

Microsoft Access 2010

Forms and Macros

Microsoft Access 2010: Forms & Macros

1.5 hours

This workshop requires completion of "Access: Basics", "Intro to Forms and Reports", and "Forms". Topics include formatting creating menus, linking forms through buttons, creating tabular subforms, creating macros, using macros in buttons and in other events.

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Pandora Rose Cowart

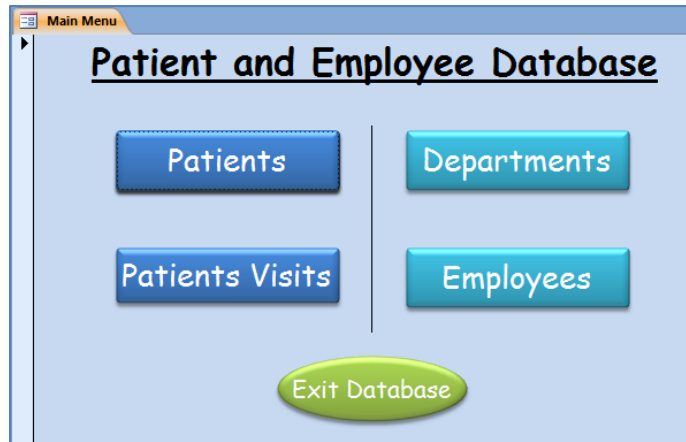
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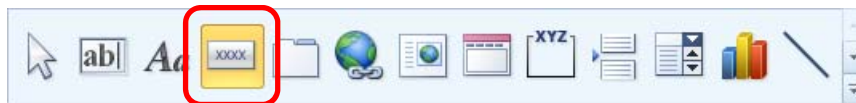
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Main Menu – Review

Recreate the Main Menu form and set it to open when the database starts. It does not need to look just like this one, but it should have five working buttons.

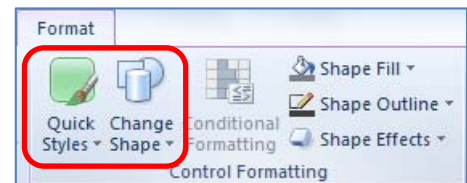


1. From the Create tab, click on the **Form Design** button
2. Create **Command Buttons** by using the controls on the Design tab
 - a. Be sure to give the buttons unique names



- b. Each Open Form button should return ALL the records
 - c. Application category -> Quit Application
3. Save Form as "Main Menu"

4. Test each of the buttons to make sure they are opening the forms you wanted
5. (If you have time) Format as desired
 - a. Use the Quick Styles and Change Shape options on the Format tab
 - b. Use a Label to create the title



