

IST 256
Lab Week 5, Part 1 – February 9, 2009

1. Understanding objects and if statements

For this problem, you are not to put any part of the program into Visual Studio. You are to write your answers on this lab sheet. (Think of this as a practice exam question, except that in the lab you can look at old programs.)

A. Assume that you have a form with a textbox named `TextBox1` and a label named `Label1`.

Write the following code:

- Declare an integer variable called *age*
- Get a number from `TextBox1.Text` and assign it to *age*
- Set `Label1.Text` to “old” if *age* is over 30 and “young” otherwise.

Write the code in this blank space.

2. Writing a program with Multiple Forms: What's in a Shoebox

For this application, you are going to create a series of forms and a program that allows the user to navigate through the forms in order to find the “shoebox” and see what's inside.

The navigation consists of going from your room (which is on the initial form) to your closet and then to a shoebox stored there.

You'll need a room form, a closet form, and a shoebox form. The shoebox form should tell what's in the shoebox. You can make this be whatever you want (within good taste).

The room form should have a button that goes to the closet form and a close button. The closet form should have a button that goes to the shoebox form and a button that goes back to the room form. The shoebox form should have a label that tells something that is in the shoebox and a button that goes back to the closet form.

First debug this part of the program, making sure that all the navigation buttons work.

Finally, instead of first showing the user what is in the shoebox, ask them to guess a letter that is in the contents of the shoebox, and then let them know if they are right or wrong. For this, you need to add another Label and TextBox to the Shoebox form:

Guess a letter for my shoebox: | _____ |

For example, suppose that your shoebox has “old pictures”:
If the user types “z”, then you put label text that says something like
“No, your letter is not in my old pictures”.
But if the user types “c”, then you say “Yes, your letter is in my old pictures”.

To tell if the letter is in the label text, use the Instr function. For example, suppose that you have a variable called letter, that you assigned from whatever the user typed in the TextBox. Suppose that you also have a variable called contents that is the string describing what is in the shoebox.

For example, *contents = “old pictures”*

And suppose that you have an Integer variable called position, then you can call Instr to ask the position of where the value of the contents string contains the value of the letter:
position = Instr(contents, letter)

If the letter occurs in the contents string, the the value of position will be greater than 0.

Print the programs for the three forms and hand them in on Wednesday with this sheet and the rest of the lab from Week 5.