PE_PRN221_FA24_000466 - Note
FALL 2024
Subject: PRN222

INSTRUCTIONS

Please read the instructions carefully before doing the questions.

- You are **NOT allowed** to use any other materials. You are **NOT allowed** to use any device to share data with others.
- You must use **Visual Studio 2019 or above, MSSQL Server 2008 or above** for your development tools.

IMPORTANT – before you start doing your solution, MUST do the following steps:

1. Create Solution in Visual Studio named **PE_PRN221_FA24_000466_StudentName**. Inside your Solution, the Project ASP.NET Core Razor Page must be named: **PharmaceuticalManagement_StudentName.**
2. To do your program, you must use **ASP.NET Core Web App (Razor Pages), apply 3-Layer architecture** (Presentation Layer, Business Logic Layer, Data Access Layer), there are at least 2 Projects for the Solution. *The database connection string must get from the appsettings.json file.*

   In the case your code connects direct to the database from ASP.NET Core Web App (Razor Pages) or hard coded the connection string, you will get 0 point.
3. Create your MS SQL database named **Fall24PharmaceuticalDB** by running code in script **Fall24PharmaceuticalDB.sql.**
4. Set the default user interface for your project as a **Login** page.
5. ***If there are syntax errors or compilation errors in your PE program, you will not pass the PE requirements, the mark will be 0.***
6. ***Your work will be considered invalid (0 point) if your code inserts stuff that is unrelated to the test.***

REFERENCES ***(this session just for reference, student can use other approach to do the practical exam)***

- Install package using CLI or Power Shell

	Microsoft.EntityFrameworkCore.SqlServer version	*Microsoft.Extensions.Configuration, Microsoft.Extensions.Configuration.Json version*
.NET 5	*5.0.17*	*5.0.0*
.NET 6	*6.0.27*	*6.0.1/6.0.0*
.NET 7	*7.0.16*	*7.0.0*
.NET 8	*8.0.2*	*8.0.0*

dotnet add package Microsoft.EntityFrameworkCore.SqlServer --version 5.0.17
dotnet add package Microsoft.EntityFrameworkCore.Design --version 5.0.17
dotnet add package Microsoft.EntityFrameworkCore.Tools --version 5.0.17

dotnet add package Microsoft.Extensions.Configuration --version 5.0.0
dotnet add package Microsoft.Extensions.Configuration.Json --version 5.0.0

- Connection String
"Server=**(local)**;Uid=sa;Pwd=**1234567890**;Database=**Fall24PharmaceuticalDB;** TrustServerCertificate=True"

Entity Framework Core
- *Install dotnet-ef for CLI*
dotnet tool install --global dotnet-ef --version 5.0.17

- *Use Entity Framework Core to generate Object Model from existing database – CLI*
dotnet ef dbcontext scaffold
"Server=**(local)**;Uid=sa;Pwd=**1234567890**;Database=**Fall24PharmaceuticalDB;**TrustServerCertificate=True"
Microsoft.EntityFrameworkCore.SqlServer --output-dir ./

- *Generate database from domain classes – CLI.*
dotnet ef migrations add "InitialDB"
dotnet ef database update

Entity Framework Core
- *Use Entity Framework Core to generate Object Model from existing database – Package Manager Console*
Scaffold-DbContext
"Server=**(local)**;Database=**Fall24PharmaceuticalDB**;Uid=**sa**;Pwd=**1234567890**;TrustServerCertificate=True"
Microsoft.EntityFrameworkCore.SqlServer -OutputDir ./

- *Generate database from domain classes – Package Manager Console*
Add-Migration "InitialDB"
Update-Database -verbose