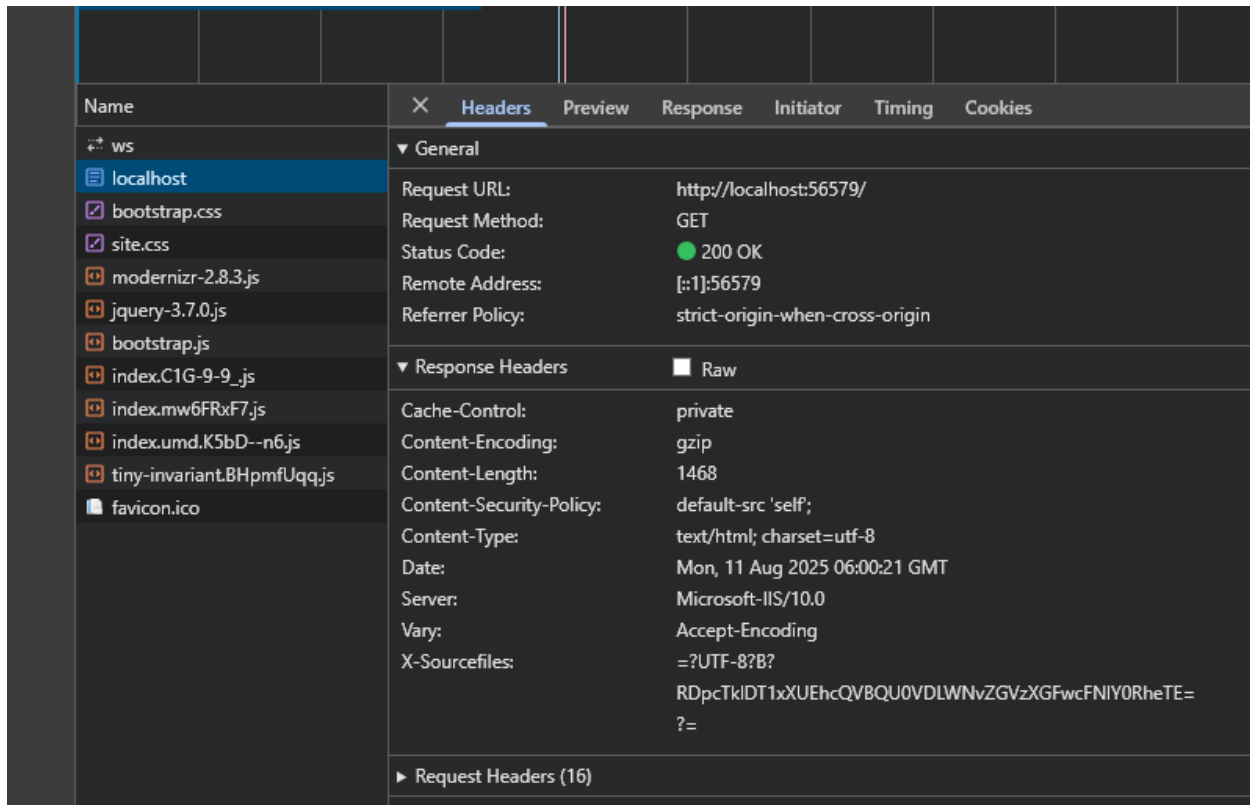


```
<configuration>
  <appSettings>
    <add key="webpages:Version" value="3.0.0.0" />
    <add key="webpages:Enabled" value="false" />
    <add key="ClientValidationEnabled" value="true" />
    <add key="UnobtrusiveJavaScriptEnabled" value="true" />
  </appSettings>
  <system.web>
    <compilation debug="true" targetFramework="4.7.2" />
    <httpRuntime enableVersionHeader="false" />
  </system.web>
  <system.webServer>
    <httpProtocol>
      <customHeaders>
        <remove name="X-Powered-By" />
        <add name="Content-Security-Policy" value="default-src 'self';" />
      </customHeaders>
    </httpProtocol>
  </system.webServer>
</runtime>
```

```
namespace appSecDay1
{
    0 references
    public class MvcApplication : System.Web.HttpApplication
    {
        0 references
        protected void Application_Start()
        {
            AreaRegistration.RegisterAllAreas();
            FilterConfig.RegisterGlobalFilters(GlobalFilters.Filters);
            RouteConfig.RegisterRoutes(RouteTable.Routes);
            BundleConfig.RegisterBundles(BundleTable.Bundles);
            MvcHandler.DisableMvcResponseHeader = true;
        }
    }
}
```



