King Fahd University of Petroleum and Minerals
MIS-105--- Introduction to Computer Applications
By: Irfan Ahmed Ilyas

Chapter 3:

1. Forms & Reports in Access
2. Writing Event Procedures in VBA

MIS105-Lab12

Objectives:
After finishing the lab, students should be able to do the following:

- Selecting right control and pasting procedures with the object events.
- Distinguish between a bound control, an unbound control, and a calculated control; explain how each type of control is entered on an Access form.
- Modify an existing form to include a combo box and command buttons.
- Switch between the Form view, Design view, and Datasheet view; use a form to add, edit and delete records of a table.

Creating Forms in Microsoft Access

Lab Practice#2 – Problem Statement

For the given database, named OurStudents.mdb, create a form for an easier data entry in Students table. Use the following details to complete the form.

- The form header should have the title and current date in it.
- The form should show one student record at a time.
- The fields on the form should be placed in a columnar layout.
- A calculated field, named GPA=Quality Points/Credits, should also be shown on the form.
- The form should make use of special controls like combo box, check box, option group, command buttons etc. when appropriate.

Steps in Form Creation

Step I: Select form creation approach
Approaches to create a Form in Microsoft Access
Three approaches can be used:

1. Using Auto Form feature
2. Using Form Wizard
3. Using Form Design View

1. *Using Auto Form feature*

It is the easiest way to create forms.

Hands On 11.3: Using Auto Form feature

1. Select the table Student.
2. Press AutoForm button, and the form will be ready.
3. The resulting form can then be opened in the design view to make necessary changes (like a different background, adding new controls etc.)

2. Using Form Wizard

- More flexible than AutoForm.
- The Wizard asks you a series of questions, then builds the form according to your answers.
- For a detailed view of Wizard screens, see Figure 2.6 (page 69)

Hands On 11.4: Using Form Wizard

1. In the Form section, select the option 'Create form by using wizard.'
2. On the first screen, select the table or query name on which the form will be created.
3. Next screen, enter the fields to be shown on the form.
4. Select the form layout in screen#3.
5. Select the form background in screen#4.
6. Press Finish to complete the form.

3. Using Form Design View

- Most flexible way of Form creation.
- Needs the deeper understanding of different concepts.
- Allows the use of property sheets for form and controls over the form.
- Allows to select different types of controls from the available tool box.

Hands On 11.4: Using Form Design View

1. In the Form section, select the option 'Create form in the Design View'.
2. Open the form property sheet.
3. Attach the form to the table Student.
4. Show the form's header and footer by using 'View | Form Header & Footer' option.
5. By making use of different controls and their property settings, make the form as required by the problem statement.

StepII: Finalizing the form

Types of controls

1. Unbound – not attached with the table.
2. Bound – attached with a table's field.
3. Calculated – using some table fields to calculate a result.

Lab Practice #1.1

In addition to all the table fields, the form should show the calculated GPA, which is [QualityPoints]/[Credits].

Hands On 11.1
Follow Step 4 on page 73 of Access portion to add a calculated control over the form.

Manual controls alignment Vs Automated controls alignment

Lab Practice #1.2
Use automated alignment feature to align the control on the form.

Hands On 11.2
Follow Step 6 on page 75 to do automated alignment.

Setting the Form Header

Lab Practice #1.3
Add a header with the current date in it.

Hands On 11.3
Follow Step 7 on page 76

Avoiding Error messages - #NAME? OR #ERROR

The reason for the errors are as follows:
#NAME: appears when the bounded field name is misspelled.
#ERROR: appears when the field attached to a label or textbox was deleted.

Lab Practice #1.4
Remove the errors appearing in the form.

Hands On 11.4
Check the spelling for the control source field in the properties of each control.
Always try to use Expression Builder.

Resetting the control tab order

Lab Practice #1.5
Change the sequence of tab order

Hands On 1.5
On page 85, instructions are being provided.

2. Creating Access Reports

Problem Statement
Create different reports needed in the Student database. These reports include: A complete list for all students A list of students grouped by major names. ….any other

Lab Practice #2:
Create full student

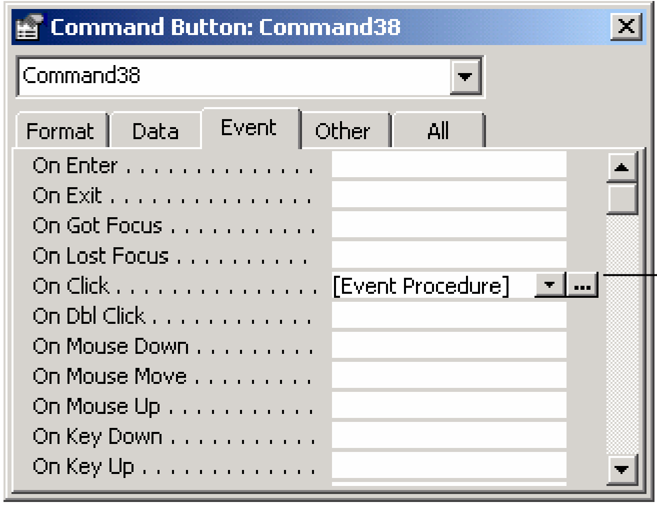
3. Writing VBA Code

Problem Statement 3

Create a simple unbounded form for testing different VBA statements like msgbox, inputbox, if-then-else, Select Case etc. Make use of Debug window in case of an error.

