Quick introduction

The conception of this *sample* is based on a set of features issued from :

* **ASP.NET Core** since using Microsoft.AspNetCore packages
* **CK-World** since using CK.Auth, CK.DB and others CK packages.

If you are not familiar to these already existing packages, you should gather material about them, because you may will be invited in this *start guide* to use some of these packages notions and they sometimes can be a little bit abstract.

About following this guide

You must be aware that you will meet with errors. If that’s the case, keep in mind not to worry about them **until** this guide tells you to.

Solution configuration

First of all, please note that your whole project **must** be implemented in a git repository.

Open **Visual Studio** and create a new “CK-Sample” empty solution.

Add a “Solution Items” **folder** in it.

Add a new **item** into your previously created folder, named “Nuget.config”.

Write down the following lines :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | <configuration> |
| +++ | 2 | <packageSources> |
| +++ | 3 | <clear /> |
| +++ | 4 | <add key="Invenietis-Release" value="https://www.myget.org/F/invenietis-release/api/v3/index.json" /> |
| +++ | 5 | <add key="Invenietis-Preview" value="https://www.myget.org/F/invenietis-preview/api/v3/index.json" /> |
| +++ | 6 | <add key="Invenietis-CI" value="https://www.myget.org/F/invenietis-ci/api/v3/index.json" /> |
| +++ | 7 | </packageSources> |
| +++ | 8 | </configuration> |

Open your **solution folder** in your file explorer. Create a new folder named “Common”.

Add a new file named “Shared.props” in it, and add the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | <Project> |
| +++ | 2 | <!-- SharedDir is the /Common directory. --> |
| +++ | 3 | <PropertyGroup> |
| +++ | 4 | <SharedDir>$(MSBuildThisFileDirectory)</SharedDir> |
| +++ | 5 | <IsTestProject Condition="$(MSBuildProjectName.EndsWith('.Tests'))">true</IsTestProject> |
| +++ | 6 | </PropertyGroup> |
| +++ | 7 |  |
| +++ | 8 | <PropertyGroup> |
| +++ | 9 | <!-- Standard properties. --> |
| +++ | 10 | <AssemblyOriginatorKeyFile>$(SharedDir)SharedKey.snk</AssemblyOriginatorKeyFile> |
| +++ | 11 | <SignAssembly>true</SignAssembly> |
| +++ | 12 | <PublicSign Condition=" '$(OS)' != 'Windows\_NT' ">true</PublicSign> |
| +++ | 13 | <RepositoryType>git</RepositoryType> |
| +++ | 14 | </PropertyGroup> |
| +++ | 15 | </Project> |

Download and put the “Shared.snk” into that folder.

**Import** the *Shared.props* you’ve just created into your *Solution Items*.

**Congrats *!***

You have created and configurated your solution. 😉

Data project configuration

Create a new **.NET Standard** Class Library, named “CK.Sample.Data”.

Edit its .csproj by adding the following lines :

|  |  |  |
| --- | --- | --- |
| ø | 1 | <Project Sdk="Microsoft.NET.Sdk"> |
| ø | 2 |  |
| +++ | 3 | <Import Project="..\Common\Shared.props" /> |
| ø | 4 |  |
| ø | 5 | <PropertyGroup> |
| ~~~ | 6 | <TargetFrameworks>netstandard2.0;net461</TargetFrameworks> |
| +++ | 7 | <CopyLocalLockFileAssemblies>True</CopyLocalLockFileAssemblies> |
| +++ | 8 | </PropertyGroup> |
| +++ | 9 |  |
| +++ | 10 | <ItemGroup> |
| +++ | 11 | <PackageReference Include="CK.DB.Auth" Version="1.0.1-C0028-develop" /> |
| +++ | 12 | <PackageReference Include="CK.DB.User.UserGithub" Version="0.1.1-C0029-develop" /> |
| +++ | 13 | <PackageReference Include="CK.DB.User.UserPassword" Version="1.0.1-C0028-develop" /> |
| +++ | 14 | <PackageReference Include="CK.DB.Actor.ActorEmail" Version="1.0.1-C0028-develop" /> |
| +++ | 15 | </ItemGroup> |
| ø | 16 |  |
| +++ | 17 | </Project> |

Add a new **class** to your project, named “Package”.

