Make a simple database program with Delphi

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Abstract

Let's learn coding easily and simply. In my blog post this time we will learn to create a simple database application with Delphi. The application that we will create is used as an example to input item data. But before we learn to make this application beforehand I will explain the specifications of the software that I use.

The Database Management System (DBMS) that we use in this application is MySQL, because MySQL is the most user-friendly and easier to use. MySQL that we use this time already includes in the XAMPP virtual server.

Keywords : Make a simple database program with Delphi

A. INTRODUCTION

Materi Section Class 1

Simple database

This time I will share about making the Delphi program a simple database program. Here's the appearance:

Okay, let's just go to the scene

1. Create a table in your database with the following fields:

Table name: : customer
Primary Key : kd_customer

Field	Type	Size
Kd_Pelanggan	Char	5
Nm_Pelanggan	Varchar	35
Alamat	Varchar	100
No_hp	Varchar	15

2. Design the form as shown below:

Open the code tab, then add the uses unit code right in the "implemetation" section.

```
implementation
uses unit2;
```

Return to the form, select DBGrid, and change the DataSource property by choosing DM.DS (DM is the name of the Data Module and DS is the name of the DataSource that is in the data module). For those of you who don't know how to create a Data Module, please read the previous post about Creating a Data Module (Delphi).

Back in the code tab, declare the following 4 procedures in private

```
private
{ Private declarations
}
procedure tampildata;
procedure bersihdata;
procedure tombolmati;
procedure tombolhidup;
```

Complete the procedure above by typing the command as follows.

```
procedure
TForm1.tampildata;
begin
    with dm.tampil do
    begin
        sql.Clear;
        sql.Add('select *
from          barang');
        active := false;
        active := true;
    end;
end;
```

```
procedure
TForm1.bersihdata;
begin
    edit1.Clear;
    edit2.Clear;
    edit3.Clear;
    edit4.Clear;
    edit5.Clear;
end;
```

```
procedure
TForm1.tombolmati;
begin
    button1.Enabled :=
true;
    button2.Enabled :=
false;
    button3.Enabled :=
false;
end;
```

```
procedure
TForm1.tombolhidup;
begin
    button1.Enabled :=
false;
    button2.Enabled :=
true;
    button3.Enabled :=
```

```
true;
end;
```

Kembali ke Form, pilih event OnShow lalu double click pada event tersebut dan lengkapi perintah seperti berikut:

```
procedure
 TForm1.FormShow(Sender:
 TObject);
begin
    tampildata;
    bersihdata;
    tombolmati;
end;
```

Run the program, if the steps you are working on are correct, the display will look like this:

Next double click on edit1, add the following code :

```
procedure
 TForm1.Edit1Change(Sender:
 TObject);
begin
    if edit1.Text<>' ' then
        begin
            with dm.Query do
                begin
                    sql.Clear;
                    sql.Add('select
*    from barang where
Kd_barang="'+edit1.Text+'
');

                    open;
                    if not eof then
                        begin
```

```
edit2.Text:=fieldvalues['N
m_barang'];
```

```
edit3.Text:=fieldvalues['H
rg_beli'];
```

```
edit4.Text:=fieldvalues['H
rg_jual'];
```

```
edit5.Text:=fieldvalues['S
tok'];
```

```
tombolhidup;
end
else
begin
```

```
edit2.Clear;
```

```
edit3.Clear;
```

```
edit4.Clear;
```

```
edit5.Clear;
```

```

                                end;
tombolmati;                                tampildata;
                                                bersihdata;
                                                tombolmati;
                                                showMessage('Data
                                                telah berhasil disimpan');
                                                edit1.SetFocus;
                                                end;
end;

```

Next is the Save Button, along with the code

```

procedure
TForm1.Button1Click(Sender
:           TObject);
begin
    if length(edit1.Text)<>5
then
                                begin
                                messagedlg('Maaf,
                                kode barang harus 5
                                karakter!',mtwarning,mbokc
                                ancel,0);
                                edit1.SetFocus;
                                exit;
                                end;

    if messagedlg('Apakah
    anda yakin akan menyimpan
    data
    ini?',mtconfirmation,[mbye
    s,mbno],0)=mryes then
                                begin
                                with dm.Query do
                                begin
                                sql.Clear;
                                sql.Add('insert
                                into
                                barang(Kd_barang,Nm_barang
                                ,Hrg_beli,Hrg_jual,Stok)')
                                ;
                                sql.Add('values
                                (''+edit1.Text+'',''+edit2
                                .Text+'',''+edit3.Text+'',
                                ''+edit4.Text+'',''+edit5.
                                Text+'')');
                                execsql;

```

end;

Then the Edit button:

```

procedure
TForm1.Button2Click(Sender
:           TObject);
begin
    if messagedlg('Apakah
    anda yakin akan mengubah
    data
    ini?',mtconfirmation,[mbye
    s,mbno],0)=mryes then
                                begin
                                with dm.Query do
                                begin
                                sql.Clear;

                                sql.Add('update barang set
                                Nm_barang="'+edit2.Text+'",
                                Hrg_beli="'+edit3.Text+'",
                                ');

                                sql.Add('Hrg_jual="'+edit4
                                .Text+'",Stok="'+edit5.Tex
                                t+'",
                                where
                                Kd_barang="'+edit1.Text+'",
                                ');

                                execsql;
                                end;
                                tampildata;
                                bersihdata;
                                tombolmati;

                                showMessage('Data telah
                                berhasil diubah');