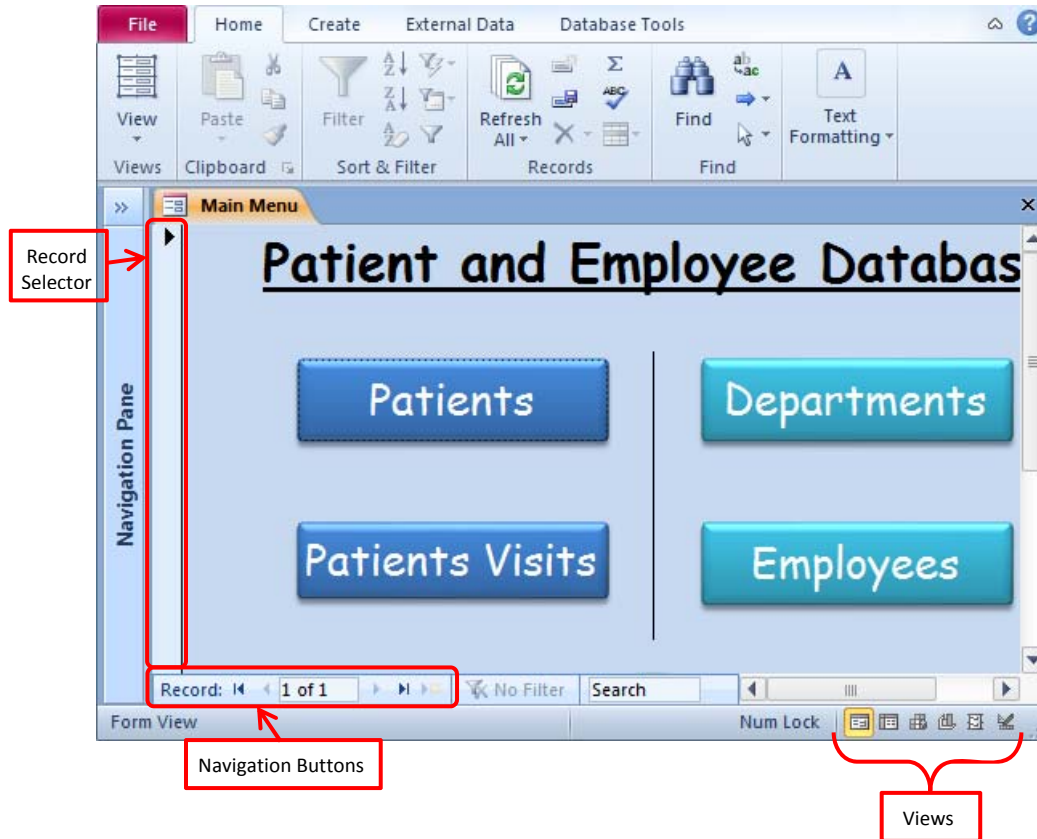
Start up Options

1. Open the **File** menu, Choose **Options** near the bottom of the menu
2. Choose Current Database from the pane on the left



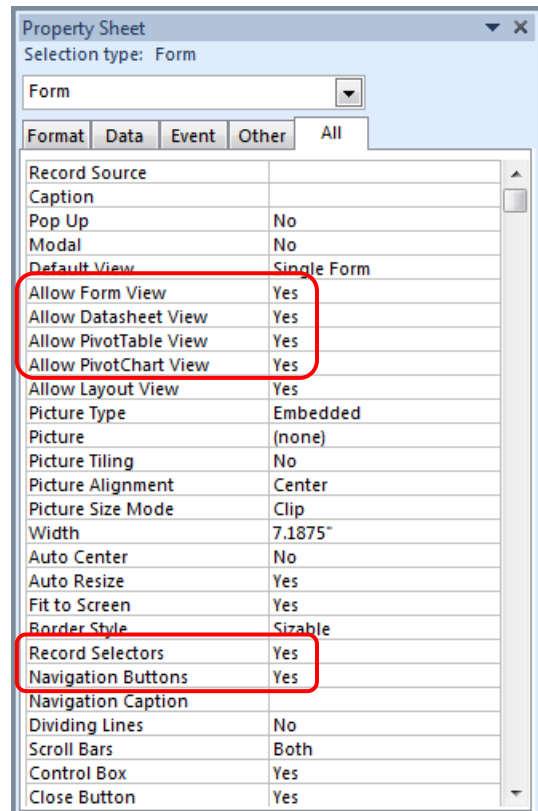
3. In the **Application Options** – Change the **Display Form** to *Main Menu*

Modifying Form Properties



1. In the design view open the Form properties
2. Turn off extra views
 - a. (allow form view YES)
 - b. **Allow Datasheet View No**
 - c. **Allow PivotTable View No**
 - d. **Allow PivotChart View No**
 - e. **Allow Layout View No**
 - f. **Allow Datasheet View No**
3. Turn off Record buttons
 - a. **Records Selectors No**
 - b. **Navigation Buttons No**

Note: Remember you can Double-click on the drop down lists in the properties and it will cycle to the next value on the list. In these cases: Yes becomes No.



Linking Forms - Review

Patients

MED REC 015-695

LAST Jacobsen FIRST Jeffery

ADDRESS 1398 NE 8th Ave, #1245

CITY Gainesville ST FL ZIP 32567

Home Phone 3525551234 Cell Phone

Work Phone 3522734321 Fax Number

Email Address jeffery.j.jacobson@jaysaregreat.com

Search for Patient

View this Patient's Visits

The Employees form has a button on the department tab that opens the department for just that employee. We'll do the same for the Patient's form; create a button to open the Visits for just this Patient.

1. Open the **Patients** form
2. Create **Command Button** by using the control on the Design tab
 - a. Form Operation -> Open Form -> Patient Visits
 - b. "Open the form and find specific data to display"
 - c. Choose Med Rec from each side to help Access see the link between the two forms
 - d. Set the button to show a picture and give it a meaningful name
3. Test the button
4. Adjust Placement and Reformat

Command Button Wizard

Sample:

Do you want the button to find specific information to display in the form?

For example, the button can open a form and display the data for a specific employee or customer.

Open the form and find specific data to display.

Open the form and show all the records.

