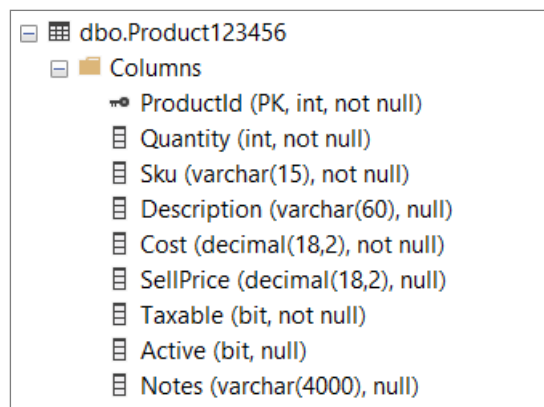# Lab Ten Instructions

Objective

The purpose of this lab is to practice working with C.R.U.D. operations;

Tasks

Open the example project `DataBindingExampleCRUD` and perform the following revisions:

1. A custom version of the Product table has been created in the SQL Database.
   It's name will be Product9999999, where 99999999 is your student number without the A0 at the beginning. (Eg. A01999999 becomes Product1999999)

2. Modify all queries to use this table.

3. The `Product` table has been updated with the addition of 3 fields: `SellPrice`, `Active`, and `Notes`

   ```
   □ ⊞ dbo.Product123456
      □ ■ Columns
           ⊷ ProductId (PK, int, not null)
           ▤ Quantity (int, not null)
           ▤ Sku (varchar(15), not null)
           ▤ Description (varchar(60), null)
           ▤ Cost (decimal(18,2), not null)
           ▤ SellPrice (decimal(18,2), null)
           ▤ Taxable (bit, not null)
           ▤ Active (bit, null)
           ▤ Notes (varchar(4000), null)
   ```

4. Revise all code in the application required to utilize the new fields. The database automatically generates a value for ProductId when a new record is added.

5. Update the UI to accommodate the new fields. Pay careful attention to things like keyboard navigation, tab order and numeric formatting.

6. Enhance code separation by adding folders for `Data` and `Common`. Move the appropriate classes into these folders and sync the namespaces with their new location.

7. Add a `Business` folder and create a Validation class inside.

8. Validate for the following criteria:

`Quantity` can't be negative
`Sku` can't be empty
`Cost` can't be negative
`SellPrice` can't be less than `Cost`

Table Data

ProductId	Quantity	Sku	Description	Cost	SellPrice	Taxable	Active	Notes
1	6	ABC100	Nice Widget 1000	452.55	678.83	1	NULL	NULL
2	1118	ABC120	Nice Widget 1200	652.25	978.38	0	1	NULL
3	108	BDC180	Big Widget	874.25	1311.38	1	1	NULL
4	1544	DDR205	Bigger Widget	1321.75	NULL	1	NULL	NULL
5	96	FAC667	Fine Widget	850.00	1275.00	0	1	NULL
6	120	GBT500	Great Big Widget 1	1500.00	2250.00	1	0	NULL
7	120	GBT502	Great Big Widget 2	2500.00	3250.00	0	1	NULL
8	120	LLP600	Large Lovely Widget	2800.00	3850.00	1	1	A very lovely widget.

Please Hand In:

1) Zip your entire project and submit the zipped file to Lab10 in the Learning Hub.
2) Lab is due by 11:59 PM on the day before next week's class.
3) Lab solution code will be available under Week10\In Class once you have submitted.