## **Homework**

## **Common**

This homework based on results from **Razor and Views**module.

### ****Task 1. Base API Controllers****

Create simple API Controllers, which return collection of categories and products.

Configure routings so that controllers will be accessed by path **<site\_root>/api**

**Materials:**

* [Create a Web API with ASP.NET Core and Visual Studio for Windows](https://docs.microsoft.com/en-us/aspnet/core/tutorials/first-web-api)

### ****Task 2. Simple REST clients****

Create 2 simple demo clients:

* Console .Net [Core]
* HTML Page + JS

which get and show categories and products lists.

**Materials:**

* [Call a Web API From a .NET Client (C#)](https://docs.microsoft.com/en-us/aspnet/web-api/overview/advanced/calling-a-web-api-from-a-net-client)
* [Calling the Web API with Javascript and jQuery](https://docs.microsoft.com/en-us/aspnet/web-api/overview/getting-started-with-aspnet-web-api/tutorial-your-first-web-api#calling-the-web-api-with-javascript-and-jquery)

### ****Task 3. Edit Data****

Update API controllers form task 1:

* For products add operations: create, update, delete
* For categories – get and update image.

### ****Task 4. Metadata, API documentation and client generation****

Add generation of metadata and (optional) API documentation, based on:

* [Swashbuckle.AspNetCore](https://github.com/domaindrivendev/Swashbuckle.AspNetCore)
* [NSwag](https://github.com/RSuter/NSwag)
* any other

Create separate unit test project and generate in this project client proxy with use one of tools:

* [swagger-codegen](https://github.com/swagger-api/swagger-codegen)
* [autorest](https://github.com/Azure/AutoRest)
* any other

**Materials:**

* [ASP.NET Core Web API help pages with Swagger / Open API](https://docs.microsoft.com/en-us/aspnet/core/tutorials/web-api-help-pages-using-swagger)