

# .NET App Dev Hands-On Lab

## MVC Lab 1 – MVC Project

This lab walks you through creating the ASP.NET Core Web Application using the MVC pattern project and adding/updating the NuGet packages. Prior to starting this lab, you must have completed EF Lab 7.

### Part 1: Creating the Project

- The `mvc` template is extremely configurable. Options can be explored by using `-h` (help):

```
dotnet new mvc -h
```

- Create the ASP.NET Core web application project using the model-view-controller pattern:

[Windows]

```
dotnet new mvc -lang c# -n AutoLot.Mvc -au none -o .\AutoLot.Mvc -f net8.0
```

- Add the project to the solution and project references:

```
dotnet sln AutoLot.sln add AutoLot.Mvc
dotnet add AutoLot.Mvc reference AutoLot.Models
dotnet add AutoLot.Mvc reference AutoLot.Dal
dotnet add AutoLot.Mvc reference AutoLot.Services
```

- Add the required NuGet packages to the project:

```
dotnet add AutoLot.Mvc package AutoMapper -v [12.0.*,13.0)
dotnet add AutoLot.Mvc package System.Text.Json -v [8.0.*,9.0)
dotnet add AutoLot.Mvc package LigerShark.WebOptimizer.Core -v [3.0.*,4)
dotnet add AutoLot.Mvc package Microsoft.Web.LibraryManager.Build -v [2.1.*,3.0)
dotnet add AutoLot.Mvc package Microsoft.EntityFrameworkCore.SqlServer -v [8.0.*,9.0)
dotnet add AutoLot.Mvc package Microsoft.EntityFrameworkCore.Design -v [8.0.*,9.0)
dotnet add AutoLot.Mvc package Microsoft.VisualStudio.Web.CodeGeneration.Design -v [8.0.*,9.0)
dotnet add AutoLot.Mvc package Microsoft.VisualStudio.Threading.Analyzers -v [17.7.*,)
```

### Part 2: Disable Nullable Reference Types and Enable Global Implicit Using Statements

Open the new project file (\*.csproj) and update the PropertyGroup to the following (change is in bold):

```
<PropertyGroup>
  <TargetFramework>net8.0</TargetFramework>
  <ImplicitUsings>enable</ImplicitUsings>
  <Nullable>disable</Nullable>
</PropertyGroup>
```

## Part 3: Adjust the launchsettings.json file

Open the `launchsettings.json` file (in the `Properties` directory of the project) and move the `HTTPS` profile to the top.

### Summary

This lab created the ASP.NET Core Web Application project and added the NuGet packages and the appropriate references.

### Next steps

In the next part of this tutorial series, build the services layer.