CALIFORNIA STATE UNIVERSITY, SACRAMENTO
College of Business Administration

MIS 15 – Introduction to Business Programming
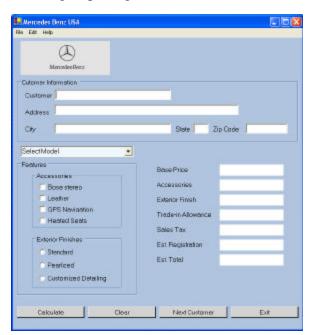
Programming Assignment 2 (P2)

Points: 20   Due Date: Tuesday, 26

This assignment involves functions, check boxes, radio button, calculations, a main menu, message boxes, a picture box, buttons, validation, a combo-box and other great things. The target form appears below. Please follow Prof. Scanlan's group assignments and evaluations.

Process Description

The customer enters his/her name, address, city, state and zip code into their respective text boxes. He/she will select a model from the combo-box ("Select Model"), the accessories and exterior finishes. When the customer selects a model from the combo-box, the base price will appear in the "Base Price" label box (the combo-box will contain at least 5 different models). After the customer checks his/her accessories and exterior finish, specifies an amount in the "Trade-in Allowance" text box (no entry assumes no trade-in allowance or zero), and clicks on the "Calculate" button, the accessories and exterior finish totals, sales tax (at 7.75 percent), 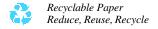estimated registration (at 2.5 percent of the base price + accessories + exterior finish total) and total will appear in their respective labels. The "Clear" button will reset the check boxes and radio buttons, and clear the previous values from the labels and "Trade-in Allowance" text box. The "Next Customer" button does the same as the "Clear" and clears the customer information text boxes. "Exit" terminates the program.

Data Validation

The following validation tests are required:

- If nothing is entered into the "Customer," "Address," "City," "State," or "Zip Code" box, a message box will appear telling the customer to enter values into the respective text box.
- The state should be a 2-letter code.

- The zip code must be a 5-digit numeric code.
- The trade-in allowance amount must be numeric (i.e., decimal) and cannot exceed the car's base price.

An appropriate and descriptive message box should appear if any incorrect values are entered.
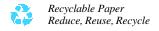

Program Requirements

Refer to the last page for objects required for this assignment.

- Create a main menu and include the file, edit and help menus in it. The file menu will have exit (terminate the program), edit (menu) font and color selections for the text boxes and labels using the font and color control boxes. The help menu will include about (i.e., a message box with the help title and software version number in the text).
- Find an automobile manufacture's logo and insert it into a picture box, such as that shown on the first page (of this assignment).
- Find at least five different models for your combo-box (list).
- The calculations for each model will be performed in separate functions. Sales tax and the estimated registration need to be calculated in separate functions and the amounts rounded (to 2 decimal places). (See discussion in Process for the sales tax and estimated registration rates.)
- The output prices should be formatted for 2-decimal places without the dollar symbol ($).
- The accessory and exterior finish prices should vary with each model. Please keep your prices simple. For example, instead of $799.99, use $800.00.
- Calculate, clear, new customer and exit buttons (see discussion in Process). With the "Clear" and "New Customer" buttons, the focus is placed on the first check box and customer (name) text box, respectively.
- Right-align all numbers (base price, accessories and exterior finish costs, trade-in allowance, sales tax, registration fee and total). All should appear with 2 decimal places.
- Use descriptive names for your referenced objectives (i.e., those referenced in the program, such as labels, text boxes, etc.), variables and constants.

Tangibles

Follow Prof. Scanlan's instructions for the first assignment when submitting this assignment.

Menu

Picture box

Group box

Text boxes

Combo-box

Labels

Check boxes

Text box

Radio buttons

Group boxes

Buttons