I Wish I Knew How To …

Program Access 2007/2010/2013 with Xojo Desktop Apps in Windows

June 2015 Edition (3.1)

By Eugene Dakin

How to read this information:

I Wish I Knew How to … Program Access with Xojo is a reference and self-paced learning material that helps you understand the different methods to program Access by using Xojo.

Many of the examples are in small simpler code to help the reader understand the code. It is much easier to understand simplified code and make it complicated, than the other way around.

New to Version 2.0 – July 2013

This version has the following material added:

1) Updated examples to the new Xojo format
2) Integrated instructions for the new GUI Xojo style
3) Updated and expanded index to easier find commands
4) Added Database Specifications
5) Added DSN example
6) Plugin addition Instructions

New to Version 3.0 – October 2013

This version has the following material added.

1) Added the SQL 2003 mdb Memofield with LIKE command Example 4-12
2) Updated code to Xojo 2013 R 3.1
3) Removed multiple page numbers on reports due to bug fix's
4) Removed some typographical errors
5) Updated Yes/No Datatype (Chapter 20)
6) Converted field 'Value' to 'StringValue'
7) Added Print without Printer Dialog version 2 – Example 12-25
8) Changed Chapter 24 to appropriate DoubleValue and StringValue fields

New to Version 3.1 – June 2015

This version has the following material added.

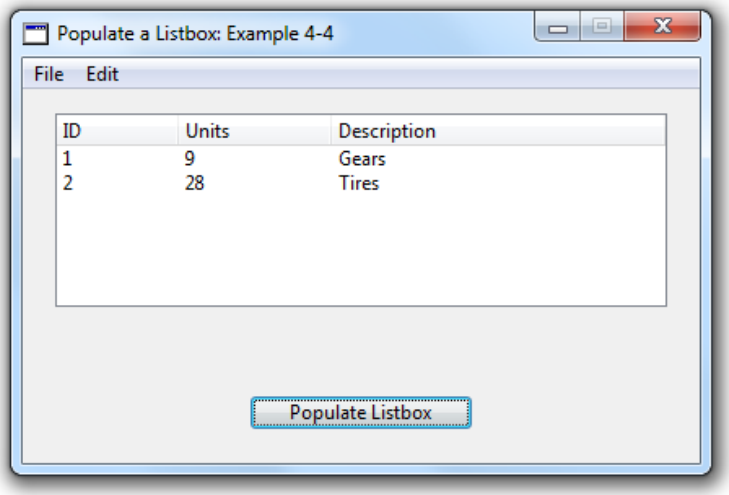
9) ActiveX Database Objects – accdb (Chapter 25)
    a. New Database (Example 25-1)
    b. Create Table (Exampe 25-2)
    c. Create Field (Example 25-3)
    d. Create Data (Example 25-4)
    e. Read Data (Example 25-5)
    f. Update Data (Example 25-6)
    g. Delete Data (Example 25-7)
10) Field Data Type listing (Chapter 28)

Table of Contents

Putting Data into a Listbox

Placing data into a listbox is a little different than the other two examples. Because there are numerous cells the format is a little bit different. The good news is that most of the calls to the database are almost the same.

Figure 23. Populating a Listbox Example 4-4



When the 'Populate Listbox' pushbutton is pressed, Example 4-4 will create 3 columns, put a header (ID, Units, Description) in the listbox, and will fill the listbox with data from the database.

Code 11. Populating a Listbox Example 4-4

```
  //Getting Information from the Database
 Dim db as ODBCDatabase
 Dim rs as RecordSet
 db = new ODBCDatabase
 db.DataSource = "DRIVER={Microsoft Access Driver (*.mdb, *.accdb)};
DBQ=C:\test\Inventory.accdb;User Id=admin;Password=;"

 if db.Connect() then //Was the connection successful?
  'MsgBox "Connected"
 else
```

```
  MsgBox "Connection failed: " + db.ErrorMessage
  return
end if

//Format the Listbox
Listbox1.HasHeading = true //show the heading
Listbox1.ColumnCount = 3 //make 3 columns
Listbox1.ColumnWidths = "20%, 25%, 55%"
Listbox1.InitialValue = "ID" + chr(9) + "Units" + chr(9) + "Description"

//Get the data from the database
rs = db.SQLSelect("SELECT * FROM Widgets") //Get all of the data from Widgets

if rs <> Nil then //Continue if there is data
  do until rs.EOF //continue until we reach the End Of File
    Listbox1.AddRow
    Listbox1.Cell(Listbox1.LastIndex, 0) = rs.Field("ID").StringValue
    Listbox1.Cell(Listbox1.LastIndex, 1) = rs.Field("Units").StringValue
    Listbox1.Cell(Listbox1.LastIndex, 2) = rs.Field("Description").StringValue
    rs.MoveNext //move to the next recordset
  loop //get the next row of data
else
  MsgBox "No RecordSet exists."
  Return
end if
rs.Close
db.Close
```

The above code creates an ODBCdatabase object and makes a recordset object. A new database is created and the location of the database is in the connection string. If there is a successful connection to the database then the rest of the code is executed. If the connection fails then the error is show and the method is exited.

