

## A201/A505 Laboratory Session #7

### LAB GOALS

To learn how to use advanced VB controls such as: (Radio Buttons, Group Boxes, and Picture Boxes).

In addition, we will review dynamic (run-time) loading of images in PictureBoxes.

Step 1: Create a new project named "RadioButtons". Once the main form is displayed, create the following interface. Make sure to save your new project in your A201 or A505 folder.

1 Button, 3 Labels, 1 Picture Box, 1  
GroupBox, and 3 Radio Buttons.

GroupBox:            GroupBoxCars

PictureBox:        PictureBox1

RadioButtons:     RadioButton1,  
                    RadioButton2,  
                    RadioButton3

Button:            BtnQuit

Also, make sure to create the GroupBox first, before placing the RadioButtons on it. This way the RadioButtons will be attached to the GroupBox, therefore, creating a single group of related RadioButtons.



Step 2: Double click the Quit button and write the code that allows your program to properly exit. Also to invoke strong type checking by the compiler, don't forget to add the following two lines at the beginning of the program:

```
Option Explicit On
Option Strict On
```

**Run:** Compile and Run your program. If your program does not compile, fix the syntax errors and compile the program again. Once you are able to successfully run the program, check to see if the RadioButtons, and the Quit button work properly. Radio Buttons are designed to allow the user to make mutually exclusive selections. In other words, when you press one button, the others should be deselected. Verify this before you move to the next step.

Step3: In this step, we would like to assign the Radio buttons the task of loading different images into the PictureBox. To do this, double click the RadioButton named "1<sup>st</sup> Car". This will create an event handler for this RadioButton. The event handler code will handle a click on this Radio Button. Inside the event handler, you should call the DisplayImage("ImageFile.jpg") procedure and pass to that procedure, the name of the image file you that you would like to display. Repeat Step3 for the other two Radio Buttons. (note: your images should be placed in the bin/debug directory of your project)

```
Private Sub RadioButton1_CheckedChanged(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles RadioButton1.CheckedChanged
    DisplayImage("MINI_Yellow.jpg")
End Sub
```

**In Case you need the Code for the Displaying Images, here it is again:**

```
Private Sub DisplayImage(ByVal TheImageFile As String)
    Dim MyImage As Bitmap
    PictureBox1.SizeMode = PictureBoxSizeMode.StretchImage
    MyImage = New Bitmap(TheImageFile)
    PictureBox1.Image = CType(MyImage, Image)
End Sub
```

**Run:** Compile and Run your code to see if it runs properly. Click on each of the RadioButtons to see if they will properly load the corresponding images into the PictureBox.