

5. Using databases in VB

5.1 Introduction to Jet Engine

- Jet Engine is Database management system.
- The Microsoft Jet engine treats the Ms access database as a single file with many tables inside that file.
- To Microsoft Jet , the directory folder is the database and ISAM files are the data tables.

- The Microsoft Jet engine is a set of routines that works together.
- These routines convert your Ms Jet request into a request that the target database can understand.
- The ODBC interface is capable of accessing data in client server databases, ISAM databases (FoxPro, MS access , Excel) and text files.

- As with accessing other type of ISAM files with the jet engine there are few restrictions.
- When opening an ISAM database with open database method you must provide a valid ISAM time

ODBC and ISAM

- ODBC means Open Database Connectivity.
- There are different methods of database connectivity such as using DATA1 control, ADO Data Control, ADO (through object), DAO.
- ISAM stands for Indexed Sequential Access Methods.

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5.3 using Databases

- Using the databases of –
 - i) Access
 - ii) FoxPro
 - iii) Excel
 - iv) Oracle

Using Databases of Access

- First create any one database in Microsoft access or use already created database that you want to be connect with your VB application
- Select DATA1 control from toolbox and drag it on your form
- Take another controls that you required.
- Set data1's database property .give full name of access database that you want to be create

- Then set it's Recordsource property
- Then set datasource property of textbox is data1.
- Then set datafield property of textbox.
- It will display database information as you require in textbox

Using Databases of FoxPro

- First create any one FoxPro database or use already created database that you want to connect in your application.
- Take textboxes and other controls that you want in your application.
- Use Active Data Object (ADO) in your application.
- You must add reference to the ADO Object Library in the References dialog box.

- To establish an explicit connection to a data source, declare a connection variable with the statement
- `Dim ADOconn As New ADODB.connection`
- Call the `ADOConn` object's `open` method by passing the connection string as an argument:
- `ADOConn.open" "`
- Once the connection object is created you can assign it to the `activeconnection` property of the `recordsource`

Using Databases of Excel

- **Workbook:** the class represents an Excel file
- **Worksheet:** represents a single worksheet
- **Sheet:** represents a single worksheet or chartsheet
- **Cell:** represents a single cell

- VBA entities Example :

The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Test1.xls". The menu bar includes File, Edit, View, Insert, Format, Tools, Data, Window, Help, and Adobe PDF. The toolbar shows various icons for file operations and formatting. The spreadsheet has columns A through E. Column A is labeled "ID", B is "HW1", C is "HW2", D is "HW3", and E is "HW - Final". The data rows are as follows:

	A	B	C	D	E
1	ID	HW1	HW2	HW3	HW - Final
2	36477636	89	77	85	93.67
3	21354956	93	90	89	100.67
4	60867348	90	95	93	102.67
5	37423696	87	98	92	102.33
6					

The status bar at the bottom shows "Ready" and "NUM". The sheet tabs at the bottom are labeled "Sheet1", "Sheet2", and "Sheet3".

Excel Containers

- **Workbooks:** a collection of objects of class “Workbook”
- **Worksheets:** a collection of objects of class “Worksheet”
- **Sheets:** a collection of Sheet objects
- **Range:** a range of objects of class Cell

Referencing the Objects - Examples

```
Sub Test1()
```

```
Worksheets("Sheet1").Range("A10", "B12") = "Hello"
```

```
Worksheets(1).Range("A13,B14") = "World!"
```

```
End Sub
```

This will take the whole square between the two cells

Two equal ways to refer Sheet1

The range of two cells

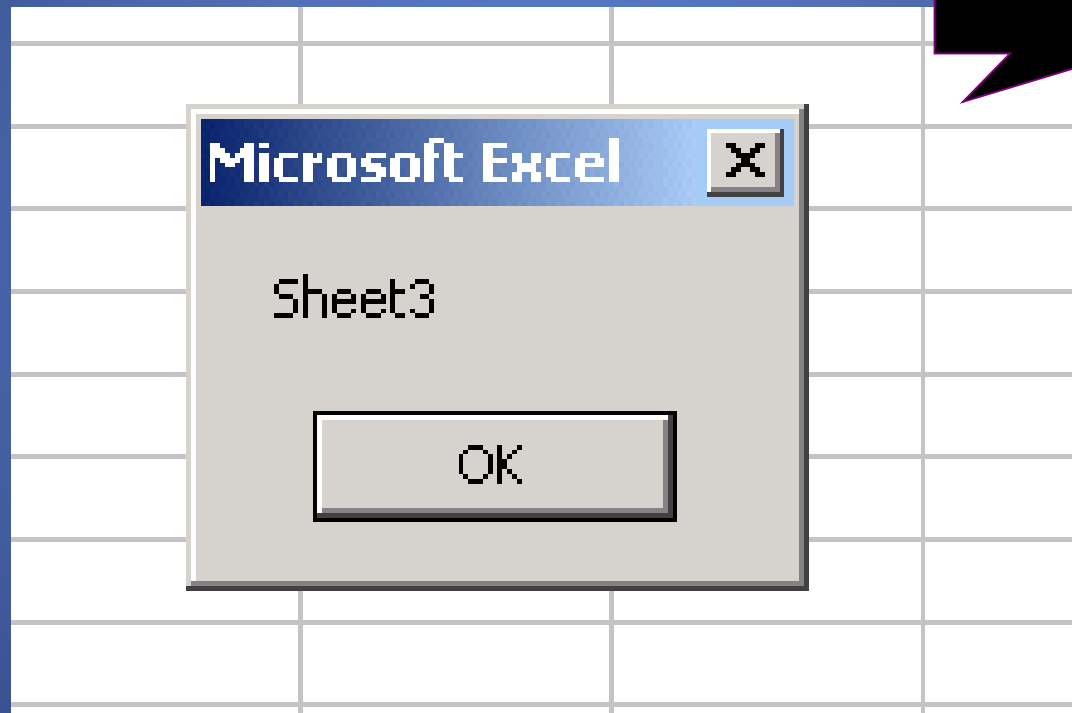
The Output

Which Workbook was Used?

10	Hello	Hello
11	Hello	Hello
12	Hello	Hello
13	World!	
14		World!

The Output!

How many times the user will click on the button?



Using Databases Of Oracle

- First create any one database in Oracle or use already created database that you want to be connect to your application.
- Use any method of database connectivity such as ADO Data Control or ADO i.e.:- through coding using object or DAO.