**Application Folders**

**App\_Start**

It has configuration classes to reduce clutter code in the Global.asax Application\_Start method. It contains following files:

**- AuthConfig.cs**

Related to security settings, including sites for OAuth login.

**- BundleConfig.cs**

Related to register bundles for the bundling and minification

**- FilterConfig.cs**

To register global MVC filters.(by default HandleErrorAttribute is registered)

**- RouteConfig.cs**

Related to MVC Route configuration

**- WebApiConfig.cs**

Used to register Web API routes and configuration settings

**Areas**

An MVC structure inside the application to partition our web application into smaller parts.

**Content**

To put CSS and other static contents

**Controllers**

Contains the controller classes

**Images**

For images, It is being referenced from the Content\Site.css by default.

**Models**

Contains view model and domain model classes.

**Scripts**

Stores all JavaScript libraries and files

**Views**

Related to the display of the application (UI).

## Html Helpers

used to render (modify and output) HTML form elements

### Html.ActionLink

Output: <a href=".."...>..</a>

### Html.BeginForm

Output: <form ...>

### Html.CheckBox

Output: <input type="checkbox" .../>

### Html.DropDownList

Output: <select ..> .. </select>

### Html.EndForm

Output: </form>

### Html.Hidden

Output: <input type="hidden" ... />

### Html.ListBox

Output: <select multiple ...>...</select>

### Html.Password

Output: <input type="password" ... />

### Html.RadioButton

Output: <input type="radio" .. />

### Html.TextArea

Output: <textarea...>...</textarea>

### Html.TextBox

Output: <input type="text" ... />

### Html.ValidationSummary

Returns an unordered list (ul element) of validation messages that are in the ModelStateDictionary object.

### Html.ValidationMessage

To display an error for a particular field in the ModelState dictionary

### Html.RouteLink

To generate a URL to a specific route

## View Related & Others

### @{ Layout = "..."}

To define layout page Equivalent to asp.net master-page

### @model <StrongModelType>

To define strongly-typed model

### @section <name> { }

To define named section

### @RenderBody

Used in layout as a placeholder for view's entire content.

### @RenderPage

Renders the content of one page within another page.

### @RenderSection

In layout pages, renders the content of a named section.

### IsSectionDefined

Returns a value that indicates whether the specified section is defined in the page.

### DefineSection

To create named content sections in content page.

### @helper

To define a helper which create a reusable code snippet.

### @functions

To define a function ( pure server-side methods)that can be reused within the view.

### @ViewBag.<myData>

Dynamic property, used to pass data between a Controller and a View

### @ViewData[myData]

To pass data between a Controller and a View via special Dictionary class

### @tempdata

To pass State Between Action Methods

## Action Method Result

### ActionResult

generic return value for an action and is used to perform a framework-level operation on behalf of the action method.

### ContentResult

To return a user-defined content type that is the result of an action method.

### EmptyResult

To return nothing from a Controller action

### FileContentResult

Sends the contents of a binary file to the response.

### FilePathResult

Sends the contents of a file to the response.

### FileResult

To return the content of a file to the browser

### FileStreamResult

Sends binary content to the response by using a Stream instance.

### HttpNotFoundResult

To return 404 status-code to indicate that the requested resource was not found.

### HttpStatusCodeResult

To return specific HTTP response status code and description.

### HttpUnauthorizedResult

To return 401 status code to indicate unauthorized HTTP request.

### JsonResult

To return a serialized JSON object.

### JavaScriptResult

To return a script that can be executed on the client.

### PartialViewResult

To render a partial view (fx. just a user control)

### RedirectResult

To redirect to a specified URI.

### RedirectToRouteResult

to redirect to a route

### ValueProviderResult

Represents the result of binding a value (such as from a form post or query string) to an action-method argument property, or to the argument itself.

### ViewEngineResult

Represents the result of locating a view engine.

### ViewResult

To Render a view as a Web page.

