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.

To get started you first need to login into the lab computer. If you do not know how please ask me to show you. Once you are logged in, make sure you double click the “Map O:drive” icon. Then proceed to open up Microsoft Visual Basic .NET.

Step 1: Create a new project named “RadioButtons”. Once the main form is displayed, create the following interface.

1 Buttons, 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 the it. This way the RadioButtons will be attached to the GroupBox and compose 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 select one of the radio buttons, the others should be deselected. Verify this before you move to the next step.

Step 3: 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 “1st Car”. This will create an event handler for this RadioButton. The event handler code will handle a click on that RadioButton. 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.

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

Note that the above procedure “DisplayImage(image_file_name)” is going to be undefined until you type the following code in your program.

```vbnet
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 it will properly load the images into the PictureBox. Also, make sure that you have placed some car images in the “C:\cars\” directory.