Add the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | using CK.Setup; |
| +++ | 2 | using CK.SqlServer.Setup; |
| +++ | 3 |  |
| ø | 4 | namespace CKS.Data |
| +++ | 5 | { |
| +++ | 6 | [SqlPackage( |
| +++ | 7 | ResourcePath = "Res", |
| +++ | 8 | Schema = "CK", |
| +++ | 9 | Database = typeof( SqlDefaultDatabase ), |
| +++ | 10 | ResourceType = typeof( Package ) ), |
| +++ | 11 | Versions( "1.0.0" )] |
| +++ | 12 | public abstract class Package : SqlPackage |
| +++ | 13 | { |
| +++ | 14 | void StobjConstruct( |
| +++ | 15 | CK.DB.Actor.ActorEMail.Package actorEmailPckg, |
| +++ | 16 | CK.DB.User.UserPassword.Package userPswdPckg, |
| +++ | 17 | CK.DB.User.UserGithub.Package userGithubPckg |
| +++ | 18 | ) |
| +++ | 19 | { |
| +++ | 20 |  |
| +++ | 21 | } |
| +++ | 22 | } |
| ø | 23 | } |

.NET Framework tests project configuration

Open your solution folder with your file explorer. Create a new folder named “Tests”.

Add a new file named “TestHelper.config”, and add the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | <?xml version="1.0" encoding="utf-8"?> |
| +++ | 2 | <configuration> |
| +++ | 3 |  |
| +++ | 4 | <appSettings> |
| +++ | 5 | <add key="DefaultBinPaths" value="{CKSetupAutoTargetProjectBinFolder}" /> |
| +++ | 6 | <add key="Monitor/LogToTextFile" value="false" /> |
| +++ | 7 | <add key="Monitor/LogToConsole" value="true" /> |
| +++ | 8 | <add key="DatabaseName" value="DB\_CK\_Sample"/>  <add key="SqlServer/MasterConnectionString" |
| +++ | 9 | value="Server=.;Database=master;Trusted\_connection=true;" /> |
| +++ | 10 | </appSettings> |
| +++ | 11 |  |
| +++ | 12 | </configuration> |

You can configure your own database connection string at lines **8-9**, which is very useful for deviant devs.

Go back into Visual Studio. Create a new folder named “Tests”. Don’t add the existing one.

Add the existing *TestHelper.config* to that folder.

Add a new **.NET Framework** Class Library in it, named “CK.Sample.Data.Tests”.

Add a new class to your project, named “DBSetup”.

Add the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | using NUnit.Framework; |
| +++ | 2 |  |
| +++ | 3 | namespace CK.Sample.Data.Tests |
| +++ | 4 | { |
| +++ | 5 | [TestFixture] |
| +++ | 6 | public class DBSetup : CK.DB.Tests.DBSetup |
| +++ | 7 | { |
| +++ | 8 | } |
| +++ | 9 | } |

Add a new folder into your class library, named “From”.

Since there are many classes and many lines to copy by extension, you are going to download a **.zip** file.

https://mega.nz/#!qURHHRRK!JcnG6vEk2yiyo1-HQAZQ7F-1JhsU3WgzLsEITHiEoT8

Extract your archive content inside your *From* folder (password is *notdeviant*).

.NET Core tests project configuration

A a new **.NET Core** Console Application into your *Tests* solution folder.