Cancel < Back Next > Finish

Command Button Wizard

Sample:

Which fields contain matching data the button can use to look up information?

Select the fields and then click the <-> button.

Patients: LAST, FIRST, MED REC, ADDRESS, CITY, ST, ZIP

Patient Visits: MED REC, LAST, FIRST, ADDRESS, CITY, ST, ZIP

Matching Fields: MED REC <-> MED REC

Cancel < Back Next > Finish

Tabular Form

The Employee table is currently embedded in the Department form. We want to make a Tabular SubForm to replace it.

1. Select the Employee table from the Navigation Pane
2. From the Create Tab, under the More Forms menu, Choose Multiple Items



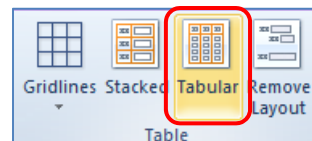
FIRST	LAST	Birthday	Celebrate	Dept ID	Picture
Annie	Appleton	18-Jun-35	<input checked="" type="checkbox"/>	2	
Billie	Blackthorne	05-Mar-53	<input type="checkbox"/>	2	
Charlie	Carson	06-Aug-70	<input checked="" type="checkbox"/>	1	

3. Turn to the design view
4. Delete all the fields but **First** and **Last**
5. Delete the Employees title and Forms image
6. Size labels and text boxes to the "shortest"
 - a. Move labels to the top of their section
7. Resize the header and detail sections
8. Open Form Properties (data tab)
 - a. Allow Deletions *No*
9. Add a button to open the employee form for this employee
 - a. From the Design Tab, create a Command button
 - b. Open A Form, Employee Form, Find specific data to display
 - c. Link by Last
 - d. Caption "More Info"
 - e. Give it a meaningful name



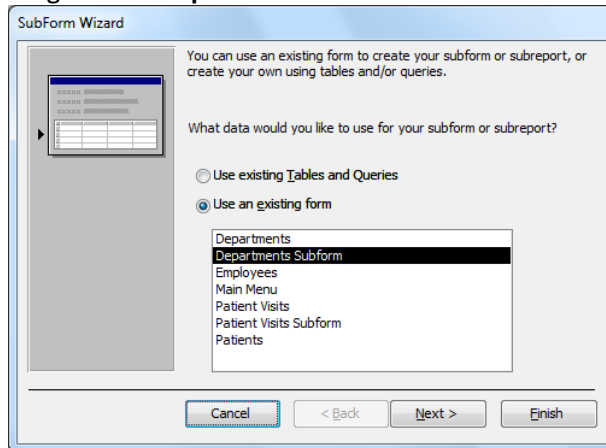
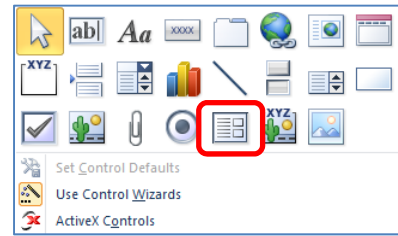
FIRST	LAST	More Info
Annie	Appleton	More Info
Billie	Blackthorne	More Info
Charlie	Carson	More Info
Devon	Dawson	More Info
Edgar	Edwards	More Info
Frances	Fraser	More Info
Greta	Garber	More Info
Harry	Halibut	More Info

10. Test the button
11. Move the button to the Header
 - a. Test again
12. Move back to the detail
13. Select All, from the Arrange Tab choose **Tabular**
 - a. Adjust size of Name fields in Layout View
14. Close and Save as "Departments SubForm"

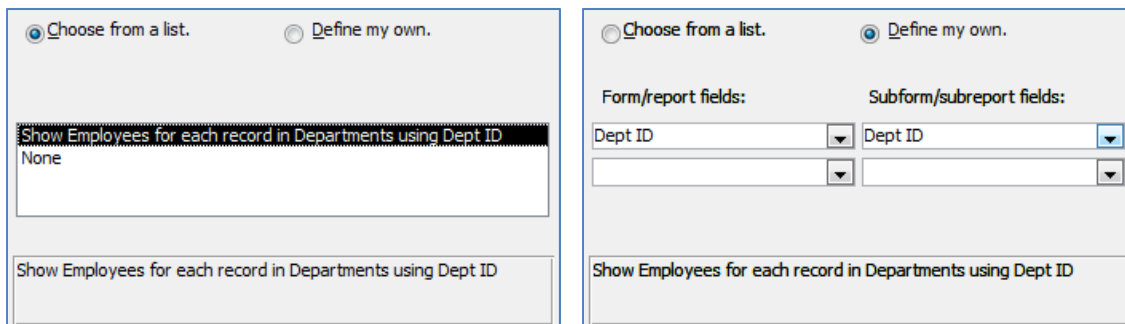


Inserting a SubForm

1. Open the Departments Form in Design view
2. Delete Employees table
3. Open the Controls menu on the Design tab click on the SubForm button
 - a. Click in the grid to place it on the form
4. Follow the steps of the wizard
 - a. Use an Existing Form – **Departments SubForm**