COMPLETE CODE

Web.config

```
<?xml version="1.0" encoding="utf-8"?>
<!--
  For more information on how to configure your ASP.NET application, please visit
  https://go.microsoft.com/fwlink/?LinkId=301880
-->
<configuration>
  <appSettings>
    <add key="webpages:Version" value="3.0.0.0" />
    <add key="webpages:Enabled" value="false" />
    <add key="ClientValidationEnabled" value="true" />
    <add key="UnobtrusiveJavaScriptEnabled" value="true" />
  </appSettings>
  <system.web>
    <compilation debug="true" targetFramework="4.7.2" />
    <httpRuntime enableVersionHeader="false" />
  </system.web>
  <system.webServer>
    <httpProtocol>
      <customHeaders>
        <remove name="X-Powered-By"/>
        <add name="Content-Security-Policy" value="default-src
'self';" />
      </customHeaders>
    </httpProtocol>
  </system.webServer>
</runtime>
```

```
<assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
  <dependentAssembly>
    <assemblyIdentity name="Antlr3.Runtime" publicKeyToken="eb42632606e9261f" />
    <bindingRedirect oldVersion="0.0.0.0-3.5.0.2" newVersion="3.5.0.2" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="Microsoft.Web.Infrastructure"
publicKeyToken="31bf3856ad364e35" />
    <bindingRedirect oldVersion="0.0.0.0-2.0.0.0" newVersion="2.0.0.0" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="Newtonsoft.Json" publicKeyToken="30ad4fe6b2a6aeed"
/>
    <bindingRedirect oldVersion="0.0.0.0-13.0.0.0" newVersion="13.0.0.0" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="System.Web.Optimization"
publicKeyToken="31bf3856ad364e35" />
    <bindingRedirect oldVersion="1.0.0.0-1.1.0.0" newVersion="1.1.0.0" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="WebGrease" publicKeyToken="31bf3856ad364e35" />
    <bindingRedirect oldVersion="1.0.0.0-1.6.5135.21930"
newVersion="1.6.5135.21930" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="System.Web.Helpers"
publicKeyToken="31bf3856ad364e35" />
    <bindingRedirect oldVersion="1.0.0.0-3.0.0.0" newVersion="3.0.0.0" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="System.Web.WebPages"
publicKeyToken="31bf3856ad364e35" />
    <bindingRedirect oldVersion="1.0.0.0-3.0.0.0" newVersion="3.0.0.0" />
  </dependentAssembly>
  <dependentAssembly>
    <assemblyIdentity name="System.Web.Mvc" publicKeyToken="31bf3856ad364e35" />
    <bindingRedirect oldVersion="1.0.0.0-5.2.9.0" newVersion="5.2.9.0" />
  </dependentAssembly>
</assemblyBinding>
</runtime>
<system.codedom>
  <compilers>
    <compiler language="c#;cs;csharp" extension=".cs"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.CSharpCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=2.0.1.0,
Culture=neutral, PublicKeyToken=31bf3856ad364e35" warningLevel="4"
compilerOptions="/langversion:default /nowarn:1659;1699;1701" />
    <compiler language="vb;vbs;visualbasic;vbscript" extension=".vb"
type="Microsoft.CodeDom.Providers.DotNetCompilerPlatform.VBCodeProvider,
Microsoft.CodeDom.Providers.DotNetCompilerPlatform, Version=2.0.1.0,
Culture=neutral, PublicKeyToken=31bf3856ad364e35" warningLevel="4"
compilerOptions="/langversion:default /nowarn:41008
/define:_MYTYPE=\"Web\"; /optionInfer+" />
  </compilers>
</system.codedom>
</configuration>
```

GLOBAL.ASAX.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;
using System.Web.Optimization;
using System.Web.Routing;

namespace appSecDay1
{
    public class MvcApplication : System.Web.HttpApplication
    {
        protected void Application_Start()
        {
            AreaRegistration.RegisterAllAreas();
            FilterConfig.RegisterGlobalFilters(GlobalFilters.Filters);
            RouteConfig.RegisterRoutes(RouteTable.Routes);
            BundleConfig.RegisterBundles(BundleTable.Bundles);
            MvcHandler.DisableMvcResponseHeader = true;
        }
    }
}
```

REFLECTION

I set up my ASP.NET MVC app to remove the X-AspNet-Version, X-AspNetMvc-Version, and X-Powered-By headers by tweaking the web.config file and adding some code changes. In web.config, I used the <customHeaders> section under <system.webServer> to strip those headers from the HTTP response, set enableVersionHeader="false" in <httpRuntime>, and added MvcHandler.DisableMvcResponseHeader = true; in Global.asax so the X-AspNetMvc-Version header would not appear at all. I also added a Content Security Policy (CSP) in the same <customHeaders> block: <add name="Content-Security-Policy" value="default-src 'self';" />. This restricts scripts, styles, and images so they can only load from the same origin, which helps prevent XSS attacks. I encountered a few problems, such as making sure there was only one <system.webServer> section to avoid conflicts, and I got an internal server error because I had a duplicate <httpRuntime targetFramework="4.7.2" /> line, which stopped the app from running until I removed it. After testing everything in the browser developer tools, I learned how these headers can reveal framework details and how adding a proper CSP can greatly improve security against client-side attacks.