Edit its .csproj by adding the following lines :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | <Project Sdk="Microsoft.NET.Sdk"> |
| ø | 2 |  |
| +++ | 3 | <Import Project="..\..\Common\Shared.props" /> |
| ø | 4 |  |
| ø | 5 | <PropertyGroup> |
| ø | 6 | <TargetFramework>netcoreapp2.0</TargetFramework> |
| ø | 7 | <OutputType>Exe</OutputType> |
| ø | 8 | <OriginProjectName>CK.Sample.Data.Tests</OriginProjectName> |
| ø | 9 | </PropertyGroup> |
| +++ | 10 |  |
| +++ | 11 | <ItemGroup> |
| +++ | 12 | <ProjectReference Include="..\..\CK.Sample.Data\CK.Sample.Data.csproj" /> |
| +++ | 13 | <PackageReference Include="NUnit" Version="3.10.1" /> |
| +++ | 14 | <PackageReference Include="NUnitLite" Version="3.10.1" /> |
| +++ | 15 | <PackageReference Include="CK.DB.Tests.NUnit" Version="6.0.1-C0036-develop" /> |
| +++ | 16 | <PackageReference Include="CK.DB.User.UserGithub.Tests" Version="0.1.1-C0029-develop" /> |
| +++ | 17 | <PackageReference Include="CK.DB.User.UserPassword.Tests" Version="1.0.1-C0028-develop" /> |
| +++ | 18 | </ItemGroup> |
| +++ | 29 |  |
| +++ | 20 | <ItemGroup> |
| +++ | 21 | <Compile Include="..\$(OriginProjectName)\\*\*\\*.cs" Exclude="..\$(OriginProjectName)\obj\\*\*"> |
| +++ | 22 | <Link>Include\%(RecursiveDir)%(Filename)%(Extension)</Link> |
| +++ | 23 | <Visible>true</Visible> |
| +++ | 24 | </Compile> |
| +++ | 25 | </ItemGroup> |
| +++ | 26 |  |
| +++ | 27 | <ItemGroup> |
| +++ | 28 | <Service Include="{82a7f48d-3b50-4b1e-b82e-3ada8210c358}" /> |
| +++ | 29 | </ItemGroup> |
| ø | 30 |  |
| ø | 31 | </Project> |

Edit the “Program” class inside your project.

Add the following lines and then add the necessary *usings* statements :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | namespace CKS.Data.NetCore.Tests |
| +++ | 2 | { |
| +++ | 3 | public class Program |
| +++ | 4 | { |
| +++ | 5 | public static int Main( string[] args ) |
| +++ | 6 | { |
| +++ | 7 | return new AutoRun( typeof( Program ).GetTypeInfo().Assembly ) |
| +++ | 8 | .Execute( args, new ExtendedTextWrapper( Console.Out ), Console.In ); |
| +++ | 9 | } |
| +++ | 10 | } |
| +++ | 11 | } |

Tests projects final configuration

Open your solution folder in your file explorer. Close VS, and move your Tests projects into your existing *Tests* folder.

Edit your .sln file consequently.

**Top-hole *!***

Both of your tests project should not throw you any error when you try to build them.

Web application project configuration

Create a new **.NET Core** Web Application, named “WebApp”.

Edit its .csproj by adding the following lines :

