Database Tutorials

Hello everyone... welcome to database tutorials. These are going to be very basic tutorials about using the database to create simple applications, hope you enjoy it. If you have any notes about it, please send them to **notes@mka-soft.com**. Finally if you find these tutorials are useful, it would be nice from you to send a small donation via PayPal to **donation@mka-soft.com**.

The work with this tutorial started on 2010-SEPTEMBER-16.

ListBoxes and ComboBoxes

Today's tutorial is about using ListBoxes and ComboBoxes. First create a simple database that contains two tables:



This is the departments table which has only one column. You can create more than one column if you like.

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| n tr | ne database has b | een disabled | Options | | | | |
| | Emp Depa | artments | | | | | |
| | ID - | EmpName • | EmpPhone 🔹 | EmpSal 🔸 | EmpNotes • | DeptName + | A |
| | 1 | Smith | 333333 | 30000 | N/A | Marketing | |
| | 2 | Michel | 999999 | 40000 | N/A | Customer Care | |
| | 3 | Todd d | 444444 | 25000 | N/A | R&D | |
| | 4 | John | 333332 | 12344 | N/A | Marketing | |
| * | (New) | | | 0 | | | |

The second table contains information about employees. It is called EMP. The DeptName column in this table get its value from the Departments table. Now start a new project.

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| | - Form1 | | | |
| 🕁 🚛 Departments | | Contract | | |
| Emp 💌 | | | | |
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Create a new data source for your project and select both tables, you should get something similar to this.

| MenuStri | p |
|---|--|
| ComboBo | |
| ^{xv} GroupBo A Label ■ ListBox | ComboBox Version 2.0.0.0 from Microsoft Corporation .NET Component |
| Data So | Displays an editable text box with a drop-down list of permitted values. |

First we will test how to display the information in ComboBox and Listbox, so drop a ComboBox and a ListBox on the form.

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Now click on the small square shape that appears on the top right corner of the list box when you select it. You should see the following:



Mark the check box:

| ListBox1 | ListBox Tasks | | |
|----------|-----------------|-----------------------------|---|
| | 👿 Use data boun | id items | |
| | Data Binding Mo | de N | |
| | Data Source | (none) | |
| | Display Member | · | |
| 0 | Value Members | property from the data sour | |
| | Selected Value | (none) | ٦ |

In the DataSource specify which table you want to display its information (in this example it is the Departments table), and the Display Member which column you want to display (because the control only displays one column).

| 1001001001001 | ListBox Tasks | | |
|---------------|-----------------|---------------------|---|
| | 👿 Use data boun | d items | |
| | Data Binding Mo | de | |
| | Data Source | DepartmentsBindingS | - |
| | Dis Jay Member | DeptName | |
| | Value Member | | |
| | Selected Value | (none) | - |
| | Add Query | | |
| | Preview Data | | |

Do the same for the ComboBox, and test the form

| Form1 | | | × |
|-------|---------------|---|---|
| R&D | • | | |
| | Marketing | | 1 |
| | Custover Care | 2 | |
| | | | |
| | | | |

Now after you see how to display information in these control, close the window, and remove the listbox and combobox. We are going to build a form.

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In the datasources window, for the Emp table, make sure you change it to Details, then drag the table and drop it on the form.

| | 14 4 0 | of {0} 🕨 | N & X |
|----|--------------|------------|---------|
| W. | ID: | | |
| | Emp Name: | | |
| | Emp Phone: | | |
| | Emp Sal: | | |
| | Emp Notes: | | |
| | Dept Name: 0 | N | 0 |
| | 197 | 63 | |
| | | | |

Now run the application...

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| 🖳 Form1 | THE R. DO. | |
|------------|------------|------|
| 4 4 4 | of 4 ▶▶∥ | ÷ × |
| ID: | 4 | 0 |
| Emp Name: | John |) |
| Emp Phone: | 333332 | N |
| Emp Sal: | 12344 | - 43 |
| Emp Notes: | N/A | Ĵ. |
| Dept Name: | huihuihi | |
| | | |

The form works but the problem is that you can write anything in the department name. What are we going to do now is to provide a list box that will allow the user to pick the department name. Select the textbox used to display DeptName column and remove it, then place a listbox.

| Emp Phone: |
|------------|
| Emp Sal: |
| Emp Notes: |
| Dept Name: |
| |
| |
| ÖÖ |

Display the Binding of the listbox:

| Emp Sal: | | | | |
|------------|---|-----------------|---------------------|----|
| Crip our | | | | |
| Emp Notes: | | | | |
| Dept Name: | · | ListBox Tasks | | |
| | | 🔽 Use data boun | d items | |
| | | Data Binding Mo | de | |
| | 0 | Data Source | DepartmentsBindingS | • |
| | | Display Member | DeptName | |
| | | Value Member | DeptName | • |
| | | Selected Value | (none) | R |
| | | Add Query | | hs |
| | | Preview Data | | |

The Data Source represents which table you want to get the values from.

The **Display Member** represents which column you are going to display to the user.

The **Value Member** represents which column you are going to use (source column) and store in the database. You can display a column to the user, and use the value of another column to store it (for example you can display user name to the user , and store user id).

The **Selected Value** represents which column you want the selected value to be stored in (destination column).

| Emp Name: | None | |
|------------|--|----------------------------|
| Emp Phone: | 😥 🎁 DepartmentsBindingSource | e 🗍 |
| Emp Sal: | EmpBindingSource | |
| Emp Notes | | 1 |
| | Emploame | 2.6 |
| Dept Name: | EmpSal | |
| ģ | 🚺 EmpNotes | |
| | I ReptName | |
| 00 | Othé [®] Data Sources | * |
| | Add Project Data Source | |
| | Selecting a BindingSource propert the corresponding property of the | ty binds to list that t |
| | Selected Value (none) | - |
| | Add Query | |
| | | |

The picture above shows the binding of the Selected Value field. This means the value you select in the list box is going to be stored in the Emp table – DeptName column. Now run the application, and test it.

| | - Form1 | | 의 X |
|----|------------|---------------|-------|
|)e | ₩ 4 2 | of 4 💽 🖌 🗍 💠 | × |
| 5 | ID: | 2 Move next | |
| | Emp Name: | Michel | |
| | Emp Phone: | 999999 | |
| | Emp Sal: | 40000 | |
| Ш | Emp Notes: | N/A | |
| | Dept Name: | Marketing | |
| | | Customer Care | |

The exact same method can be used with combobox. So remove the list box and place a combobox instead, and set its binding exactly the same way as you did for the listbox. It is as simple as that.

So this will be all for today. If you have questions or notes, send them to notes@mka-soft.com.

Thank you.

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