

.NET App Dev Hands-On Workshop

Razor Lab 5 – Helper Components

This lab adds helper components to the `AutoLot.Blazor` project. Before starting this lab, you must have completed Blazor Lab 4.

Part 1: Add the Navigation Helpers

- Add a new directory named `Helpers` to the `AutoLot.Blazor` project. In this folder, add another new folder named `ItemHelpers`.
- Add a new Razor component named `CreateHelper.razor` to the `ItemHelpers` folder. Clear out the contents and update it to the following:

```
<a href="/@RouteStart/create" class="text-success">
  Create <i class="fa-solid fa-plus"></i></a>
```

```
@code {
  [Parameter] public string RouteStart { get; set; }
}
```

- Add a new Razor component named `DeleteHelper.razor` to the `ItemHelpers` folder. Clear out the contents and update it to the following:

```
<a href="/@RouteStart/delete/@Id" class="text-danger">
  Delete <i class="fa-solid fa-trash"></i></a> |
```

```
@code {
  [Parameter] public int Id { get; set; }
  [Parameter] public string RouteStart { get; set; }
}
```

- Add a new Razor component named `DetailsHelper.razor` to the `ItemHelpers` folder. Clear out the contents and update it to the following:

```
<a href="/@RouteStart/details/@Id" class="text-info">
  Details <i class="fa-solid fa-info-circle"></i></a> |
```

```
@code {
  [Parameter] public int Id { get; set; }
  [Parameter] public string RouteStart { get; set; }
}
```

- Add a new Razor component named `EditHelper.razor` to the `ItemHelpers` folder. Clear out the contents and update it to the following:

```
<a href="/@RouteStart/edit/@Id" class="text-warning">
  Edit <i class="fa-solid fa-edit"></i></a> |
```

```
@code {
  [Parameter] public int Id { get; set; }
  [Parameter] public string RouteStart { get; set; }
}
```

- Add a new Razor component named `ListHelper.razor` to the `ItemHelpers` folder. Clear out the contents and update it to the following:

```
<a href="/@RouteStart/index" class="text-primary">
  Back to List <i class="fa-solid fa-list"></i></a>
@code {
  [Parameter] public string RouteStart { get; set; }
}
```

- Update the `GlobalUsings.cs` to include the new directories:

```
global using AutoLot.Blazor.Helpers;
global using AutoLot.Blazor.Helpers.ItemHelpers;
```

- Update the `_Imports.razor` file to include the new directory:

```
@using AutoLot.Blazor.Helpers
@using AutoLot.Blazor.Helpers.ItemHelpers
```

Part 2: Add the Car Helpers

- Add a new folder named `CarHelpers` under the `Helpers` folder. Add a new Razor component named `CarDetail.razor` to the `CarHelpers` folder. Clear out the contents and update it to the following:

```
<h1>Details for @CarInstance.PetName</h1>
<dl class="row">
  <dt class="col-sm-2">Make</dt>
  <dd class="col-sm-10">@CarInstance?.MakeNavigation?.Name</dd>
  <dt class="col-sm-2">Color</dt>
  <dd class="col-sm-10">@CarInstance?.Color</dd>
  <dt class="col-sm-2">Pet Name</dt>
  <dd class="col-sm-10">@CarInstance?.PetName</dd>
  <dt class="col-sm-2">Price</dt>
  <dd class="col-sm-10">@CarInstance?.Price</dd>
  <dt class="col-sm-2">Date Built</dt>
  <dd class="col-sm-10">@CarInstance?.DateBuilt?.ToLongDateString()</dd>
  <dt class="col-sm-2">Is Drivable</dt>
  <dd class="col-sm-10">@CarInstance?.IsDrivable</dd>
</dl>
@code {
  [Parameter][EditorRequired]
  public Car CarInstance { get; set; } = default!;
}
```

- Add a new Razor component named CarEdit.razor to the CarHelpers folder. Clear out the contents and update it to the following:

```

<DataAnnotationsValidator/>
<ValidationSummary/>
<div>
    <label class="col-form-label" for="quantity">Make</label>
    <InputSelect class="form-control" @bind-Value="CarInstance.MakeId">
        @foreach (var item in Makes)
        {
            <option value="@item.Id">@item.Name</option>
        }
    </InputSelect>
    <ValidationMessage For="() => CarInstance.MakeId"/>
</div>
<div>
    <label class="col-form-label" for="color">Color</label>
    <InputText class="form-control" @bind-Value="CarInstance.Color"/>
    <ValidationMessage For="() => CarInstance.Color"/>
</div>
<div>
    <label class="col-form-label" for="petName">Pet Name</label>
    <InputText class="form-control" @bind-Value="CarInstance.PetName"/>
    <ValidationMessage For="() => CarInstance.PetName"/>
</div>
<div>
    <label class="col-form-label" for="price">Price</label>
    <InputText class="form-control" @bind-Value="CarInstance.Price"/>
    <ValidationMessage For="() => CarInstance.Price"/>
</div>
<div>
    <label class="col-form-label" for="dateBuilt">Date Built</label>
    <InputDate class="form-control" @bind-Value="CarInstance.DateBuilt"/>
    <ValidationMessage For="() => CarInstance.DateBuilt"/>
</div>
<div>
    <label class="col-form-label" for="isDrivable">Is Drivable</label>
    <InputCheckbox @bind-Value="CarInstance.IsDrivable"/>
    <ValidationMessage For="() => CarInstance.IsDrivable"/>
</div>
@code {
    [Inject]
    private IMakeDataService MakeDataService { get; set; }
    [Parameter]
    [EditorRequired]
    public List<Make> Makes { get; set; }
    [Parameter]
    [EditorRequired]
    public Car CarInstance { get; set; } = default!;
}

```

- Add a new Razor component named `CarList.razor` to the `CarHelpers` folder. Clear out the contents and update it to the following:

```
<h3>Car List</h3>
<table class="table">
  <thead>
    <tr>
      <th>Make </th>
      <th>Color</th>
      <th>Pet Name</th>
      <th>Price</th>
      <th>DateBuilt</th>
      <th>Is Drivable</th>
      <th></th>
    </tr>
  </thead>
  <tbody>
    @foreach (var c in Cars)
    {
      <tr>
        <td>@c.MakeNavigation.Name</td>
        <td>@c.Color</td>
        <td>@c.PetName</td>
        <td>@c.Price</td>
        <td>@c.DateBuilt</td>
        <td>@c.IsDrivable</td>
        <td>
          <EditHelper Id="@c.Id" RouteStart="cars"/>
          <DetailsHelper Id="@c.Id" RouteStart="cars"/>
          <DeleteHelper Id="@c.Id" RouteStart="cars"/>
        </td>
      </tr>
    }
  </tbody>
</table>
@code {
  [Parameter][EditorRequired]
  public List<Car> Cars { get; set; }
}
```

- Update the `GlobalUsings.cs` to include the new directories:

```
global using AutoLot.Blazor.Helpers.CarHelpers;
```

- Update the `_Imports.razor` file to include the new directory:

```
@using AutoLot.Blazor.Helpers.CarHelpers
```

Summary

This lab added navigation and template helpers to the client application.

Next Steps

The following lab will finish the Car pages.

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