

# HEMS Basic Interview Test

## Instruction :

1. Please make sure you have SQL Server and Visual Studio Installed in your PC.
2. You have 2 x 24 hours to finish this task.
3. Upload the results and database backup to your github private repository.
4. Add [ardinurdiansyah.2734@gmail.com](mailto:ardinurdiansyah.2734@gmail.com) as contributor.
5. Inform your Interviewer, when it's done.

## Task :

1. Create a database and add this table

### a. Table Product Category

|    | Field_Name            | Data Type |
|----|-----------------------|-----------|
| PK | Product_Category_Code | VARCHAR   |
| PK | Seq_Id                | Int       |
|    | Category_Name         | VARCHAR   |
|    | Category_Description  | VARCHAR   |
|    | Status                | VARCHAR   |
|    | Create_Date           | Datetime  |
|    | Update_Date           | Datetime  |

### b. Table Product Type

|    | Field_Name            | Data Type |
|----|-----------------------|-----------|
| PK | Product_Type_Code     | VARCHAR   |
| PK | Seq_Id                | Int       |
| FK | Product_Category_Code | VARCHAR   |
|    | Type_Name             | VARCHAR   |
|    | Type_Description      | VARCHAR   |
|    | Status                | VARCHAR   |
|    | Create_Date           | Datetime  |
|    | Update_Date           | Datetime  |

### c. Table Product

|    | Field_Name            | Data Type |
|----|-----------------------|-----------|
| PK | Product_Code          | VARCHAR   |
| PK | Seq_Id                | Int       |
| FK | Product_Category_Code | VARCHAR   |
| FK | Product_Type_Code     | VARCHAR   |
|    | Product_Name          | VARCHAR   |
|    | Product_Description   | VARCHAR   |
|    | Status                | VARCHAR   |
|    | Create_Date           | Datetime  |
|    | Update_Date           | Datetime  |

2. Create a Form to Manipulate those 3 tables, with roles :
  - a. You can't do a hard delete (Deleted Rows need to still exist in the table, but not shown in form).
  - b. You can't directly update the field, (Previous field will be inactive, and the new field will be active)

- c. Updating will not change Product\_Category\_Code, Product\_Type\_Code, and Product\_Code, please see the table below for example :

| Code (PK) | Sequence (PK) | Field 1      | Field 2      |
|-----------|---------------|--------------|--------------|
| AAA       | 1             | Product      | Customer     |
| AAA       | 2             | Pro duct – 1 | Cus to mer 1 |
| AAA       | 3             | Pro Dak      | Kas Tu Mer   |

- d. Use SQL Stored Procedure for all required Query between Code and Database.

3. Create a HTML Dashboard View that will show all data depends on the data that already exist at Category, Type and Product. **DON'T USE TABLE**, you can use Tab, Cards or any Element Type you suitable with except table.

#### Optional Task

1. Create a View that you can add Category, Type and Product in 1 Form, read the user actions sequence bellow to give you an image of the logic :
    1. Click Add Category Button
      - 2.1. Fill Category Attribute
    - 2.2. Click Add Type Button
      - 2.2.1 Fill Type Attribute
      - 2.2.2 Click Add Product Button
      - 2.2.3 Fill Product Attribute
      - 2.2.4 Click Save Product
    - 2.3 Click Save Type
    - 2.4 Click Save Category
  2. Close Form ( Data Shown on Category List, Detail will be inside the Category Form )
2. Create a Pdf for all the data by Category, Type and Product. ( Show Preview before Download ).