

Year 12 : Visual Basic Tutorial.

ADO - Linking to Microsoft Access Databases.

IMPORTANT :

You will use a database called **hospital.mdb** for the walkthroughs and exercises presented here. The path to this database will always be **C:\hospital.mdb** in these notes - You will have to change this to the path of the database on your computer, whenever it occurs.

HANDS
ON

There are two ways to link to a database in VB -

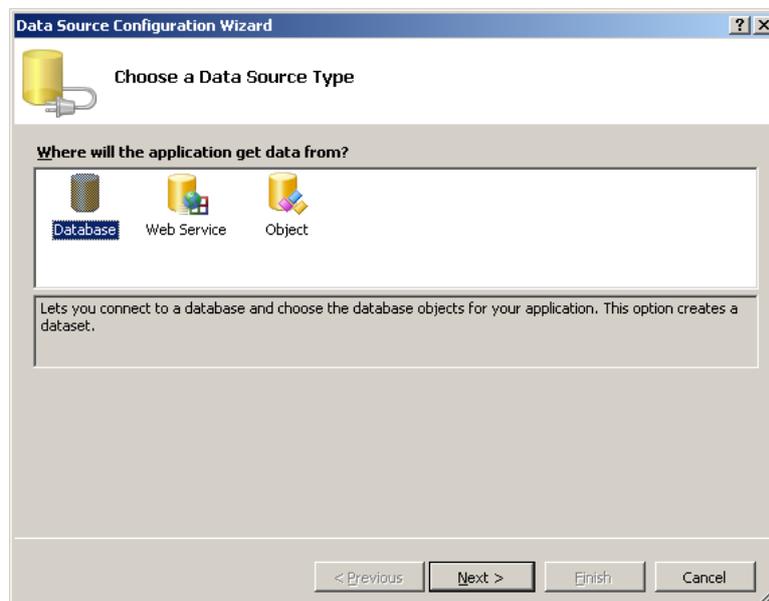
[A] The Easy Way (faster but not so versatile) or

[B] by writing Program Code.

We'll stick to the Easy Way for now....

[1] Create a new Windows application.

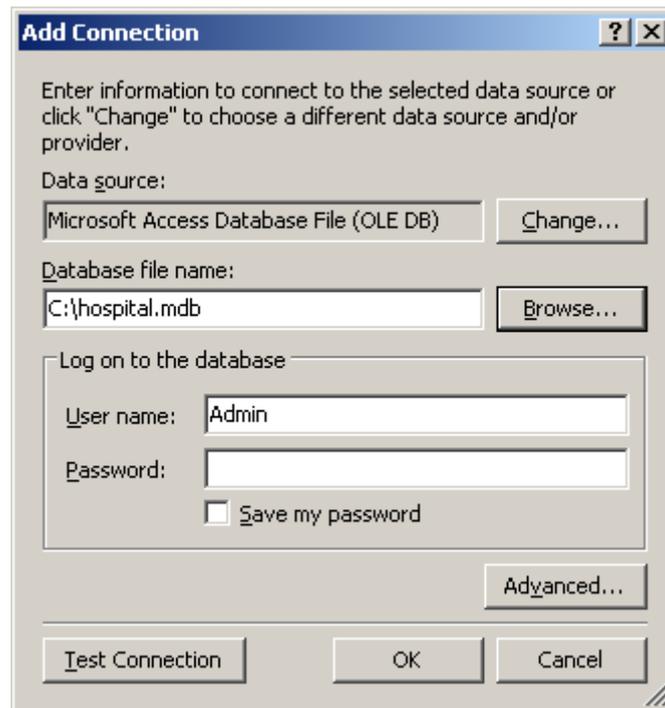
[2] In the Data menu, click the **Add New Data Source** command. The Data Source Configuration wizard should appear...



Select **Database** and click **<Next>**

You now need to set up the connection to your database.