- b. Because our relationships are set up properly and we aren't doing anything fancy, Access knows to link these by Dept ID, but we can click on the **Define my own option** to set it ourselves



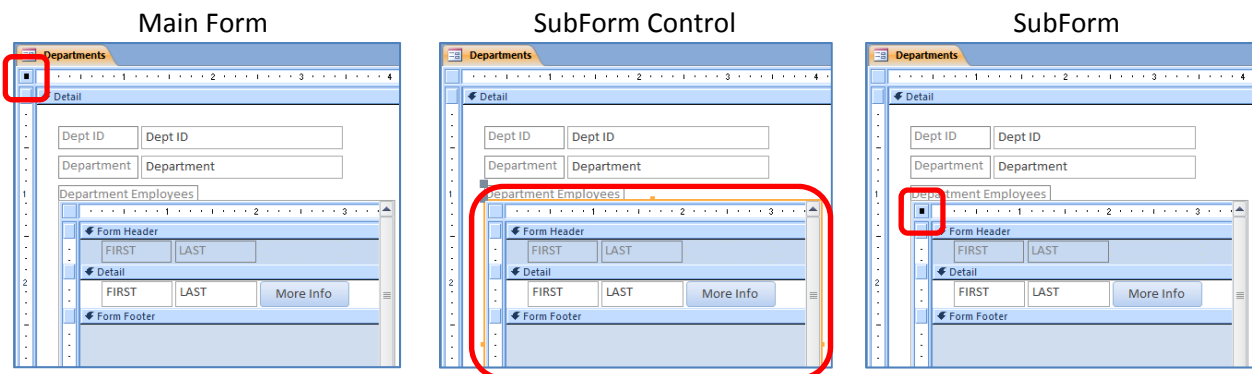
- c. Name the control Department Employees

The size of the control is determined by the size of the grid of the SubForm. Let's go fix it and try again.

1. Close and don't save the Departments form
2. Open the Departments SubForm Form in design view
3. Adjust the grid to be under 4" wide
4. Close and Save Department's SubForm
5. Repeat steps at the top of this page to reinsert the SubForm Control into the Departments Form

Modifying a SubForm

1. Once the SubForm is in place, go to the Layout View
2. Resize the SubForm to fit at least 6 employees
3. Go to the Design View
4. Open the Property Sheet
5. Click once on the SubForm control to select it
6. Click on it again to 'get inside'
 - a. Look for the mark in the top left corner that shows which form is currently selected



7. In the Form properties of the SubForm change -
 - a. **Allow Additions** No
 - b. **Navigation Buttons** No
8. Turn to the Form View, make sure you turned off the correct properties

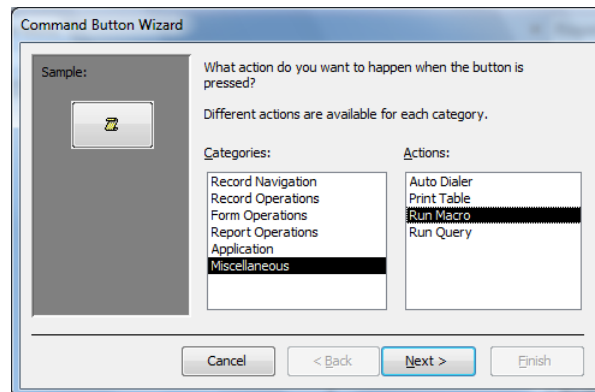
The screenshot shows the 'Departments' form in Form View. The 'Dept ID' field contains the value '1' and the 'Department' field contains 'Front Desk'. A 'Close Form' button is visible. Below these fields is a table titled 'Department Employees' with columns for 'FIRST' and 'LAST' names, and a 'More Info' button for each row. The data in the table is as follows:

FIRST	LAST	More Info
Charlie	Carson	More Info
Edgar	Edwards	More Info
Ophelia	Oakley	More Info
Pamela	Perkins	More Info
Rafel	Risso	More Info

At the bottom of the form, there is a status bar showing 'Record: 1 of 5', 'No Filter', and a 'Search' field.

