FALL 22

Subject: PRN221 Duration: 90 minutes

## **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:

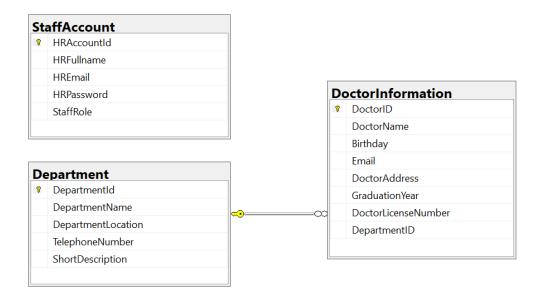
1. To do your program, you must use **ASP.NET Core Razor Pages. Note that** you are not allow to connect direct to database from Razor Pages, every database connection must be used through Repository and Data Access Objects. The database connection string must get from appsettings.json file.

In the case your code connects directly to database from ASP.NET Core Razor Pages, you will get 0 mark.

- Create Solution in Visual Studio named PRN221PE\_FA22\_169961\_StudentName.
   Inside your Solution, the Project ASP.NET Core Razor Page must be named:
   HospitalManagement\_StudentName.
- 3. Create your MS SQL database named **HospitalManagementDB** by running code in script **HospitalManagementDB.sql.**
- 4. Set the default user interface for your project as **Login** page.

Create an application using **ASP.NET Core Razor Pages** with .NET Core (.NET 5 or .NET 6), C#, and ADO.NET (or Entity Framework Core). A MS SQL Server database will be created to persist the data and it will be used for reading and managing data.

## A part of **HospitalManagement** database.



 $Staff\ Account\ role:\ Administrator=0;\ Manager=1;\ Staff=2$ 

1. (1.0 mark) Authentication function

If user with a *staff role* logs in successfully, save this information to a temporary parameter. All CRUD actions are required with authentication. In the case login unsuccessfully, display "You do not have permission to do this function!".

- 2. (2.0 marks) Check if login successfully, list all doctor information in **DoctorInformation** table (pagging is required for this function, 3 records/1page).
- 3. (1.0 mark) Check if login successfully, search all doctors with 2 conditions: Email, Birthday (OR option for this case and using relative search).
- 4. (1.0 mark) Check if login successfully, delete the selected item with the confirmation then update the list of doctors.
- 5. (3.0 marks) Check if login successfully, add new item with the requirements:
  - The new item will display in top of the doctor's list.

- The DepartmentID/DepartmentName will come from the **Department** table (you can use ComboBox UI control in this case)
- All fields are required.
- Value for GraduationYear <= this year (2022) and >1901.
- Value for doctor's name is greater than 6 characters. Each word of the doctor name (DoctorName) must begin with the capital letter.
- 6. (2.0 mark) Check if login successfully, update the selected existing item.
  - With update function, the same validation requirements with Add function.