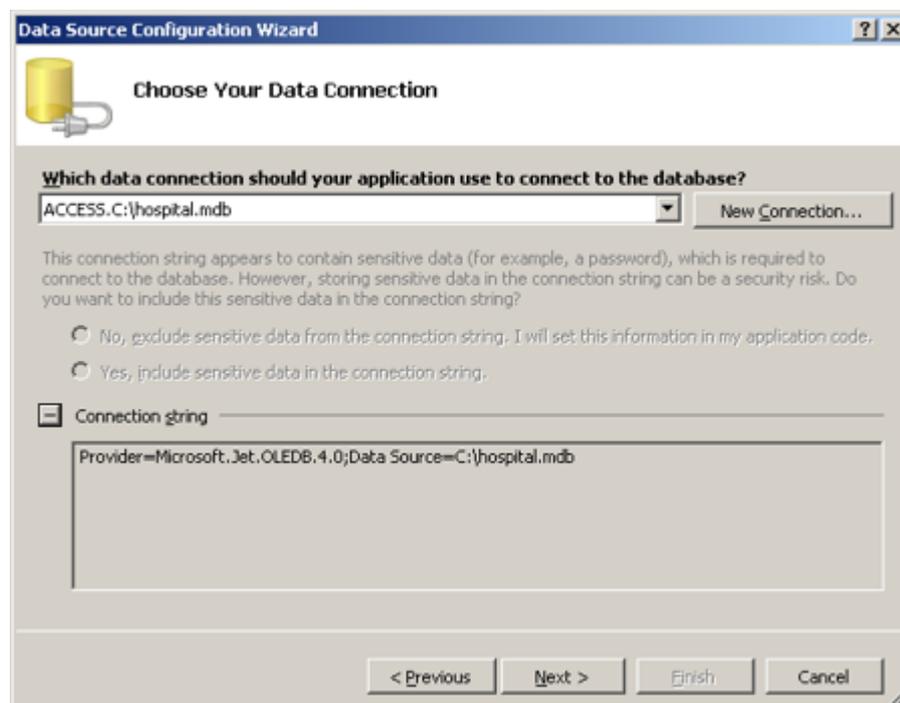
Click on the **[New Connection]** button.



Make sure the dialog box is set to the above options (the path to your database will probably be different - use the Browse button to find your database)

Test the connection before moving on by clicking [OK].

The details of the connection should now be filled in (Click the [+] to see the connection string.)

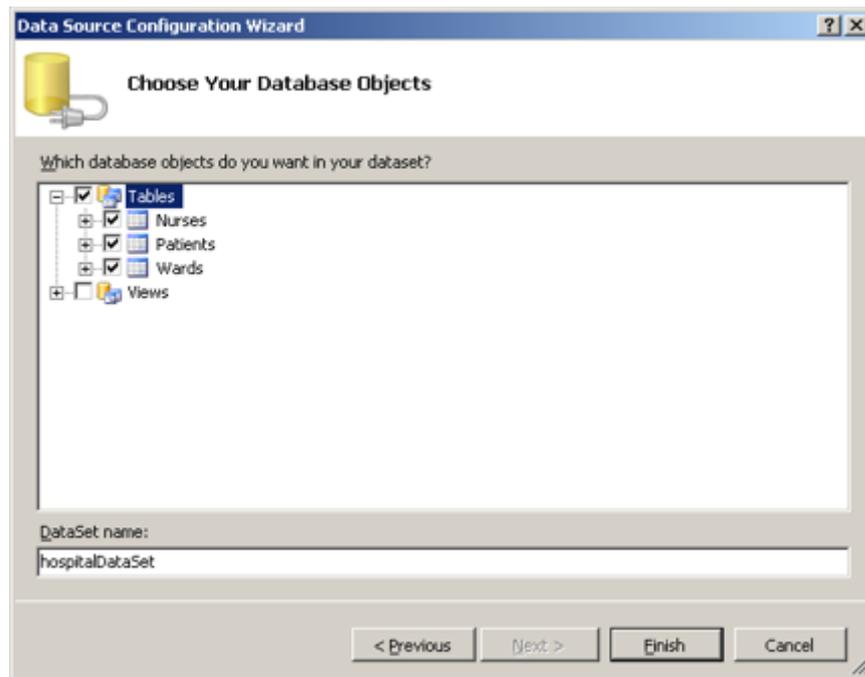


Click the <Next> button.

You will see a message displayed asking whether you want to make a copy of the database into your project. There is no need to do this so select [No].

You will now be asked if you want to save the Connection string..and [Yes] - you do! (If the location of your database changes then you only need to edit the string in the configuration file of your Solution explorer)

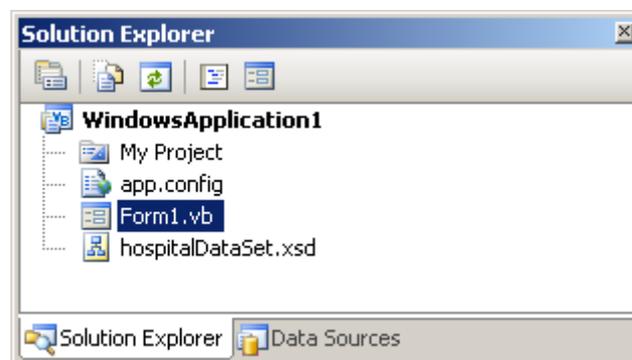
You now create the **dataset** to be used in your application. A dataset is a copy of some or all of the fields in the tables of your database.



