

Tutorial 5

Database

Task 1

Creating a database using **Access 2010**:

1. Using Microsoft Access create a database for;
 - a. Name
 - b. School
 - c. Age
 - d. Birth Cert No
 - e. Year
 - f. Address
 - g. Date of birth
2. Type the data like table below:

Name	School	Age	Birth Cert No	Year	Address	DOB
Adam	Sek Keb Wira	12	A123	6 Amanah	Tmn Mahkota	12/04/2003
Ahmad	Sek Keb Wira	11	D234	5 Jujur	Gambang	14/05/2002
Sofia	Tadika Charis	8	D333	2 Cekap	Jaya Gading	06/02/2005
Sarah	Tadika Sentosa	7	A639	1 Bersih	Indera Sempurna	26/06/2006

3. Save your database.

Task 2

1. Open VB.net 2013.
2. Design your application like below:

Load Database	previous	next
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Name :	<input type="text"/>	Add Record
School :	<input type="text"/>	Save Record
Age :	<input type="text"/>	Delete Record
Birth Cert No	<input type="text"/>	Update Record
Year :	<input type="text"/>	
Address:	<input type="text"/>	
	<input type="text"/>	Search Record by Birth Cert No

3. Do the connection your application with the above database.
4. **Next button** is used to go next record and previous **button** is used to go back to the previous record.
5. All button must be function – add record, save record, delete record, update record and search record ...

---- good luck -----

1.	<pre> Declare all variable as public : Dim con As New OleDb.OleDbConnection Dim dbProvider As String Dim dbSource As String Dim ds As New DataSet Dim da As OleDb.OleDbDataAdapter Dim sql As String Dim inc As Integer Dim MaxRows As Integer </pre>
2.	<pre> Create connection with database : [event button click or form_load] dbProvider = " PROVIDER= Microsoft.ACE.OLEDB.12.0;" dbSource = "Data Source = [database_name] accdb" con.ConnectionString = dbProvider & dbSource con.Open() </pre>

	<pre> sql = "SELECT * FROM [table_name]" da = New OleDb.OleDbDataAdapter(sql, con) da.Fill(ds, "[database_name]") MsgBox("Database is now open") </pre>
3	<p>Navigation Record :</p> <p>3.1 : Create procedure : object in VB with field table</p> <pre> Private Sub NavigateRecords () TextBox1.Text = ds.Tables("[database_name]").Rows(inc).Item(0) TextBox2.Text = ds.Tables("[database_name]").Rows(inc).Item(1) TextBox3.Text = ds.Tables("[database_name]").Rows(inc).Item(2) TextBox4.Text = ds.Tables("[database_name]").Rows(inc).Item(3) End Sub </pre> <p>3.2 : Previous Button :</p> <pre> If inc > 0 Then inc = inc - 1 NavigateRecords() ElseIf inc = -1 Then MsgBox("No Records Yet") ElseIf inc = 0 Then MsgBox("First Record") EndIf </pre> <p>3.3 : Next Button</p> <pre> If inc <> MaxRows - 1 Then inc = inc + 1 NavigateRecords() Else MsgBox("No More Rows") EndIf </pre> <p>3.3 : Goto first record</p> <pre> If inc <> 0 Then inc = 0 NavigateRecords () EndIf </pre> <p>3.4 : Goto last record</p> <pre> If inc <> MaxRows - 1 Then </pre>

	<pre> inc = MaxRows - 1 NavigateRecords () EndIf </pre>
4	<p>Update record :</p> <pre> Dim cb AsNew OleDb.OleDbCommandBuilder (da) ds.Tables (" [database_name] ").Rows (inc) .Item (0) = TextBox1.Text ds.Tables (" [database_name] ").Rows (inc) .Item (1) = TextBox2.Text ds.Tables (" [database_name] ").Rows (inc) .Item (2) = TextBox3.Text ds.Tables (" [database_name] ").Rows (inc) .Item (3) = TextBox4.Text da.Update (ds, " [database_name] ") MsgBox ("Data updated") </pre>
5.	<p>Add Record :</p> <pre> Note :Make all textbox clear .cler text= "" Save : If inc <> -1 Then Dim cb As New OleDb.OleDbCommandBuilder (da) Dim dsNewRow As DataRow dsNewRow = ds.Tables (" [database_name] ").NewRow () dsNewRow.Item (0) = TextBox1.Text dsNewRow.Item (1) = TextBox2.Text dsNewRow.Item (2) = TextBox3.Text dsNewRow.Item (3) = TextBox4.Text ds.Tables (" [database_name] ").Rows.Add (dsNewRow) da.Update (ds, " [database_name] ") MsgBox ("New Record added to the Database") MaxRows = ds.Tables (" [database_name] ").Rows.Count inc = MaxRows - 1 Else MsgBox ("First Record") EndIf </pre>
6	<p>Delete Record</p> <pre> Dim cb As New OleDb.OleDbCommandBuilder (da) </pre>

	<pre> ds.Tables("[database_name]").Rows(inc).Delete() MaxRows = MaxRows - 1 inc = 0 NavigateRecords() da.Update(ds, "[database_name]") </pre>
7	<pre> Search Dim i AsInteger Dim flag AsBoolean For i = 0 To MaxRows - 1 If TextBox7.Text = CStr(ds.Tables("[database_name]").Rows(i).Item(0)) Then inc = i NavigateRecords() flag = True EndIf Next If flag <>TrueOr TextBox7.Text = ""Then MsgBox("No data found") TextBox7.Focus() EndIf </pre>