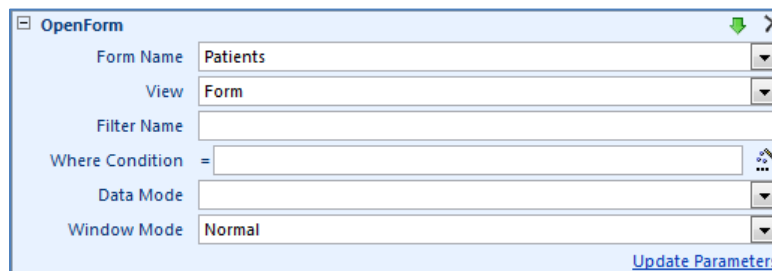
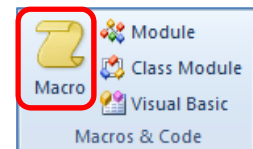
Creating a Macro

Buttons are limited to only one action at a time: open a form; go to the next record, exit the application. If you want a button to do multiple tasks you can set up a Macro and then have the button do the single 'miscellaneous' task of: **Run a Macro**.



We are going to create a New Patient button and a New Employee button for our Main Menu. To create a new record we need to (1) Open a form and (2) Go to a new Record. We can create buttons to do each, but not both.

1. From the Create Tab, choose Macro
2. From the Action menu choose **Open Form**
3. Change the **Form Name** property to be *Patients*
 - a. Leave the other properties alone



4. For the next step, choose GoToRecord from the Action menu
5. Change the **Record** property to be *New*
 - a. Leave the other properties alone
6. Save the Macro as "New Patient"
7. Run the Macro
 - a. It should take you to a blank Patient form to Record 77



Open Form Action Arguments

Form Name – This drop down list will provide you with a list of all the forms in your database.

View – Form, Design, Print Preview, Datasheet, ...

Filter Name – Name of a Query (spelling counts) that will limit your records

Where Condition – An SQL statement such as `Select * from Patients where Patient.City="Waldo"`

Data Mode – Add, Edit, or Read Only. If you leave this blank, Access will open the form as it's saved.

Add – **Data Entry** property set to Yes. This will open the form and ONLY show you a new record.

Edit – Properties **Allow Additions, Allow Deletions, Allow Edits** all set to Yes.

Read Only – Properties **Allow Additions, Allow Deletions, Allow Edits** all set to No.

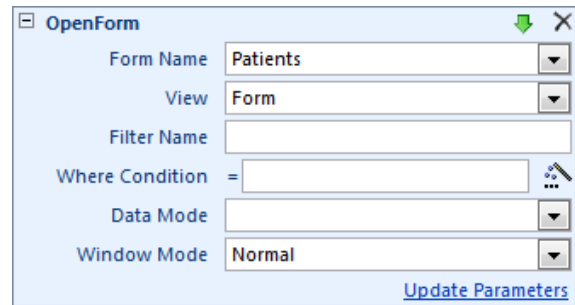
Window Mode – Normal, Hidden, Icon, Dialog.

Normal – Opens the way the database is set (Overlapping Windows or Tabbed Documents)

Hidden – Opens the form but hides it from view. This is a simple way to make a global variable.

Icon – When you are using the Overlapping Windows this will minimize the form

Dialog – Properties **Modal**, and **Pop up** are set to Yes. This will open the form as a floating window. This is good for search boxes, error messages, and search windows.



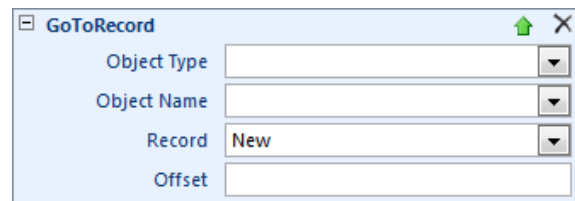
GoToRecord Form Action Arguments

Object Type – Table, Query, Form...

Object Name – This list will populate with options based on the selection in the Object Type. If Object Type and Object Name are left blank, Access assumes the 'current' database object.

Record – Previous, Next, First, Last, GoTo, New

Offset – This option is used when the Record choice is "GoTo". We go to an offset of... i.e. +5 will jump forward 5 records, -5 will jump back. This is especially useful when we have data with many similar values. Instead of moving one record at a time we can 'Jump' via our *Offset*.