Hands On 3.1

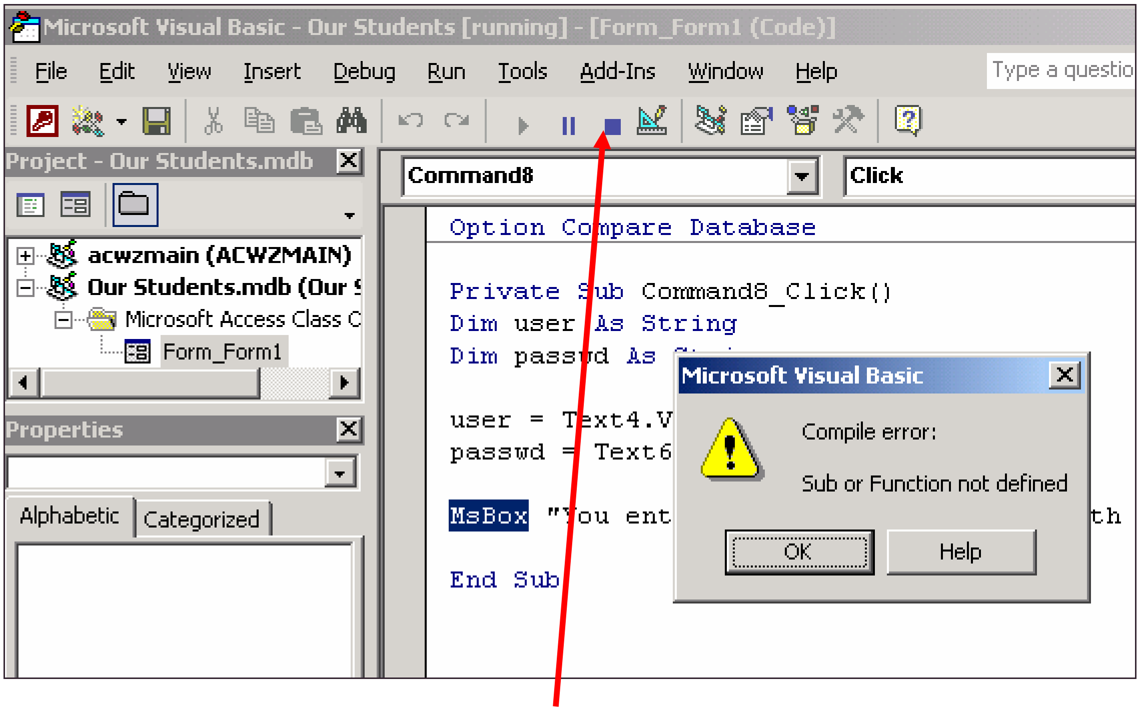
1. Create a new unbound form with 2 textboxes and one command button.
2. Change the name of all these objects to more meaningful names.
3. Write a procedure for ‘On Click’ of button object. The procedure should read the values of user name and password and print these values in a message box. [Use of & operator in joining strings]



On Click . . . . [Event Procedure]

Press the button to open VBA code editor.

4. Run the form and click on the button to see the procedure running.
5. **Use of Debugger:** In case a mistake was done in the code (like misspelling for some command), an error window will appear as follows.



```
Option Compare Database

Private Sub Command8_Click()
Dim user As String
Dim passwd As S

user = Text4.V
passwd = Text6

MsBox "You ent                                 th

End Sub
```

Microsoft Visual Basic

Compile error:

Sub or Function not defined

6. Read the error carefully. Push the **Reset button** to stop the debugger. Fix the error. Close the debug window and run the form again.
7. **Use of Comments**: In order to exclude any line from consideration of the processor, use the character ‘.
8. **Use of if-then-else:** To test the empty value of any textbox, make use of IsNull function. Assign the value to the variable when it is sure that the textbox is not empty. In case any textbox empty check is true, exit the procedure immediately by using the statement **Exit Sub**.

Syntax: if-then-else

```
If  <condition> Then
   <statements for condition true>
Else
   <statements for condition false>
End If
```

Use of Select Case: Assume that the users allowed to use the system with their passwords are as follows:

SNo	User Name	Password
1	irfan	hello

Make use of a select case statement to check the validity of username and the password entered by the user.

Syntax: Select Case

```
Select Case <var to check>
  Case <value1>
          Statement(s)
  Case <value1>
          Statement(s)
  Case Else
          Statement(s)
  End Select
```

Problem Statement 3(b): Altering properties of objects using VBA code

Make use of a check box control to toggle the appearance of a copyright notice on the window. Access some form properties (for the unbound form) with the code as well.