

TU2983: Advanced Databases
Individual Assignment 2
Data Entry and Data Manipulation Interfaces

IMPORTANT NOTE: This assignment continues from the work you have done in “Individual Assignment 1”. You are required to re-use same Visual Basic Project that you created for “Individual Assignment 1”, or use an improved version of the same Visual Basic Project for “Individual Assignment 1”:

1. You will use the same topic that was previously assigned to you in “Individual Assignment 1”.
2. All windows forms that you previously created for “Individual Assignment 1” must be used, or be improved.
3. The database file that you previously created for “Individual Assignment 1” must be used, or be improved.
4. The pictures that you have previously collected created for “Individual Assignment 1” must be used.
5. You will add new windows forms required for this assignment to your previous Visual Basic Project.
6. Evaluation of “Individual Assignment 2” will only be made on the following Tasks:

TASK 1: Build a catalogue form that the user can use to browse each product in your database and view the product’s picture.

1. Use the same table of products, **tbl_products_<your_matic>** (e.g. tbl_products_a123456), that you created for “Individual Assignment 1”, or use an improved version of the table of products.
2. Use the same pictures of products that you created for “Individual Assignment 1”.
3. The user must be able to view the attributes of each products and the product picture at the same time

TASK 2: Build forms for each of the following tables, which will allow you to INSERT, UPDATE, and DELETE data that is contained in that table:

- The **Products** table
 - The **Staff** table
 - The **Customers** table
1. For the **Product INSERT** form only, include a button to select a product picture when you are inserting a new PRODUCT database record through your form.
 - **IMPORTANT:** Your evaluator will test your program by attempting to add new products and new product pictures.
 2. You must ensure that your program does not terminate when a user makes a mistake in data entry.
 - **IMPORTANT:** Your evaluator will test the resilience of you program in capturing errors, by attempting the following mistakes:
 - a. Deliberately adding a primary key that already exists for a new data row.
 - b. Deliberately typing a foreign key that does not exist when editing data.
 - c. Deliberately adding alphabetical data for numeric attributes.

TASK 3: Add new buttons to your existing ‘MAIN MENU’ form that can open each of the forms that you built for TASK 1 & 2.

1. Your program will also be evaluated for aesthetics, neatness, and user-friendliness.

SUBMIT THE FOLLOWING:

1. **Your entire VB project folder** for this assignment’s project, which contains:
 - **Your Microsoft Access Database**, which should be stored in your VB project’s Bin/Debug directory.
 - **Your “pictures” subfolder**, which should be stored as a subdirectory in your VB project’s Bin/Debug directory.
 - **All the old forms** you previously created for “Individual Assignment 1”.
 - **All the new forms** that you created for “Individual Assignment 2”.
2. Compress all the files above into a single *.ZIP or *.RAR, and label this file as **<your_matic>_<your_shop_name>.zip/.rar** (e.g. a123456_solarpanelmart.zip)
 - ***** IMPORTANT ***: Your *.ZIP/*.RAR must not exceed 100mb (Megabytes). If it does exceed 100mb, you need to reduce the resolution of all your pictures, in order to reduce their file size.**
 - Upload your *.ZIP/*.RAR file to UKMfolio, at the Lab Assignment 2 Submission Link which has your EVALUATOR’S NAME on it.
3. All *.ZIP/*.RAR files for the assignment must be submitted to UKMfolio before the following due date:

Due date: Sunday 7th January 2024, 11:59pm.