

MS Access Lab 4

Topic: Introduction to Forms and Reports

Summary

1. Forms:

- Introduction
- Kinds and Purposes
- Information in a Form
- Link between a form and its record
- Creating a form
- Example

2. Reports:

- Introduction
- Information in a report
- Link between a report and its record
- Creating a report
- Example

Northwind.mdb

In this session we will again use northwind.mdb. Open Northwind.mdb file in "C:/Program Files/Microsoft Office/Office/Samples" folder

Form: Introduction

To easily view, enter, and change data directly in a table, create a form. When you open a form, Microsoft Access retrieves the data from one or more tables and displays it on screen using the layout you chose in the Form Wizard or using a layout that you created from scratch.

Order ID	Customer ID	Required Date	Employee
11022	HANAR	09-May-96	Dodsworth, Anne
11023	BSBEV	25-May-96	Davolio, Nancy
11024	EASTC	10-May-96	Peacock, Margaret

Tables display many records at the same time, but you may have to scroll to see a whole record, and you can't update data from more than one table at the same time.

Forms focus on one record at a time, and they can display fields from multiple tables, pictures, and more.

Automate tasks INVOICE

Orders : Form

Bill To: B's Beverages
Fauntleroy Circus
London EC2 5NT
UK

Salesperson: Davolio, Nancy

Order ID: 11023 **Required Date:** 25-May-96

Product	Unit Price	Quantity	Extended Price
Iphoh Coffee	\$46.00	30	\$1380.00
Uncle Bob's Dried Pears	\$30.00	4	\$120.00

Print Invoice

Form: Kinds and Purposes

1. **Data entry form:** To enter data into a table
2. **Custom dialog box:** To accept user input and then carry out an action based on that input
3. **Switchboard:** To open other forms or reports

You can use forms for a variety of purposes.

Create a data-entry form to enter data into a table.

Create a custom dialog box to accept user input, and then carry out an action based on that input.

Create a switchboard form to open other forms or reports.

The screenshot displays three distinct form types. At the top is a 'Products' data-entry form with fields for 'Product' (Chai), 'Supplier' (Exotic Liquids), and 'Category' (Beverages). Below it is a 'Main Switchboard' featuring a lighthouse graphic and the 'NORTHWIND' logo, with buttons for 'View Products', 'Categories', 'Products', and 'Print Sales Reports'. Overlaid on the switchboard is a 'Sales Reports' custom dialog box with radio buttons for 'Sales by Category', 'Employee Sales by Country', and 'Sales Summaries', and buttons for 'Preview', 'Print', and 'Cancel'.

Form: Information in a Form

Most of the information in a form comes from an underlying record source. Other information in the form is stored in the form's design.

The 'Employee Prices' form is shown in 'Form view'. It has a blue header and a table with three columns: 'Product ID', 'Product Name', and 'Unit Price'. The table contains one row with values '1', 'Chai', and '\$18.00'. Below the table is a yellow box containing the text 'Employee Price: \$13.50' and a message 'Please pay the accounting clerk for your purchases.' Red lines with text boxes point to various elements: 'Graphic elements, such as lines and rectangles, are stored in the form's design.' points to the table border; 'Data comes from the fields in the underlying record source.' points to the table data; 'A calculation comes from an expression, which is stored in the form's design.' points to the 'Employee Price' value; 'Descriptive text is stored in the form's design.' points to the 'Employee Price' label and the message text.

Form: Link between a form and its record

You create the link between a form and its record source by using graphical objects called controls. The most common type of control used to display and enter data is a text box.

Design view

These labels display descriptive text.

These text boxes are used to display data from and enter data into the Products table.

Product ID: Product Name: Unit Price:

ProductID ProductName UnitPrice

Employee Price: =[UnitPrice]*0.75

ur purchases.

This text box uses an expression to calculate a total.

