

EINSTRUCTIONS

Please read the instructions carefully before doing the questions.

You can use materials in your computer, notebook and textbook.

You are **NOT allowed** to use any device to share data with others.

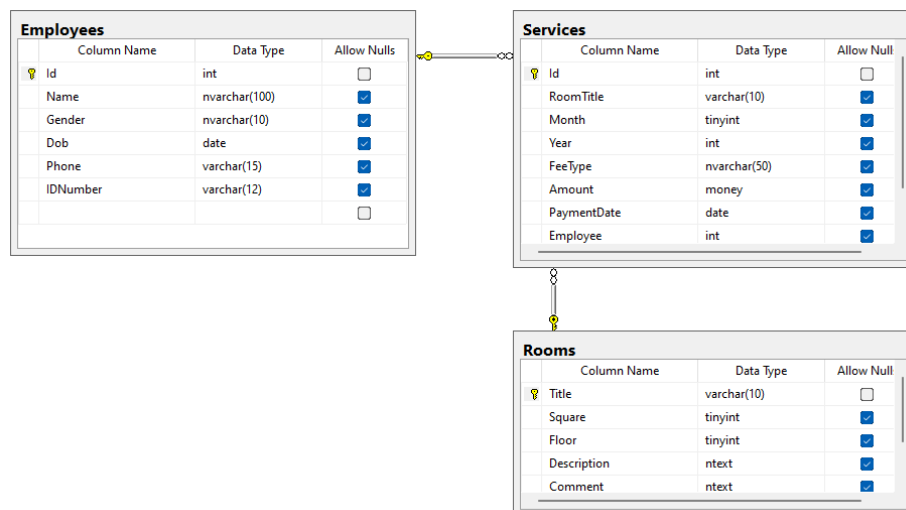
Beside the above conditions, students must follow the following requirements:

1. The work must complete by using Visual Studio 2022++
2. The Framework must be .NET 6.0
3. THIS PART IS VERY IMPORTANT, PLEASE READ IT CAREFULLY AND FOLLOW THE INSTRUCTIONS.
 - You are given a database script (.sql file) in the Zip file. Execute the script before doing questions.
 - You must use the given solution.
 - You are not allowed to add any libraries via NuGet Package Manager during the exam.
 - Just one of above requirements is violated, your work will be considered as invalid.

On completion, submit the **whole solution folder**.

Before submitting, you can delete the folder [bin] in each project to reduce the size of the solution, to fit the requirements of PEA_Client.

Use the following database diagram for doing this exam.



Note that: In the table Services, if one service has been paid it will have a date and employee to receive payment, stored in two attributes PaymentDate and Employee, otherwise these attributes are null.

Question 1. (5 points)

In this question, you are asked to write a WPF application that allow to manage employee's information in database.

Note:

- 0 will be given to the work that not using database connection string in the file **appsettings.json**

| Employee ID | Employee Name | Gender | DateOfBirth | Phone | IDNumber |
|-------------|-----------------|--------|-------------|------------|--------------|
| 1 | Bùi Ngọc Huyền | Female | 04/00/1993 | 0977800234 | 035184000209 |
| 2 | Nguyễn Thu Thảo | Female | 05/00/1988 | 0904253601 | 011218982101 |
| 3 | Trần Nam Anh | Male | 17/00/1987 | 0972481765 | 012912199129 |
| 4 | Lê Bảo Nam | Male | 23/00/1984 | 0901291192 | 032122398120 |

Figure 1 - Required form

- **(0.5 point)** The form is designed as shown in figure above.
The radio button [Male] is selected by default.
- **(1 point)** List all employees that have a phone number in the database like Figure 1.
- **(1.5 point)** When a user clicks on a row in the ListView, load information of the selected Employee into panel [Employee Information] above.
- **(0.5 point)** The user can click on button [Refresh] to set all data in panel [Employee Information] to default value.
- **(1.5 points)** Allow the user to use panel [Employee Information] and buttons [Add], [Edit], [Delete] to create a new employee and update/ delete the selected employee.

Note that: the EmployeeID cannot be updated.

