

# Build an EF and ASP.NET Core 3.0 App HOL

## Lab 10

This lab walks you through updating your site with basic GDPR support. Prior to starting this lab, you must have completed Lab 9.

### Part 1: Update Startup.cs

#### Step 1: Update the Configure method

1) After the call to UseStaticFiles, add UseCookiePolicy:

```
app.UseHttpsRedirection();
app.UseWebOptimizer();
app.UseStaticFiles();
app.UseCookiePolicy();
app.UseRouting();
```

#### Step 2: Update the ConfigureServices method

1) After the call to services.AddControllersWithViews(), configure the cookie policy options:

```
services.Configure<CookiePolicyOptions>(options =>
{
    // This lambda determines whether user consent for non-essential cookies is
    // needed for a given request.
    options.CheckConsentNeeded = context => true;
    options.MinimumSameSitePolicy = SameSiteMode.None;
});
```

2) After configuring the cookie policy options, set tempdata and session cookies as essential:

```
// The TempData provider cookie is not essential. Make it essential
// so TempData is functional when tracking is disabled.
services.Configure<CookieTempDataProviderOptions>(options => { options.Cookie.IsEssential = true; });
services.AddSession(options => { options.Cookie.IsEssential = true; });
```

## Part 2: Update the Home Controller

Add actions to grant and withdraw consent

### Step 1: Update the using statements

- 1) Add the following using statements to the top of the HomeController.cs file:

```
using Microsoft.AspNetCore.Http.Features;
using AutoLot.Web.Extensions;
```

### Step 2: Add the GrantConsent action method

- 1) The GrantConsent is used when a user agrees to the cookie policy:

```
[HttpGet]
public IActionResult GrantConsent()
{
    HttpContext.Features.Get<ITrackingConsentFeature>().GrantConsent();
    return RedirectToAction(nameof(Index), nameof(HomeController).RemoveController(),
        new {area = ""});
}
```

### Step 3: Add the WithdrawConsent action method

- 1) The WithdrawConsent is used when a user changes their mind about the cookie policy and no longer grants consent:

```
[HttpGet]
public IActionResult WithdrawConsent()
{
    HttpContext.Features.Get<ITrackingConsentFeature>().WithdrawConsent();
    return RedirectToAction(nameof(Index), nameof(HomeController).RemoveController(),
        new {area = ""});
}
```

## Part 3: Add/Update the views

### Step 1: Add the `_cookieConsentPartial` partial view

- 1) Add a new partial view named `_cookieConsentPartial.cshtml` in the `Views\Shared` folder.
- 2) Update the code to match the following:

```
@using Microsoft.AspNetCore.Http.Features
@{
    var consentFeature = Context.Features.Get<ITrackingConsentFeature>();
    var showBanner = !consentFeature?.CanTrack ?? false;
    var cookieString = consentFeature?.CreateConsentCookie();
}
@if (showBanner)
{
    <div id="cookieConsent" class="alert alert-info alert-dismissible fade show" role="alert">
        Use this space to summarize your privacy and cookie use policy. <a asp-area="" asp-
        controller="Home" asp-action="Privacy">Learn More</a>.
        <button type="button" class="accept-policy close" data-dismiss="alert" aria-label="Close"
        data-cookie-string="@cookieString">
            <span aria-hidden="true">Accept</span>
        </button>
    </div>
    <script>
        (function() {
            var button = document.querySelector("#cookieConsent button[data-cookie-string]");
            button.addEventListener("click",
                function(event) {
                    document.cookie = button.dataset.cookieString;
                },
                false);
        })();
    </script>
}
```

### Step 2: Update the `_Layout` partial view

- 1) In the `_LayoutPartial.cshtml` file (located in `Views\Shared`), update the markup just after the closing `</header>` tag to the following:

```
<div class="container">
    <partial name="_CookieConsentPartial"/>
    <main role="main" class="pb-3">
        @RenderBody()
    </main>
</div>
```

## Step 3: Update the \_Menu partial view

1) In the \_Menu.cshtml file (located in Views\Shared), add the following using statement:

```
@using Microsoft.AspNetCore.Http.Features
```

2) Update the razor block to the following:

```
@{  
    var dealerInfo = DealerInfoMonitor.CurrentValue;  
    var consentFeature = Context.Features.Get<ITrackingConsentFeature>();  
    var showBanner = !consentFeature?.CanTrack ?? false;  
}
```

3) Add the following after the Privacy menu item (before the closing </ul> tag):

```
@if (showBanner)  
{  
    <li class="nav-item">  
        <a class="nav-link text-dark" asp-controller="Home" asp-action="GrantConsent"  
            title="Accept Cookie Policy">Accept Cookie Policy <i class="fas fa-cookie-bite"></i></a>  
    </li>  
}  
else  
{  
    <li class="nav-item">  
        <a class="nav-link text-dark" asp-controller="Home" asp-action="WithdrawConsent"  
            title="Revoke Cookie Policy">Revoke Cookie Policy <i class="fas fa-cookie"></i></a>  
    </li>  
}
```

## Summary

This lab added basic support for GDPR and completes with workshop.

## Next Steps

In the next lab, you will add an MVC Area to the application.