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| **Tag Helpers** | **About Descriptions** |
| **Anchor Tag Helpers** | The Anchor Tag Helpers extend the standard HTML anchor tag (<a>..</a>) where it provides some new attribute. By standard convention, the attribute name must start with asp-. This helper object contains the below attributes –   1. **asp-controller -**This attribute assigns the controller name which is used for generating the URL. 2. **asp-action -**This attribute is used to specify the controller action method name. If no value assigns against this attribute name, then default asp-action value in the controller will execute to render the view. 3. **asp-route-{value} -**This attribute actually enables a wildcard-based route prefix. Any value specified in the {value} placeholder is actually interpreting as a route parameter. 4. **asp-route -**This attribute is used for creating a direct URL linking to an actual route value. 5. **asp-all-route-data -**It supports to create a dictionary of key-value pairs. The key is the parameter name and value is the parameter value. 6. **asp-fragment -**This attribute specifies an URL fragment section to append the URL. 7. **asp-area -**This attribute name actually set the area name used in the actual route. 8. **asp-protocol -**This attribute is used to specify the protocol value like https in the URL. 9. **asp-host -**It is used to specify the hostname in the URL. 10. **asp-page -**This attribute is needed to be used with the Razor Pages.   <a asp-controller="Student" asp-action="Index"  asp-route-id="@Model.Id"> StudentId: @Model.StudentId </a> >Student List</a> |
| **Cache Tag Helpers** | This Tag Helper object provides the ability to catch the application content within the ASP.NET core cache provider. This helper objects basically increase the performance of the application. The default cached date time is set to twenty minutes by the Razor engine. The attributes of this Tag Helpers –   1. **enabled -** This attribute decides that content within the Cache Tag Helper is cached or not. The default value is true. 2. **expires-on -** This attribute is used to set the absolute expiration date for the cached data. 3. **expires-after -** This attribute set the length of time from the first request to the cached content. 4. **expires-sliding -** This attribute set the time span of the cached entity so that after that time that entity can be deleted if not accessed.   <cache enabled="true">  Last Cached Time: @DateTime.Now  </cache> |
| **Distributed Cache Tag Helpers** | This Tag Helper object provides the ability to catch the application content within the ASP.NET core distributed cache provider. This helper objects basically increase the performance of the application. So, his Helpers objects and Cache Tag Helpers inherits from the same base class. So, for this reason, all attribute available under cache tag helpers will also available Distributed Cache Tag Helpers. Except for this attribute, it contains one new attribute as below –   1. name -> This attribute provides the key of each instance of the cache entirely in the cache provider.   <distributed-cache name="unique-cache-1">  Time Inside Cache Tag Helper: @DateTime.Now  </distributed-cache> |
| **Environment Tag Helpers** | This Tag Helper renders the enclosed HTML content based on the current hosting environment conditionally. This helper object contains a single attribute named name. This attribute accepts string type value and value can be assigned as a comma separation method.  <environment names="Testing,Release">  <strong>Application Environemt is Staging or Production</strong>  </environment> |
| **Form Tag Helper** | This Tag Helpers method helps us to work with Form and HTML elements within a Form. The Form Tag Helpers can do -   1. It can generate the same form action attribute which we normally used for MVC Controller to provide action name. 2. Generate a hidden token to present cross-origin forgery.   <form asp-controller="Demo" asp-action="Save " method="post">  ………………………………  </form> |
| **Image Tag Helper** | The Image Tag Helpers basically extend the <img> tag of the HTML. It always required an src tag as well as a Boolean attribute named asp- append-version. If we need to provide static image source from a hosted web server, then a cache bursting string is added into the query parameter as the image source. This process ensures us that if file changes then the related changes need to done mandatorily for the web server changes. |
| **Input Tag Helper** | This Tag helper is used for HTML input element to display model data in our Razor view. This helper objects do the following –   1. asp-for attribute normally populate id and name of the specified HTML attribute for the display expression name. 2. It can assign attribute value based on the model data to the HTML attribute 3. It supports HTML 5 based validation attributes related the model data annotations   @model Login  <form asp-controller="Demo" asp-action="Register" method="post">  Provide Email: <input asp-for="Email" />  Provide Password: <input asp-for="Password" />  <button type="submit">SignUp</button>  </form> |
| **Label Tag Helper** | This Tag Helper basically extend the label tag of the HTML. It populates the caption of the label and attributes against the expression name. This Helper Object provides advantages like -   1. We automatically retrieve the label description from the Display attribute. 2. It reduced the code volume of the markup. 3. It also can be used as strong types for the model property.   <form asp-controller="Demo" asp-action="Register" method="post">  <label asp-for="Email">Email Address</label>  <input asp-for="Email" />  </form> |
| **Select Tag Helper** | This Tag Helpers populate <select> tag of HTML and also associated option elements for the properties of the error. The asp-for attribute of this tag helps is used to mention the model property name of the select element. Similarly, asp-items specify the option element.  <select asp-for="Country" asp-items="Model.Countries"></select> |
| **Text Area Tag Helpers** | This Tag Helper is a similar type of Input Tag Helper. The only difference is that this tag helper is applicable on <textarea> tag. |
| **Validation Message Tag Helper** | It is used to show the validation message in our view model. |
| **Validation Summary Tag Helper** | It is used to display validation |