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1: {*****
2: *
3: * Project : OLE DB maXbase SeriesSystem Information Series
4: * App Name : 241_db3_SQL_tutorial.txt, loc's = 196 for Tutorial 12
5: * Purpose : DB Access via OLE DB with Access and SQL
6: * History : system for mX3, need: Database3.mdb in /Examples and ODBC DNS
7: *****}
8: Program DB_ACCESS_SQL;
9:
10: function MyGetTickCount: Longint; external 'GetTickCount@kernel32.dll stdcall';
11: procedure CreateDBGridForm(aSet: TAdoQuery); forward;
12:
13: var
14:   dCom: TADODCommand;
15:   sl: TStringList;
16:
17:
18: Procedure ConnectTest;
19: var cnect: TADOConnection;
20: begin
21:   cnect:= TADOConnection.Create(self);
22:   try
23:     cnect.Provider:= 'Microsoft.Jet.OLEDB.4.0'
24:     cnect.ConnectionString:= 'Provider=SQLOLEDB;DataSource=MyServer;Integrated
Security//=SSPI;Initial Catalog=pubs;'; //or for MS Jet (MS Access):
25:     cnect.ConnectionString:= 'Provider=Microsoft.Jet.OLEDB.4.0;'+
26:                               'DataSource=c:\db.mdb;';
27:     cnect.Connected:= true;
28:     cnect.LoginPrompt:= False;
29:     cnect.Open('Admin',''); //cnect.Active:= true;
30:   finally
31:     cnect.Free;
32:   end;
33: end;
34:
35: Procedure SetADOAccessSQL_Query;
36: var //adoquery: TAdoDataSet;
37:   adoQry: TAdoQuery;
38:   i,z: integer;
39: begin
40:   adoQry:= TAdoQuery.Create(self);
41:   with adoQry do begin
42:     cacheSize:= 500;
43:     connectionString:= 'Provider=MSDASQL;DSN=mx3base;Uid=sa;Pwd=admin';
44:     {commandText:= 'INSERT INTO Table1 (FirstName, LastName, Phone)+'
45:                   'VALUES (''Max99'', ''Box5459'', ''031-333 77 88'')';}
46:     commandText:= 'SELECT * FROM Table1';
47:     Open;
48:     Writeln(intToStr(Recordcount)+' records found: ')
49:     for i:= 0 to Recordcount - 1 do begin
50:       for z:= 0 to Fieldcount - 1 do
51:         Write((Fields[z].asString)+' ');
52:       Writeln(#13#10)
53:       Next;
54:     end;
55:     CreateDBGridForm(adoQry);
56:     Close;
57:     Free;
58:   end;
59: end;
60:
61: //*****SQL StringList Solution*****
62: procedure splitAttributes(ast: string; attrs: TStringList);
63: var x: integer;
64:   s: string;
65: begin
66:   if not (Assigned(attrs)) then
67:     attrs:= TStringList.Create;
68:   s:= '';
69:   x:= 1;
70:   while (x <= length(ast)) do begin
71:     if ast[x] = ',' then begin
72:       attrs.Add(Trim(s));
73:       s:='';
74:     end else
75:       s:= s + ast[x];

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76:     inc(x);
77: end;
78: attrs.Add(Trim(s+ast[x-1]));
79: end;
80:
81: procedure deleteStr(var auxstr: string; len: byte);
82: begin
83:   Delete(auxstr, 1, len);
84: end;
85:
86: procedure fillRecords(aDBName, T,A,C, fs: string; sl: TStringlist);
87: var attrs: TStringlist;
88:     f: shortint;
89:     auxstr: shortstring;
90: begin
91:   attrs:= TStringlist.Create;
92:   splitAttributes(A, attrs);
93:   with TADOQuery.Create(self) do begin
94:     cachesize:= 500;
95:     connectionString:= 'Provider=MSDASQL;DSN='+aDBName+';Uid=sa;Pwd=admin';
96:     //commandText:= 'SELECT * FROM Table1';
97:     SQL;
98:     commandText:= 'SELECT '+A+' FROM '+T;
99:     if length(C) > 0 then
100:       commandText:= 'SELECT '+A+' FROM '+T+' WHERE '+C;
101:     Open;
102:     First;
103:     try
104:       while not(EOF) do begin
105:         auxstr:='';
106:         for f:= 0 to attrs.count-1 do
107:           auxstr:= auxstr + FS + fields[f].AsString;
108:           deleteStr(auxstr, length(fs));
109:           sl.add(auxstr);
110:         Next;
111:       end;
112:     finally
113:       Close;
114:       Free;
115:     end;
116:   end; //with
117:   attrs.Free;
118: end;
119:
120: procedure ShowRecords;
121: var i: integer;
122: begin
123:   for i:= 0 to sl.count-1 do
124:     Writeln(sl[i])
125:   Writeln('');
126: end;
127:
128: procedure GetDBProviders;
129: var ws: TWideStrings;
130:     i: integer;
131: begin
132:   ws:= TWideStringList.Create;
133:   getProviderNames(ws)
134:   for i:= 1 to ws.count -1 do
135:     writeln(intToStr(i) + ' '+ws.strings[i])
136:   ws.free;
137: end;
138:
139: procedure CreateDBGridForm(aSet: TADOQuery);
140: var tmpDataSource: TDataSource;
141:     dbGrid: TDBGrid;
142:     dbFrm: TForm;
143: begin
144:   dbFrm:= CreateMessageDialog('FastForm DB SQL',mtwarning,[mball,mbhelp,mbok]);
145:   dbFrm.caption:= 'FFP SQL DBGrid Demo';
146:   dbFrm.setBounds(50,50,900,500)
147:   dbFrm.formstyle:= fsstayontop;
148:   dbFrm.color:= clWebGold;
149:   dbFrm.show;
150:   dbgrid:= TDBGrid.Create(self)
151:   with dbGrid do begin

