Build an EF and ASP.NET Core 3.0 App HOL

Lab 9

This lab walks you through creating a View Component and for the menu system. Prior to starting this lab, you must have completed Lab 8.

Part 1: Create the View Component Server-Side Code

1) Create a new folder in the MVC project named `ViewComponents` and add a new class named `MenuViewComponent.cs`.

2) Add the following using statements:

```
using AutoLot.Dal.Repos.Interfaces;
using Microsoft.AspNetCore.Mvc;
using Microsoft.AspNetCore.Mvc.ViewComponents;
```

3) Make the class `public`, inherit from `ViewComponent`, and add the `Invoke` method:

```
public class Menu : ViewComponent
{
  public ViewComponentResult Invoke()
  {
  }
}
```

4) Add a constructor that takes an instance of the `IMakeRepo` and a `private` variable to hold the instance. This will be added into the class by the DI container:

```
private readonly IMakeRepo _makeRepo;
public Menu(IMakeRepo makeRepo)
{
  _makeRepo = makeRepo;
}
```

5) Implement the `Invoke` method. This method uses the `IMakeRepo` instance to get the list of Makes. If the call is successful, then the methods returns the `MenuView` partial view (to be created soon). If the call fails, the method returns a `ContentViewComponentResult` with an error message:

```
public IViewComponentResult Invoke ()
{
  var makes = _makeRepo.GetAll();
  if (makes == null)
  {
    return new ContentViewComponentResult("There was an error getting the makes");
  }
  return View("MenuView", makes);
}
```

Part 2: Update the ViewImports Partial View

Step 1: Check the _ViewImports.cshtml File

1) In order to use the `ViewComponent` as a Tag Helper, the assembly must be registered in the `_ViewImports.cshtml` file. Add the following to the end of the file:
   Note: This was done in a previous lab

```
@addTagHelper *, AutoLot.Web
```

Part 3: Create the ViewComponent Partial View

Step 1: Create the MenuView partial view

1) Add a new folder named `Components` under the `Views\Shared` folder. Add a new folder named `Menu` under the `Components` folder. Add a new partial view named `MenuView.cshtml` in the new folder.

2) Update the code to match the following:

```
@model IEnumerable<Make>
<div class="dropdown-menu">
  <a class="dropdown-item text-dark" asp-area="" asp-controller="Cars" asp-action="Index">All</a>
  @foreach (var item in Model)
  {
    <a class="dropdown-item text-dark" asp-controller="Cars" asp-action="ByMake"
      asp-route-makeId="@item.Id" asp-route-makeName="@item.Name">@item.Name</a>
  }
</div>
```

Part 4: Update the Main Layout

1) Open the `_Layout.cshtml` file in `Views\Shared` folder and add the view component as a tag helper in the li for the Inventory drop down:

```
<li class="nav-item dropdown">
  <a class="nav-link dropdown-toggle text-dark" data-toggle="dropdown">
    Inventory <i class="fa fa-car"></i>
  </a>
  <vc:menu/>
</li>
```

Summary

The lab created the View Component and its view and added it to the menu.

Next steps

In the next part of this tutorial series, you will add basic support for GDPR.