Products : Table		
Product ID:	Product Name:	Unit Price:
5	Chef Anton's Gumbo Mix	\$21.35
6	Grandma's Boysenberry Sy	\$25.00
7	Uncle Bob's Organic Dried	\$30.00

Creating a form

You can create a form on your own or you can have Microsoft Access create your form for you using a Form Wizard. A Form Wizard speeds up the process of creating a form because it does all the basic work for you. When you use a Form Wizard, Microsoft Access prompts you for information and creates a form based on your answers. Even if you've created many forms, you may want to use a Form Wizard to quickly lay out all the controls on your form. Then you can switch to Design view to customize your form.

Creating a form with a wizard

Option 1:

1. Choose **Objects** → **Forms** → **Create form by using wizard** (Fig. 1)
2. Click on the name of the **Table** or **Query** that includes the data you want to base your form on (in the left column)
3. Then choose the Layout that you want your Forms to follow (experiment with **Columnar**, **Tabular**, **Datasheet** and **Justified** to find the layout that you like best)
4. Next, choose the Style that you would like for your Form.
5. Give a Title to your Form. You can now either go and open your form or either modify the design in **Design view**.
6. Click on **Finish**.

Option 2:

1. Choose **Insert** → **Form**
2. A **New Form** dialog box will pop up (Fig 2.) and then choose **Form Wizard**
3. Click on the name of the **Table** or **Query** that includes the data you want to base your form on (click on the list at the bottom of the dialog box)
4. Follow steps 4-6 in Option 1

- Note:**
1. If you clicked AutoForm: Columnar, AutoForm: Tabular, or AutoForm: Datasheet, Microsoft Access automatically creates your form.
 2. If the resulting form doesn't look the way you want, you can ALWAYS change it in **Design view**

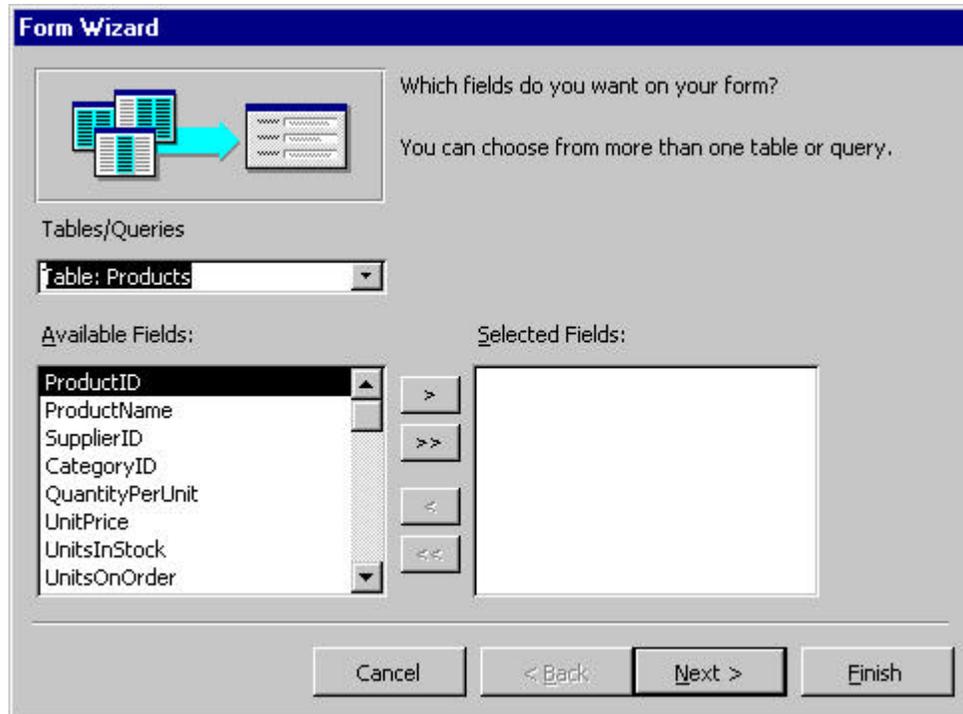


Fig. 1: Window in Form Wizard (Option 1)