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152:     Parent:= dbFrm;
153:     left:= 65; top:= 100;
154:     width:= 800; height:= 350;
155:     ReadOnly:= True;
156:     //Options:=DBGrid.Options + [dgEditing];
157:     tmpDataSource:= TDataSource.Create(Self);
158:     with tmpDataSource do begin
159:         dataset:= TDataSet(aSet);
160:         IsLinkedto(TDataSet(aSet))
161:         Enabled;
162:     end;
163:     //DataSource is linked to a DataSet.
164:     dataSource:= tmpDataSource;
165:     BeginLayout; ///
166:     writeln('fcount of datasource '+intToStr(fieldcount))
167: end;
168: //tmpDataSource.Free;
169: //dbGrid.Free;
170: //dbFrm.Free;
171: end;
172:
173:
174: Begin //main app
175:     //SetAdoQuery;
176:     //SetAdoSet;
177:     maxform1.ShellStyle1Click(self);
178:     sl:= TStringList.Create;
179:     FillRecords('mx3base','table1','firstname','','; ',sl);
180:     FillRecords('mx3base','table1','firstname,lastname,phone','','; ',sl);
181:     //FillRecord('mx3base','table1','firstname,lastname,phone','firstname = 'max''','; ',sl);
182:     ShowRecords;
183:     sl.Free;
184:
185:     //Some Infos & Tests
186:     SetADOAccessSQL_Query;
187:     GetDBProviders;
188:     Writeln('Data Link Dir is: ' + DataLinkDir);
189:     Writeln('Machinename is: ' + getHostName);
190:     Writeln('Username is: ' + getUserName);
191:     //DLL Test
192:     Writeln('tick count from dll func ' + IntToStr(MyGetTickCount));
193:     {Writeln((getASCII))
194:     Writeln(S_UTF_8ToString(getASCII))
195:     Writeln(S_StringToUTF_8(getASCII))}
196: End.
197:
198:
199: // with BDE or ODBC Example
200: { with TQuery.Create(NIL) do begin
201:     databasename:= dbname;
202:     //filteroptions
203:     SQL.Add('SELECT'+A+'FROM'+T);
204:     if length(C)>0 then
205:         SQL.Add('WHERE'+C);
206:     prepare;
207:     while not(prepared) do
208:         open;
209:         first;
210:         try
211:             while not(EOF) do begin
212:                 auxstr:='';
213:                 for f:= 0 to attrs.count-1 do
214:                     auxstr:= auxstr + FS + fields[F].asstring;
215:                     deleteSTR(auxstr, length(fs));
216:                     sl.add(auxstr);
217:                 next;
218:             end;
219:             close;
220:         finally
221:             Free;
222:         end;
223:     end;}
224:
225:
226: *****
227: There is no place like 127.0.0.1

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228:
229: Exception: Access violation at address 4DE2F83C in module 'msado15.dll'. Read of address
    78742E67 at 0.1057
230: Access violation at address 1B041FC6 in module 'msjet40.dll'. Read of address 0003242E at
    37.408
231: [Microsoft][ODBC Driver Manager] Data source name not found and no default driver specified at
    35.440
232: [Microsoft][ODBC Microsoft Access Driver] Query is too complex at 35.607
233: [Microsoft][ODBC Microsoft Access Driver] The Microsoft Jet database engine cannot find the
    input table or query 'TableId'. Make sure it exists and that its name is spelled correctly at
    35.556
234: [Microsoft][ODBC Microsoft Access Driver] Syntax error (missing operator) in query expression
    '031-333 77 88' at 41.356
235: [Microsoft][ODBC Microsoft Access Driver] Too few parameters. Expected 2 at 41.354
236:
237:
238: The syntax for the INSERT statement is:
239:
240:     INSERT INTO table
241:     (column-1, column-2, ... column-n)
242:     VALUES
243:     (value-1, value-2, ... value-n);
244:
245: dbs.Execute " INSERT INTO Employees " _
246:     & "(FirstName,LastName, Title) VALUES " _
247:     & "('Harry', 'Washington', 'Trainee');"
248:
249:
250: ADOConnection1.Open;
251: ADOQuery1.Close;
252: ADOQuery1.SQL.Text:= 'SELECT * FROM database1 WHERE
253: value1=1 AND value2= ' + inttostr(array[3]);
254:
255: QuotedStr rather than '''
256:
257: CommandText does not return a result set at 41.360
258: CommandText does not return a result set at 38.372
259:
260: ADOQuery1.SQL.Clear;
261: ADOQuery1.SQL.Add('Insert into Score ([Score],[Round],[FighterID],[FightID])
262: Values('+quotedstr(cbrfl.text)+' ,'+QuotedStr(inttostr(countround))+', )');
263: ADOQuery1.ExecSQL;
264: ADOQuery1.SQL.Clear;
265:
266: tools and configuration:
267: mdbviewer for Database3.mdb
268: dns-entry in ODBC DataSources: Provider=MSDASQL;DSN=mx3base
269:
270:
271:
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