|  |  |  |
| --- | --- | --- |
| ø | 1 | <Project Sdk="Microsoft.NET.Sdk"> |
| ø | 2 |  |
| ø | 3 | <PropertyGroup> |
| ø | 4 | <OutputType>Exe</OutputType> |
| ø | 5 | <TargetFramework>netcoreapp2.0</TargetFramework> |
| ø | 6 | </PropertyGroup> |
| +++ | 7 |  |
| +++ | 8 | <ItemGroup> |
| +++ | 9 | <PackageReference Include="CK.AspNet" Version="2.0.1-C0036-develop" /> |
| +++ | 10 | <PackageReference Include="CK.AspNet.Auth" Version="1.1.1-C0049-develop" /> |
| +++ | 11 | <PackageReference Include="CK.DB.AspNet.Auth" Version="1.1.1-C0049-develop" /> |
| +++ | 12 | <PackageReference Include="Microsoft.AspNetCore.Authentication.OAuth" Version="2.0.3" /> |
| +++ | 13 | <PackageReference Include="Microsoft.AspNetCore.Cors" Version="2.0.3" /> |
| +++ | 14 | <PackageReference Include="Microsoft.AspNetCore.Server.Kestrel" Version="2.0.3" /> |
| +++ | 15 | <PackageReference Include="Microsoft.Extensions.Logging.Console" Version="2.0.2" /> |
| +++ | 16 | <PackageReference Include="Microsoft.Extensions.Configuration.Json" Version="2.0.2" /> |
| +++ | 17 | <PackageReference Include="Microsoft.AspNetCore.Authentication.Cookies" Version="2.0.4" /> |
| +++ | 18 | </ItemGroup> |
| +++ | 29 |  |
| +++ | 20 | <ItemGroup> |
| +++ | 21 | <ProjectReference Include="..\CK.Sample.Data\CK.Sample.Data.csproj" /> |
| +++ | 22 | </ItemGroup> |
| +++ | 23 |  |
| +++ | 24 | <ItemGroup> |
| +++ | 25 | <None Update="appsettings.Development.json"> |
| +++ | 26 | <CopyToOutputDirectory>PreserveNewest</CopyToOutputDirectory> |
| +++ | 27 | </None> |
| +++ | 28 | <None Update="appSettings.json"> |
| +++ | 29 | <CopyToOutputDirectory>PreserveNewest</CopyToOutputDirectory> |
| +++ | 30 | </None> |
| +++ | 31 | </ItemGroup> |
| ø |  |  |
| ø |  | </Project> |

Edit both of its classes “Startup” and “Program”.

Since there are many lines to copy (more than a hundred), you are going to download a **.zip** file.

https://mega.nz/#!HQgWTahD!khhwHBYgMgTDWqzEWXsLvn3d3Oj5Yhkc90xAaPS0G58

Extract your archive content inside your *WebApp* folder, replacing their older versions. The password is the same that the one you’ve already used : *notdeviant*.

Add a new folder in your *WebApp*, named “Properties”.

Add a file named “launchSettings” (json), with the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | { |
| +++ | 2 | "profiles": { |
| +++ | 3 | "WebApp": { |
| +++ | 4 | "commandName": "Project", |
| +++ | 5 | "environmentVariables": { |
| +++ | 6 | "ASPNETCORE\_ENVIRONMENT": "Development" |
| +++ | 7 | } |
| +++ | 8 | } |
| +++ | 9 | } |

Go back in your *WebApp*. Add a new file named “appsettings” (json).

Add the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | { |
| +++ | 2 | "Monitoring": { |
| +++ | 3 | "LogPath": "WebAppLogs", |
| +++ | 4 | "GrandOutput": { |
| +++ | 5 | "Handlers": { |
| +++ | 6 | "TextFile": { "Path": "Textual" } |
| +++ | 7 | } |
| +++ | 8 | } |
| +++ | 9 | }, |
| +++ | 10 |  |
| +++ | 11 | "Authentication": { |
| +++ | 12 | "GitHub": { |
| +++ | 13 | "ClientId": "", |
| +++ | 14 | "ClientSecret": "" |
| +++ | 15 | } |
| +++ | 16 | } |
| +++ | 17 | } |

And then add a new file named “appsettings.Development” (json).

Add the following lines in it :

|  |  |  |
| --- | --- | --- |
| +++ | 1 | { |
| +++ | 2 | "Monitoring": { |
| +++ | 3 | "GrandOutput": { |
| +++ | 4 | "Handlers": { |
| +++ | 5 | "Console": true |
| +++ | 6 | } |
| +++ | 7 | } |
| +++ | 8 | }, |
| +++ | 9 | "StObjMap": { |
| +++ | 10 | "Path": "CK.Sample.Data\\bin\\Debug\\netstandard2.0\\CK.StObj.AutoAssembly.dll" |
| +++ | 11 | } |
| +++ | 12 | } |