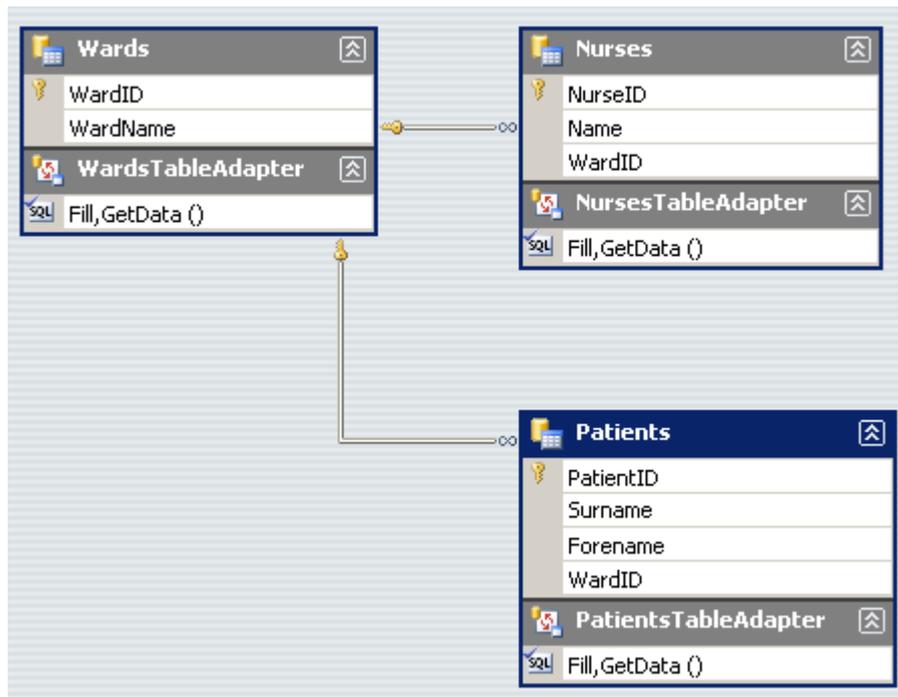
Select all the tables (as shown above).

Click [Finish]

- [3] You should now see an extra element appear in the Solution Explorer. There is now **hospitalDataSet.xsd**.

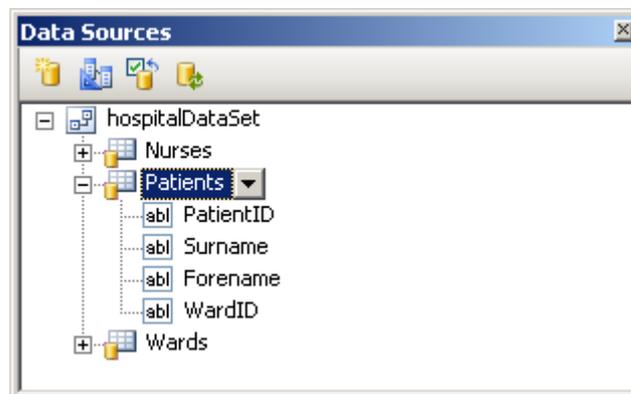


If you right-click hospitalDataSet.xsd and view the **Designer** you should see a visual representation of the schema of the database.



[4] You will now write an application that displays some of this data.

Find your **Data Sources** window. The tables and fields of your dataset should be displayed. Expand the Patients table...



Drag each of the four fields of the Patients table onto the Form. **Labels** and **TextBoxes** should be created for each.

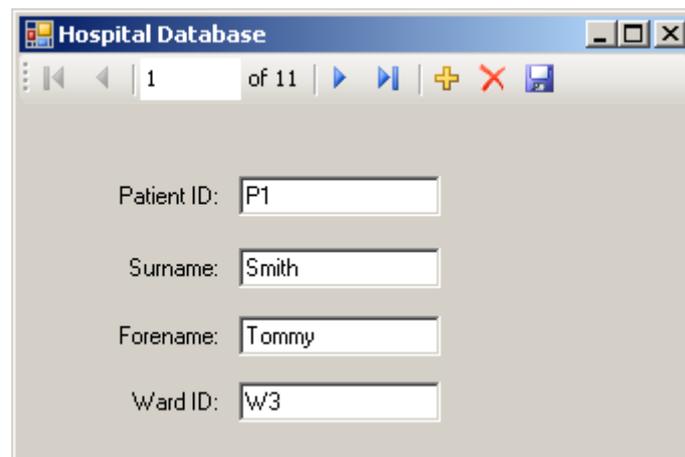
A **Navigation Bar** is also created at the top of the form, as well as these object displayed at the bottom of the screen...



A **TableAdapter** moves data between the database and the **DataSet**.

A **BindingSource** makes sure objects display data from the **DataSet**.

[5] Run the program and you should be able to see data from the Patients Table..



Using the Navigator Bar you can look at each of the records in the table, navigate to the First, Last, Next or Previous record.

You can also Add new patients to the table and save the data, or delete records (careful!).

Save this project - you will need it in the next chapter.