

.NET App Dev Hands-On Lab

API Lab 1 – Solution and Projects

This lab walks you through creating the ASP.NET Core RESTful service project and adding/updating the NuGet packages. Prior to starting this lab, you must have completed EF Lab 01.

Part 1: Creating the Projects

The API labs build onto the current AutoLot solution.

Step 1: Create the ASP.NET Core RESTful Service Project

- Create the ASP.NET Core service application project:

[Windows]

```
dotnet new webapi -lang c# -n AutoLot.Api -au none -o .\AutoLot.Api --use-controllers -f net8.0
```

- Add the project to the solution and project references:

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

- Add the required NuGet packages to the project:

```
dotnet add AutoLot.Api package Asp.Versioning.Mvc -v [8.*,9.0)
dotnet add AutoLot.Api package Asp.Versioning.Mvc.ApiExplorer -v [8.*,9.0)
dotnet add AutoLot.Api package Microsoft.EntityFrameworkCore.SqlServer -v [8.0.*,9.0)
dotnet add AutoLot.Api package Microsoft.EntityFrameworkCore.Design -v [8.0.*,9.0)
dotnet add AutoLot.Api package Microsoft.VisualStudio.Threading.Analyzers -v [17.*,18.0)
dotnet add AutoLot.Api package Microsoft.VisualStudio.Web.CodeGeneration.Design -v [8.0.*,9.0)
dotnet add AutoLot.Api package Swashbuckle.AspNetCore -v [6.5.*,7.0)
dotnet add AutoLot.Api package Swashbuckle.AspNetCore.Annotations -v [6.5.*,7.0)
dotnet add AutoLot.Api package Swashbuckle.AspNetCore.Swagger -v [6.5.*,7.0)
dotnet add AutoLot.Api package Swashbuckle.AspNetCore.SwaggerGen -v [6.5.*,7.0)
dotnet add AutoLot.Api package Swashbuckle.AspNetCore.SwaggerUI -v [6.5.*,7.0)
dotnet add AutoLot.Api package System.Text.Json -v [8.0.*,9.0)
```

Part 2: Disable Nullable Reference and Invariant Globalization Types

Open the project file (*.csproj) for the new projects and disable nullable types and set invariant globalization to false if the node is present (changes in bold):

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

Part 3: Adjust the launchsettings.json file

- Step 1: Move the https profile to the top in AutoLot.Api

If a profile isn't selected, the first profile in the list will be selected by default. Move the https profile to the top so it gets selected and not the http profile.

Part 4: Remove Extra Scaffolded Files

- Remove the following scaffolded files:

```
Controllers/WeatherForecastController.cs  
WeatherForecast.cs
```

Summary

This lab created the solution and the projects, and added the NuGet packages, and the appropriate references.

Next steps

In the next part of this tutorial series, you will start working with the Web API project.