Programming SQL

Option Explicit

Private Sub Form_Load()
    txtUserQuery.Text = Adodc1.RecordSource
    Adodc1.Caption = Adodc1.RecordSource
End Sub

Private Sub cmdQuery_Click()
    ON Error Resume Next
    cmdQuery.Enabled = False
    Adodc1.RecordSource = txtUserQuery.Text
    Call Adodc1.Refresh
    Adodc1.Caption = Adodc1.RecordSource
End Sub

Private Sub Adodc1_MoveComplete(ByVal adReason As ADODB.EventReasonEnum, ByVal pError As ADODB.Error, ByVal adStatus As ADODB.EventStatusEnum, ByVal pRecordSet As ADODB.RecordSet)
    cmdQuery.Enabled = True
End Sub

Hierarchical FlexGrid Control

➤ Similar to DataGrid, but only for viewing data (read-only)
➤ Some Properties - Name, AllowBigSelection, AllowUserResizing, Appearance, BackColor, Cols, Height, Highlight, MergeCells, Rows, RowSizingMode, Width, WordWrap, Visible

DataList and DataCombo Controls

➤ DataList is similar to List
➤ DataCombo is similar to ComboBox
➤ Both can be populated automatically with data from one field of a recordset
DataList and DataCombo Example

**Controls**
- DataCombo1 (ComboBox) - displays a list of author names
- DataList1 (DataList) - displays books by a selected author
- DataGrid1 (DataGrid) - displays full information of the selected book
- adoAuthorNames (ADO Data Control) - data control for DataCombo1
- adoBooks (ADO Data Control) - data control for DataList1
- adoAllInfo (ADO Data Control) - data control for DataGrid

Control settings

- **DataCombo1**
  - DataSource: adoAuthorNames (author names)
  - RowSource: adoAuthorNames
  - ListField: Author
- **DataList1**
  - DataSource: adoBooks (books by a selected author)
  - RowSource: adoBooks
  - ListField: ISBN
- **DataGrid1**
  - DataSource: adoAllInfo (full info of selected book)

* Not available at run-time
Control settings - RecordSource

ADOAuthorNames
- DataSource: biblio.mdb
- Command type: adCmdText
- Command text: SELECT Author, Au_ID FROM Authors ORDER BY Author ASC

ADOBooks
- Command type: adCmdText
- Command text: SELECT Author FROM Authors

ADOAllInfo
- Command type: adCmdText
- Command text: SELECT * from authors

Find a list of books by an author

bookQuery = _
"SELECT Authors.Author, [Title Author].ISBN " & _
"FROM Authors INNER JOIN [Title Author] ON " & _
"Authors.Au_ID = [Title Author].Au_ID " & _
"WHERE Authors.Author = ")"

New View
Author ISBN • Title Author
- ISBN
- Au_ID

Find book information given an ISBN

allInfoQuery = _
"SELECT DISTINCT Titles.Title, Publishers.Name, " & _
"[Title Author].Title, [Title Author].PubID " & _
"FROM (Publishers INNER JOIN Titles ON " & _
"[Title Author] ON " & _
"[Title Author].ISBN = [Title Author].ISBN " & _
"WHERE Titles.ISBN = ")"

New View
Title Publisher Year
Publisher
- PubID
- Name
- Company Name
- Address
- City
- State
- Zip
- Telephone
- Fax
- Comments

Authors
- Au_ID
- Author
- Year Born

Subject
- Description
- Notes
- Subject Comments

Titles
- Title
- Year Published
- ISBN
- Publisher
- Description
- Notes
- Subject
- Comments

Authors
- Au_ID
- Author
- Year Born

Comments
BoundColumn

- DataCombo1
- DataGrid1
- AdoPublishers
- AdoTitles

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BoundColumn

- DataCombo1
  - DataSource: AdoTitles
  - ListField: Company Name
  - RowSource: adoPublishers['value taken to update DataSource'] PubID

- DataGrid1
  - DataSource: AdoTitles
  - AdoPublishers (Record Source)
    - CommandType: adCmdText
    - CommandText: SELECT [Company Name], PubID FROM Publishers ORDER BY Name ASC

- AdoTitles
  - CommandType: adCmdText
  - CommandText: SELECT Title, PubID FROM Titles ORDER BY Title ASC

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Other capabilities of Recordsets

[Data control].RecordSet.Fields("FieldName")

[Data control].RecordSet("FieldName")

BookmarkLocation = _
    [Data control].RecordSet.Bookmark

[Data control].RecordSet.Bookmark = _
    BookmarkLocation

Transaction processing

➤ BeginTrans
➤ CommitTrans
➤ Rollback