```

```
edit1.SetFocus;  
end;  
end;
```

Lanjut Ke button hapus:

```
procedure  
TForm1.Button3Click(Sender  
: TObject);  
begin  
    if messagedlg('Apakah  
anda yakin akan menghapus  
data  
ini?',mtconfirmation,[mbye  
s,mbno],0)=mryes then  
        begin  
            with dm.Query do  
                begin  
                    sql.Clear;  
                    sql.Add('delete  
from barang where  
Kd_barang="'+edit1.Text+'"  
' );  
                    execsql;  
                    end;  
                    tampildata;  
                    bersihdata;  
                    tombolmati;  
                end;  
            showmessage('Data telah  
berhasil dihapus');  
            edit1.SetFocus;  
            end;  
end;
```

Last button exit:

```
procedure  
TForm1.Button4Click(Sender  
: TObject);  
begin  
    if messagedlg('Apakah  
anda yakin akan menutup  
form  
ini?',mtconfirmation,[mbye
```

```
s,mbno],0)=mryes then  
    close;  
end;
```

B. CONCLUSION

Let's learn coding easily and simply. In my blog post this time we will learn to create a simple database application with Delphi. The application that we will create is used as an example to input item data. But before we learn to make this application beforehand I will explain the specifications of the software that I use.

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D. REFERENCE (Based ISO 690)

- [1] A. S. Putra And O. M. Febriani, "Knowledge Management Online Application In Pdam Lampung Province," In *Prosiding International Conference On Information Technology And Business (Icitb)*, 2018, Pp. 181–187.
- [2] A. S. Putra, O. M. Febriani, And B. Bachry, "Implementasi Genetic Fuzzy System Untuk Mengidentifikasi Hasil Curian Kendaraan Bermotor Di Polda Lampung," *J. Sist. Inf. Dan Manaj. Basis Data*, Vol. 1, No. 1, Pp. 21–30, 2018.
- [3] O. M. Febriani And A. S. Putra, "Sistem Informasi Monitoring Inventori Barang Pada Balai Riset Standardisasi Industri Bandar Lampung," *J. Inform.*, Vol. 13, No. 1, Pp. 90–98, 2014.
- [4] Putra, Arie Setya. "2018 Artikel Struktur Data, Audit Dan Jaringan Komputer." (2018).
- [5] Putra, A. S. (2018, July 17). Paperplain Fundamental Create

Application With Borland Delphi 7.0 University Of Mitra Indonesia. Retrieved From Osf.Io/Pbrn9.

Darmawan, A., Yuliawati, D., Marcella, O., & Firmandala, R. (2016). Sistem Absensi dan Pelaporan Berbasis Fingerprint dan SMS Gateway. *EXPLORE*, 7(1).

E. REFERENCE (Based APA)

Putra, A. S., Aryanti, D. R., & Hartati, I. (2018, November). Metode SAW (Simple Additive Weighting) sebagai Sistem Pendukung Keputusan Guru Berprestasi (Studi Kasus: SMK Global Surya). In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, No. 1, pp. 85-97).

Sari, D. P., Febriani, O. M., & Putra, A. S. (2018, November). Perancangan Sistem Informasi SDM Berprestasi pada SD Global Surya. In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, No. 1, pp. 289-294).

Putra, A. S. (2018). Paperplain: Execution Fundamental Create Application With Borland Delphi 7.0 University Of Mitra Indonesia.

Putra, A. S., Sukri, H., & Zuhri, K. Sistem Monitoring Realtime Jaringan Irigasi Desa (JIDES) Dengan Konsep Jaringan Sensor Nirkabel. *IJEIS (Indonesian Journal of Electronics and Instrumentation Systems)*, 8(2), 221-232.

Febriani, O. M., Wahyuni, T., & Yusuf, S. (2017). DESIGN OF WEBSITE-BASED INFORMATION SYSTEM FOR EDOCUMENT ADMINISTRASI IN THE COMMUNITY SERVICE UNIT (A Case Study at Rajabasa District). *INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY*, 16(7), 7010-7020.

Febriani, O. M., & Wahyuni, T. (2017, October). PERANCANGAN SISTEM E-DOCUMENT ADMINISTRASI LOGBOOK PENELITIAN PADA UNIT LAYANAN DI BANDAR LAMPUNG. In *Prosiding Seminar Nasional Darmajaya* (Vol. 1, No. 1, pp. 187-194).

Febriani, O. M., & Permadi, A. B. (2017). Implementasi Sistem Aplikasi Data Bimbingan dan Pelanggaran Siswa pada Sekolah Menengah Atas di Lampung Tengah dengan Metode Analisis dan Desain Sistem Terdistribusi (SSAD). *EXPERT*, 7(1).

Febriani, O. M., & Ambarwati, L. (2015). PERANCANGAN APLIKASI PENGOLAHAN DATA PENJUALAN UKM KELANTING KHAS TELO DESA SIDOHARJO KECAMATAN JATI AGUNG KABUPATEN LAMPUNG SELATAN. *Jurnal Teknologi Informasi dan Bisnis Pengabdian Masyarakat Darmajaya*, 1(1), 77-95.

Febriani, O. M. (2015). Rancang Bangun Aplikasi E-commerce menggunakan Freewebstore pada UKM Kelanting di Desa Sidoharjo Lampung Selatan. *Prosiding Sembistek 2014*, 1(02), 446-458.