





PRN212 Project 04

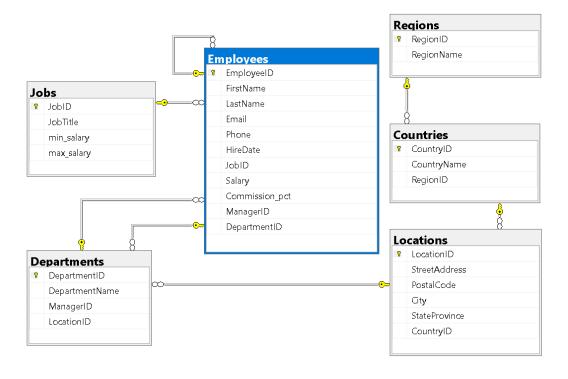
Building a Employee Management System with Windows Presentation Foundation (WPF)

1. Project Objectives

In this assignment, you will:

- Use the Visual Studio.NET to create Windows Presentation Foundation (WPF) and Class Library (.dll) projects.
- Perform CRUD actions using Entity Framework Core.
- Use LINQ to query and sort data.
- Apply passing data in the WPF application.
- Apply 3-Layers architecture to develop the application (DataAccess, Repositories, Services, Presentation).
- Add CRUD and searching actions to the application.
- Apply to validate data type for all fields.
- Run the project and test the WPF application actions.

2. Database Design







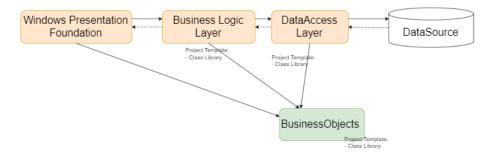


3. Main Functions

- Member (Admin/Staff/Student) authentication by Email and Password.
- If the user is an "Admin" then his/her is allowed to use all functions of project. The application has a default account (admin account) whose MemeberID is "Admin" and password is "@admin123" that stored in the table AccountMember in DB.
- If user is a "Staff", this staff role is allowed to manage all functions related to managing departments, employees, and jobs. The application has a default account (staff account) whose MemeberID is "Staff" and password is "@staff123" that stored in the table AccountMember in DB.

4. Note

- You must use **Visual Studio 2019 or above (.NET8), MSSQL Server 2019 or above** for your development tools.
- To do your program, you must use **Windows Presentation Foundation. Note that** you are not allow to connect direct to database from WPF, every database connection must be used through Repository and Data Access Objects. The database connection string must get from appsettings.json file.
- Create Solution in Visual Studio named **GroupName_ClassCode_Course.sln**. Inside your Solution, the Project WPF must be named: **GroupNameWPF**.
- Create your MS SQL database named **EmployeeManagementDB** by running code in script **EmployeeManagementDB.sql.** Do your self to create table AccountMember.
- Set the default user interface for your project as **Login** window.



Data Source in this case is the SQL Server Database