Last Updated: August 09, 2013

Context: Registration Form, ContactShare

1. Users can share contacts with one another

**MVC**

**Day - 1**

1. MVC Architecture(S/I) (2 minutes) - IM
   1. History
   2. ASP.NET MVC
2. Basic application structure(I) – (5 minutes) - IM
   1. Sample Application
      1. Convention Over Configuration
         1. Controller Folder
         2. Views Folder
         3. Model Folder
            1. Create Sub-folder per controller?
         4. Scripts Folder
            1. Create sub-folder per controller?
         5. Content Folder
            1. Create sub-folder per controller?
         6. Shared Folder
            1. Global Shared Folder
            2. Controller Shared Folder
3. Basic MVC – Day 1
   1. Controller (5 minutes) – IM
   2. Model - IM
      1. Form Processing (5 minutes)
      2. Binding to parameters/model (20 minutes)
         1. ValueProviders
            1. Precedence while binding
         2. Primitive action parameters binding
         3. Model Binding
            1. Include
            2. Exclude
            3. Prefix
         4. Binding IEnumerable
            1. Unspecified Array Index
            2. Specified array index
         5. Binding Dictionary
         6. Binding Nested Object as properties
         7. Validation
            1. DataAnnotations
            2. ModelState
   3. Views -SS
      1. ViewEngineCollection (1 minutes)
      2. Razor (10 minutes)
         1. Razor Syntax
         2. @ Vs. @Html.Raw()
         3. MVCString
         4. Layout
      3. ViewBag/ViewData (2 minutes)
      4. Html Helpers (5 minutes)
         1. Input Helpers
         2. Action Vs. RenderAction (5 minutes)
   4. Filters (5 minutes + Demo) - IM
      1. Introduction

**Day 2**

1. MVC Life Cycle – Day 2 (Pararell) (15 minutes) - IM
2. Controller(I) – Day 2 - SS
   1. Baked-in Attributes
      1. ActionName
      2. ChildActionOnly
      3. HttpVerbs
   2. Override Default Controller Factory
   3. Inheriting from application specific controller
      1. Authorized Controller
      2. ??
3. Model(S/I) – Day 2/3/4 (30 minutes + **Demo**)
   1. ModelBinding –IM
      1. Model Binding Under The Hood
      2. ValueProvider
         1. MVC built-in Value Providers
         2. Custom Value Provider
         3. Adding to ValueProviderFactories
      3. Custom ModelBinder (**Demo**)
         1. IModelBinder
         2. DefaultModelBinder
            1. Methods Walk Through
            2. ??
         3. Register Model Binder
         4. ModelBinderAttribute
      4. UpdateModel/TryUpdateModel
   2. Validation (30 minutes + **Demo**) - SS
      1. Custom DataAnnotation
         1. Derived from ValidationAttribute
         2. ValidationResult
         3. Derived from existing DataAnnotations Attribute
         4. IValidatableObject
      2. ClientSide Validation
      3. Cusotm validation Message
   3. ModelMetaData (15 minutes + **Demo**) - IM
      1. Usages
      2. ModelMetadataProvider
         1. DataAnnotationModelMetadataProvider
         2. CustomModelMetadataProvider (Demo)
            1. Creating Attibutes
            2. Registering
            3. Utilizing
   4. ActionResult (15 minutes + **Demo**)
      1. Built-In
      2. Route to ActionMethod
      3. Custom Action Result
         1. Why to?
         2. PopupResult
4. View(S/I) – Day 4/5 (30 minutes + **Demo**)
   1. Razor - SS
      1. Edge Cases
      2. Razor Helpers
      3. App\_Code
   2. Html Helpers - SS
      1. TextBox Vs. EditorFor
      2. DataAnnotations in
         1. DisplayTemplates
            1. DisplayForModel
         2. EditorTemplates
            1. EditorForModel
      3. Default Editor Templates - SS
      4. Custom Helpers - IM
         1. UIHint
         2. Specify Templates
            1. Pass as string argument
            2. DisplayTemplates/EditorTemplates Location
      5. Html Helper Extensions - IM
5. Routing – Day 6 - IM
   1. Basic
6. Filters - IM
   1. Authorization
   2. Action
   3. Result
   4. Exception
   5. Registering Filter (Implementing Interfaces)
   6. Applying as Attribute (Deriving from FilterAttribute)
7. Ajax Implementations (jQuery) – Day 6 – IM
   1. Application Framework
8. Extensibility and DI – Day 7 - IM
9. Security – Day 6 -SS
10. Unit Testing(nUnit/Mock) – Day 7
11. Web API – Day 7 - IM
12. Real time project overview (PayRoll) – Day 7
13. Open Session

Notes:

Model/Controller should have high precedence and should be 3 days workshop.