.NET App Dev Hands-On Lab

MVC Lab 8 –Areas

This walks you through creating an area for Make maintenance. Prior to starting this lab, you must have completed MVC Lab 7.

Note: Adjust any directory separators to your OS (e.g. \ for Windows, / for Mac/Linux)

Part 1: Create the Area and MakesController

- Create a new folder named `Areas` in the `AutoLot.Mvc` project. Right-click the folder and select Add -> Area. Select MVC Area and name it `Admin`. Delete the `Data` and `Models` folders from the scaffolded area. Delete the `ScaffoldingReadMe.txt`, as we are using attribute routing. Add a new controller named `MakesController` and update the code to the following:

```
namespace AutoLot.Mvc.Areas.Admin.Controllers;

[Area("Admin")]
[Route("Admin/[controller]/[action]")]
public class MakesController(IAppLogging<MakesController> appLogging, IMakeRepo baseRepo)
    : BaseCrudController<Make, MakesController>(appLogging, baseRepo)
{
  protected override SelectList GetLookupValues()
  {
      return null;
  }

  // GET: Admin/Makes
  [Route("/Admin")]
  [Route("/Admin/[controller]")]
  [Route("/Admin/[controller]/[action]")]
  public override IActionResult Index()
  {
    return base.Index();
  }
}
```

Part 2: Copy or Move the _ViewImports and _ViewStart Partials

- Either copy the `_ViewImports.cshtml` and `_ViewStart.cshtml` files into the Areas\Admin\Views folder or move them to the project root.

Part 3: The Make Views

Step 1: Create the Index view

- Create a new folder named `Makes` in the `Areas\Admin\Views` folder. Add a new view named `Index.cshtml` to this folder and update the markup to the following:

```
@model IEnumerable<Make>

@{
  ViewData["Title"] = "Index";
}

<h1>Index</h1>
<p>
  <a asp-action="Create">Create New</a>
</p>
<table class="table">
  <thead>
    <tr>
      <th>@Html.DisplayNameFor(model => model.Name) </th>
      <th></th>
    </tr>
  </thead>
  <tbody>
@foreach (var item in Model) {
    <tr>
      <td>@Html.DisplayFor(modelItem => item.Name) </td>
      <td>
        <item-edit item-id="@item.Id"></item-edit> |
        <item-details item-id="@item.Id"></item-details> |
        <item-delete item-id="@item.Id"></item-delete>
      </td>
    </tr>
}
  </tbody>
</table>
```

Step 2: Create the Details view

- Add a new view named `Details.cshtml` to the `Views\Makes` folder and update the markup to the following:

```
@model Make

@{
  ViewData["Title"] = "Details";
}
<h1>Details</h1>
<div>
  <h4>Make</h4>
  <hr/>
  <dl class="row">
    <dt class="col-sm-2">@Html.DisplayNameFor(model => model.Name)</dt>
    <dd class="col-sm-10">@Html.DisplayFor(model => model.Name) </dd>
  </dl>
</div>
<div>
  <item-edit item-id="@Model.Id"></item-edit>
  <item-list></item-list>
</div>
```

Step 3: Create the Create view

- Add a new view named `Create.cshtml` to the `Views\Makes` folder and update the markup to the following:

```
@model Make
@{
  ViewData["Title"] = "Create";
}
<h1>Create</h1>
<h4>Make</h4>
<hr/>
<form asp-action="Create">
  <div class="row">
    <div class="col-md-4">
      <div asp-validation-summary="ModelOnly" class="text-danger"></div>
        <label asp-for="Name" class="col-form-label"></label>
        <input asp-for="Name" class="form-control"/>
        <span asp-validation-for="Name" class="text-danger"></span>
    </div>
  </div>
  <div class="d-flex flex-row mt-3">
    <input type="submit" value="Create" class="btn btn-primary"/>  |  
    <item-list></item-list>
  </div>
</form>
@section Scripts {
  @{ await Html.RenderPartialAsync("_ValidationScriptsPartial"); }
}
```

Step 4: Create the Edit view

- Add a new view named `Edit.cshtml` to the `Views\Makes` folder and update the markup to the following:

```
@model Make
@{
  ViewData["Title"] = "Edit";
}
<h1>Edit</h1>
<h4>Make</h4><hr/>
<form asp-action="Edit">
  <div class="row">
    <div class="col-md-4">
      <div asp-validation-summary="ModelOnly" class="text-danger"></div>
      <div>
        <label asp-for="Name" class="col-form-label"></label>
        <input asp-for="Name" class="form-control"/>
        <span asp-validation-for="Name" class="text-danger"></span>
      </div>
      <input type="hidden" asp-for="Id"/>
      <input type="hidden" asp-for="TimeStamp"/>
    </div>
  </div>
  <div class="d-flex flex-row mt-3">
    <input type="submit" value="Save" class="btn btn-primary"/>   |  
    <item-list></item-list>
  </div>
</form>
@section Scripts {
  @{ await Html.RenderPartialAsync("_ValidationScriptsPartial"); }
}
```

Step 5: Create the Delete view

- Add a new view named `Delete.cshtml` to the `Views\Makes` folder and update the markup to the following:

```
@model Make
@{ ViewData["Title"] = "Delete";  }
<h1>Delete</h1>
<h3>Are you sure you want to delete this?</h3>
<div>
  <h4>Make</h4><hr />
  <dl class="row">
    <dt class = "col-sm-2">@Html.DisplayNameFor(model => model.Name) </dt>
    <dd class = "col-sm-10">@Html.DisplayFor(model => model.Name)</dd>
  </dl>
  <form asp-action="Delete">
    <input type="hidden" asp-for="Id" />
    <input type="hidden" asp-for="TimeStamp"/>
    <input type="submit" value="Delete" class="btn btn-danger" /> |
    <item-list></item-list>
  </form>
</div>
```

Part 4: Update the _Menu Partial

- Add a new menu item to the `_Menu.cshtml` partial for navigation to the Admin Area:

```
<li class="nav-item">
  <a class="nav-link text-dark" asp-area="Admin" asp-controller="Makes" asp-action="Index"
title="Makes Admin">Makes Admin<i class="fas fa-cog"></i></a>
</li>
```

Summary

The lab created the area for Make maintenance completed this hands-on lab.

Next Steps

The next labs will add the data services to abstract away the calls to the repositories.