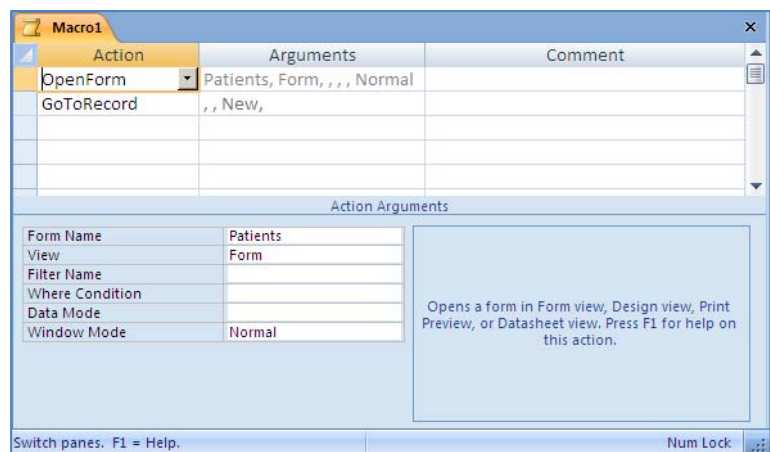


Note for Earlier Versions

If you are using Office 2007 or earlier, your macro screen, it will look more like this one.

Instead of having the Action Arguments under each Action, they appear at the bottom of the window.

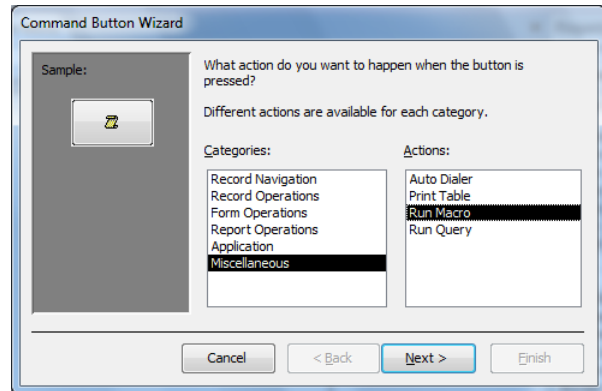
The Action list and Action Arguments are the same, but in this new Office 2010 version it looks very different.



Creating a Button to Run a Macro

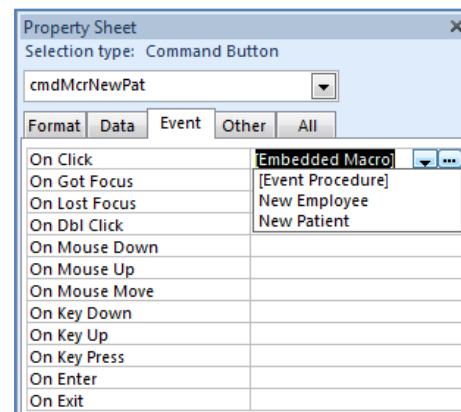
Using the Command Button Wizard

1. Open the Main Menu form in Design View
2. From the controls in the Design tab, create a Command Button
3. Choose the **Miscellaneous** category, **Run Macro** action
4. Choose the New Patient Macro
5. Change the text to *New Patient*
6. Give the button a meaningful name
 - a. Something like, cmdMcrNewPatient
7. Test the Button
8. Format the button to look like the others



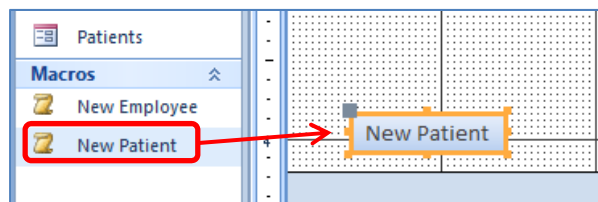
Using the Property Sheet

1. Copy and Paste the button, Change the Caption (name) to be New Employee
 - a. Align it with the Employee button
2. Create a New Employee Macro
3. New Employee Button still opens Patients Form
4. Open the Property Sheet for the New Employee button
 - a. Change the **On Click** property (event tab) to *New Employee*
5. Open the Property Sheet for the New Patient button
 - a. Change the **On Click** property to *New Patient*



Dragging from the Navigation Pane

1. Open the Patients Form in Design View
2. Drag the New Patient macro onto the form
3. Adjust format and placement
4. Open the Patient Visits Form in Design View
5. Drag the New Patient macro onto the form
6. Adjust Format and Placement