## Attributes

### [AcceptVerbs(...)]

To specify HTTP verbs an action method will respond to.

### [ActionName(...)]

To define the name of an action

### [AdditionalMetadata(...)]

to populate the ModelMetadata.AdditionalValues dictionary for a model property.

### [AllowHtml]

To allow HTML markup during model binding by skipping request validation for the property.

### [AsyncTimeout(...)]

To set the timeout value, in milliseconds, for an asynchronous method.

### [Authorize(...)]

To restrict access by callers to an action method.

### [ChildActionOnly]

To indicate that an action method should be called only as a child action.

### [HandleError(...)]

to handle an exception that is thrown by an action method.

### [HiddenInput(...)]

To render a property or field value as a hidden input element.

### [HttpDelete]

to restrict an action method to handle only HTTP DELETE requests.

### [HttpGet]

to restrict an action method to handle only HTTP Get requests.

### [HttpPost]

to restrict an action method to handle only HTTP Post requests.

### [HttpPut]

to restrict an action method to handle only HTTP Put requests.

### [ModelBinder(..)]

to associate a model type to a model-builder type.

### [NoAsyncTimeout]

To set the timeout to infinite (never).

### [NonAction]

To indicate that a controller method is not an action method.

### [OutputCache(..)]

To mark an action method whose output will be cached.

### [Remote(...)]

It is used to invoke the server-based validation from client side.

### [RequireHttps]

It forces an unsecured HTTP request to be re-sent over HTTPS.

### [SessionState(...)]

Specifies the session state of the controller.

### [ValidateInput(...)]

To mark action methods whose input must be validated.

## Data Annotations for Model

### [Bind(...)]

Lists fields to exclude or include when binding parameter or form values to model properties

### [Compare("...")]

To compare two properties.

### [CreditCard]

To Specify that a data field value is a credit card number.

### [DataType(DataType.<type>)]

used for formatting purposes, not for validation.

### [DisplayName (...)]

Defines the text we want used on form fields and validation messages

### [EmailAddress]

To validate an email address

### [FileExtensions(Extensions = "jpg,png...")]

To Validate file name extensions.

### [key]

To denote one or more properties that uniquely identify an entity.

### [MaxLength(...)]

To define the maximum length of array or string data allowed in a property.

### [MinLength(...)]

To define the minimum length of array of string data allowed in a property.

### [Phone..]

To Specify for phone number using a regular expression.

### [Range (...)]

Gives a maximum and minimum value for a numeric field

### [RegularExpression(...)]

To specify that a data field value must match the specified regular expression.

### [Required (...)]

Indicates that the property is a required field

### [StringLength(...)]

Defines a maximum length for a string field

### [ScaffoldColumn(...)]

Allows hiding fields from editor forms

### [Url]

It provides URL validation.

## Attributes

### ActionFilterAttribute

Represents the base class for filter attributes.

### ActionMethodSelectorAttribute

Represents an attribute that is used to influence the selection of an action method.

### ActionNameSelectorAttribute

Represents an attribute that affects the selection of an action method.

### CustomModelBinderAttribute

It invokes a custom model binder.

### FilterAttribute

base class for action and result filter attributes.

## Html Helpers

### @Html.AntiForgeryToken

It generates a hidden form field (anti-forgery token) that is validated when the form is submitted.

### @Html.AttributeEncode

To convert the specified attribute value to an HTML-encoded string.

### @Html.Encode

To convert the specified value to an HTML-encoded string.

### @{ Html.EnableClientValidation(); }

To enables or disables client validation

### Html. EnableUnobtrusiveJavaScript

To enables or disables unobtrusive JavaScript.

### @Html.FormatValue

To format value

### @Html.Raw

To return markup that is not HTML encoded.

### @Html.Partial

To render a partial view into a string.

### @{Html.RenderPartial(..);}

writes directly to the response output stream instead of returning a string.

### @Html.Action

executes a separate controller action and returns as string

### Html.RenderAction

executes a separate controller action and render the result directly to the Response