The listbox is formatted by showing the heading, making 3 columns, showing the column width in percentage values and adding the heading labels. Each label is separated by a tab that is shown as chr(9).

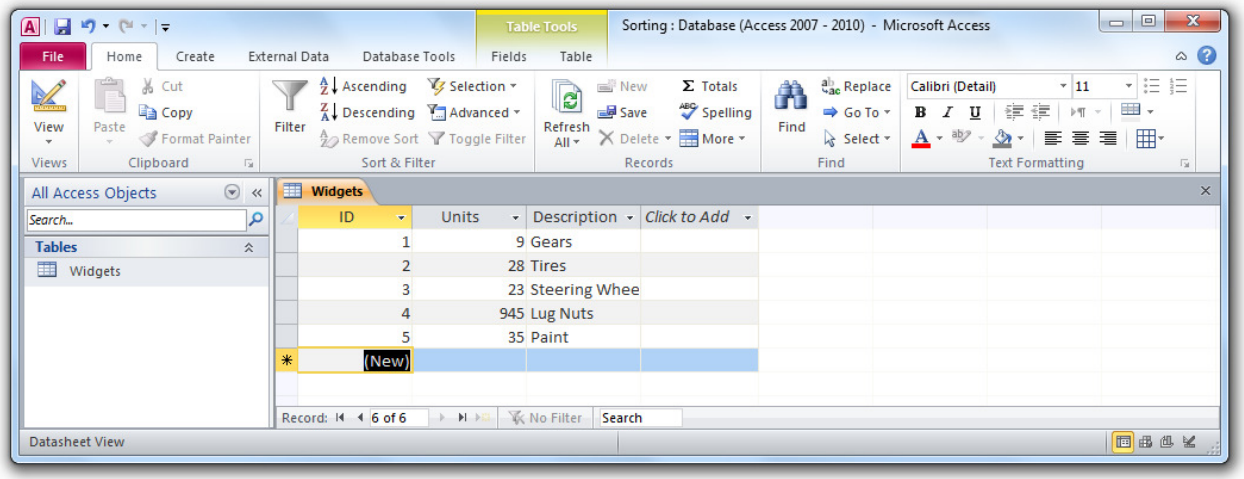
All data from the Widgets table is placed in the recordset. If data exists, then the loop is started until the EndOfFile (EOF) has been reached. A row is added to the listbox and columns 0, 1, and 2 are populated with data. When complete, the recordset and database are closed.

Sorting Data

When there is a large list of data, placing it in some sort of order would make it easier for the user. An SQL command exists called the ORDER BY clause which places everything in a recordset by alphabetical order.

I have created a Sorting database and added some information to the Widget table that is in random order. Make sure that the Sorting.accdb database has been placed in the folder c:\test\.

Figure 24. Contents of Sorting Database



Index

The 'I Wish I Knew' series contains technical data and advice that makes sense and contains practical and numerous examples with explanations to allow you to ease into the steep programming curve. You can create Microsoft Access database applications today!

This book "I Wish I Knew How to … Program 2007/2010/2013 Access with Xojo Desktop Apps in Windows" delves into the mystery of programming a front end database.

The book is written as a guide and reference to Xojo programmers who program Desktop Applications in Windows. There are no dynamic link libraries (dll), COM, or Active X parts to add, athough there is a Xojo plugin. The book has a strong focus on DSN-less connections, and works with the Microsoft Access 2007/2010/2013 (mdb and accdb) databases.

There are over 25 chapters and contains over 260 pages with over 80 example programs. The book is a live document and will likely have updates in the future.

Examples include opening recordsets, finding data, sorting, updating data, counting records, printing a report, deleting records, creating new records, creating reports, and more. Many screenshots have been added to show the results of the code with an index to help find topics quickly.

This is one of many books at Great White Software. This book can be purchased at http://great-white-software.com/rblibrary/ where many great Xojo resources are available.

Happy programming!

Eugene

Eugene Dakin MBA, Ph.D., P.Chem., is an author of Xojo and Real Studio reference materials and has many years of experience in the programming industry. Another great reference book is *I Wish I Knew How To … Program Excel with Xojo in Windows*.

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