Modifying Existing Buttons

In Access 2003 or earlier buttons were based on VBA, Visual Basic for Applications code. If we needed to edit a button we had to wade through screens such as this:

```
cmdExitDatabase Click
Option Compare Database

Private Sub cmdExitDatabase_Click()
On Error GoTo Err_cmdExitDatabase_Click

    If Me.Dirty Then Me.Dirty = False
    DoCmd.Quit

Exit_cmdExitDatabase_Click:
Exit Sub

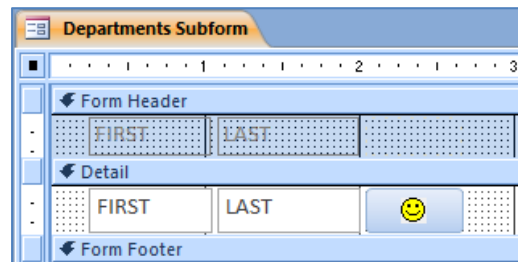
Err_cmdExitDatabase_Click:
MsgBox Err.Description
Resume Exit_cmdExitDatabase_Click

End Sub
```

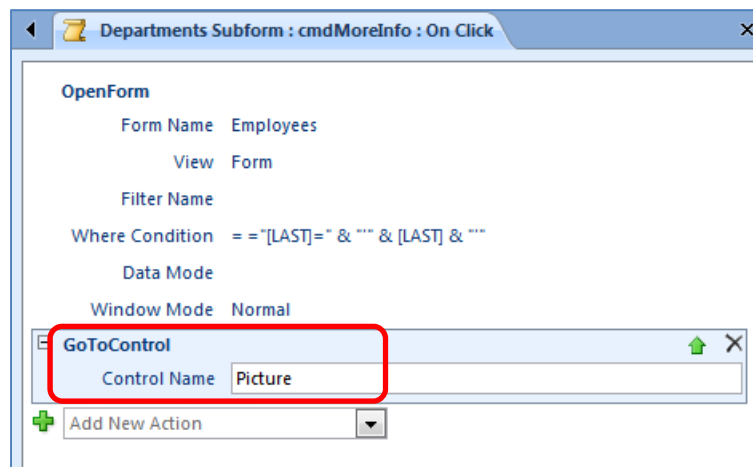
Beginning in Office 2007, new buttons are created with Embedded Macros. So instead of a "Event Procedure", our **On Click** properties give us "Embedded Macro".

We're going to change the **More Info** button on our Departments SubForm to show us the employee's picture.

1. Open the Departments SubForm in design view
2. Open the properties for the More Info button
3. Change the look of the button
 - a. Format Tab – click in the **Picture** property
 - b. Click on the ... at the end of the line
 - c. Find the *Happy Face* and click OK



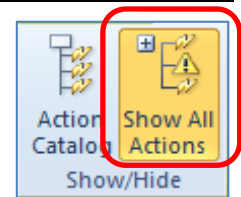
4. Change the event
 - a. Event Tab – click in the On Click property
 - b. Click on the ... at the end of the line
 - c. Add a New Action
 - i. GoToControl
 - ii. **Control Name**
Picture
 - d. Close and Save



5. Test the button

Macro Actions

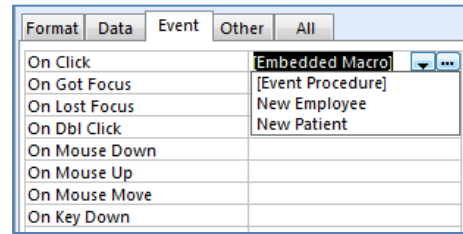
Here is a list of all the Macro actions. If you don't see them on your list, be sure to turn on the **Show All Actions** button in the Show/Hide group on the Macro Tools Design Tab.



