ASP.NET MVC 5 A Problem Solution Approach “, 2013.
2. Matthew MacDonald TMH, “The Complete Reference ASP.NET”, First Edition, Mcgraw Hill, 2002.

Books for Reference:

1. Kogent Learning Solutions Inc, “ASP.NET 2.0 Black Book”, Platinum Edition, DreamTech Press, 2006.
2. Dino Esposito “Introducing Microsoft ASP .NET 2.0”, First Edition, PHI Publisher.
3. Matthew MacDonald, “Pro ASP.NET 4 in C#”, 4th Edition, 2010.

Open Educational Resources (OER):

1. <https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions-1/controllers-and-routing/aspnet-mvc-controllers-overview-cs>
2. https://www.c-sharpcorner.com/UploadFile/g_arora/Asp-Net-mvc-series-for-beginners-part-1/
3. <https://www.codeproject.com/Articles/207797/Learn-MVC-Model-View-Controller-step-by-step-in>
4. https://en.wikipedia.org/wiki/ASP.NET_MVC