Comment	ImportSharePointList	RunMacro
Group	LockNavigationPane	RunMenuCommand
If	MaximizeWindow	RunSavedImportExport
SubMacro	MessageBox	RunSql
AddContactFromOutlook	MinimizeWindow	SaveAsOutlookContact
AddMenu	MoveAndSizeWindow	SaveObject
ApplyFilter	NavigateTo	SaveRecord
Beep	OnError	SearchForRecord
BrowseTo	OpenForm	SelectObject
CancelEvent	OpenQuery	SendKeys
ClearMacroError	OpenReport	SetDisplayedCategories
CloseDatabase	OpenSharepointList	SetFilter
CloseWindow	OpenSharePointRecycleBin	SetLocalVar
CollectDataViaEmail	OpenTable	SetMenuItem
CopyObject	OpenVisualBasicModule	SetOrderBy
DeleteObject	PrintObject	SetProperty
DeleteRecord	PrintOut	SetTempVar
DisplayHourGlassPointer	PrintPreview	SetValue
Echo	QuitAccess	SetWarnings
EditListItems	Redo	ShowAllRecord's
EmailDatabaseObject	Refresh	ShowToolbar
ExportWithFormatting	RefreshRecord	SingleStep
FindNextRecord	RemoveTempVar	StartNewWorkflow
FindRecord	RenameObject	StopAllMacros
GoToControl	RepaintObject	StopMacro
GoToPage	Requery	UndoRecord
GoToRecord	RestoreWindow	WordMailMerge
ImportExportData	RunApplication	WorkflowTasks
ImportExportSpreadsheet	RunCode	
ImportExportText	RunDataMacro	

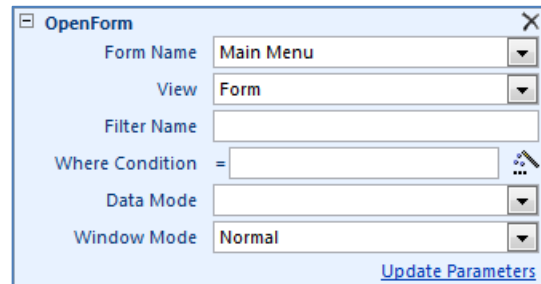
Non-Button Macros

While we use buttons to activate macros it is possible to have them run automatically, in the background. Buttons run a macro or event procedure on the event that they are 'clicked'. But there are lots of other events that can trigger a macro or event procedure.



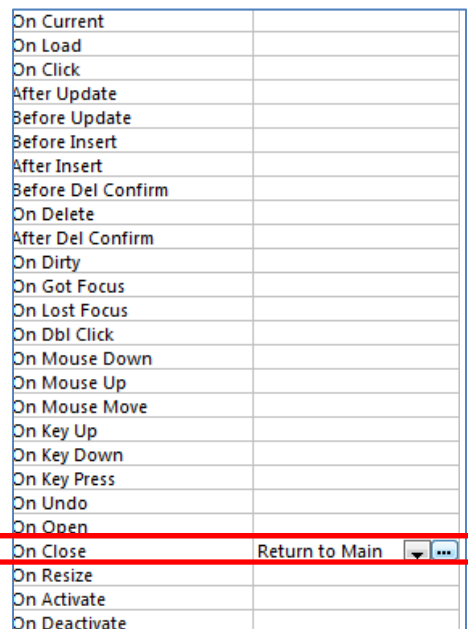
We're going to create a button that will run when a form is closed. Each time we close a Form we would like the Main Menu to open. Let's create a simple macro that opens the Main Menu.

1. From the Create Tab, choose Macro
2. From the Action List, choose Open Form
3. From the Form Name, choose Main Menu
4. Close and save as "Return to Main"




We could create a macro that would close the form and then open the main menu, but what if they use the X in the corner, or the keyboard shortcuts (Ctrl-W, Ctrl-F4)? No matter how the form is closed, we would like the Main Menu to open. We're going to assign this macro to run anytime a form is closed.

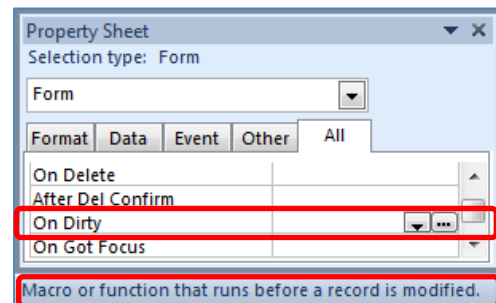
1. Open the Patient's Form in Design View
2. Open the Property Sheet for the Form
3. Turn to the Event Tab
4. Set property **On Close** to be *Return to Main*
5. Repeat for each of the other main forms
 - a. Patient Visits, Departments, and Employees
 - b. In Design view set property **On Close** to be *Return to Main*



Help

Some of the Event names are not clear. This is true of many of the property options. Watch your status bar as you click inside each property option, you'll see a small description that may help.

Beyond that there is help through the Access Help button , online through the [Microsoft Support](#), a myriad of online forums, and of course me. I'm happy to help the best I can.



And please, try to avoid the VBA Code if you can.