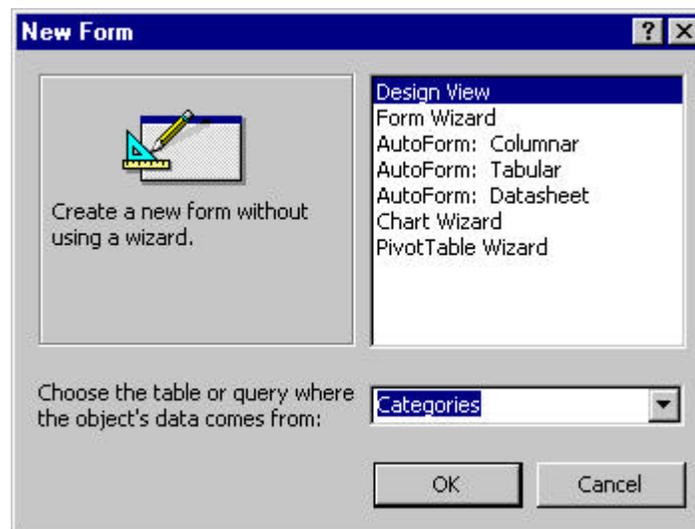
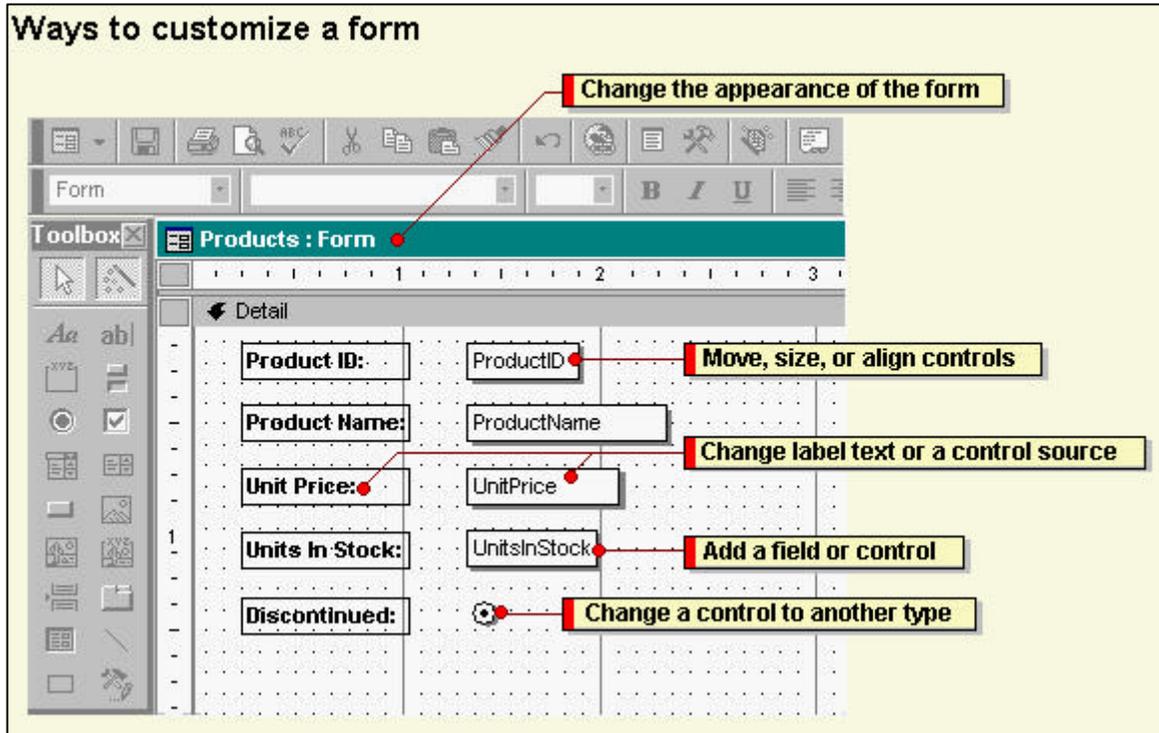


Fig. 2: New Form Dialog Box (Option 2)



Note If you click one of the AutoForm options, Microsoft Access uses the autoformat you last specified, either in the Form Wizard or using the AutoFormat command on the Format menu in Design view.

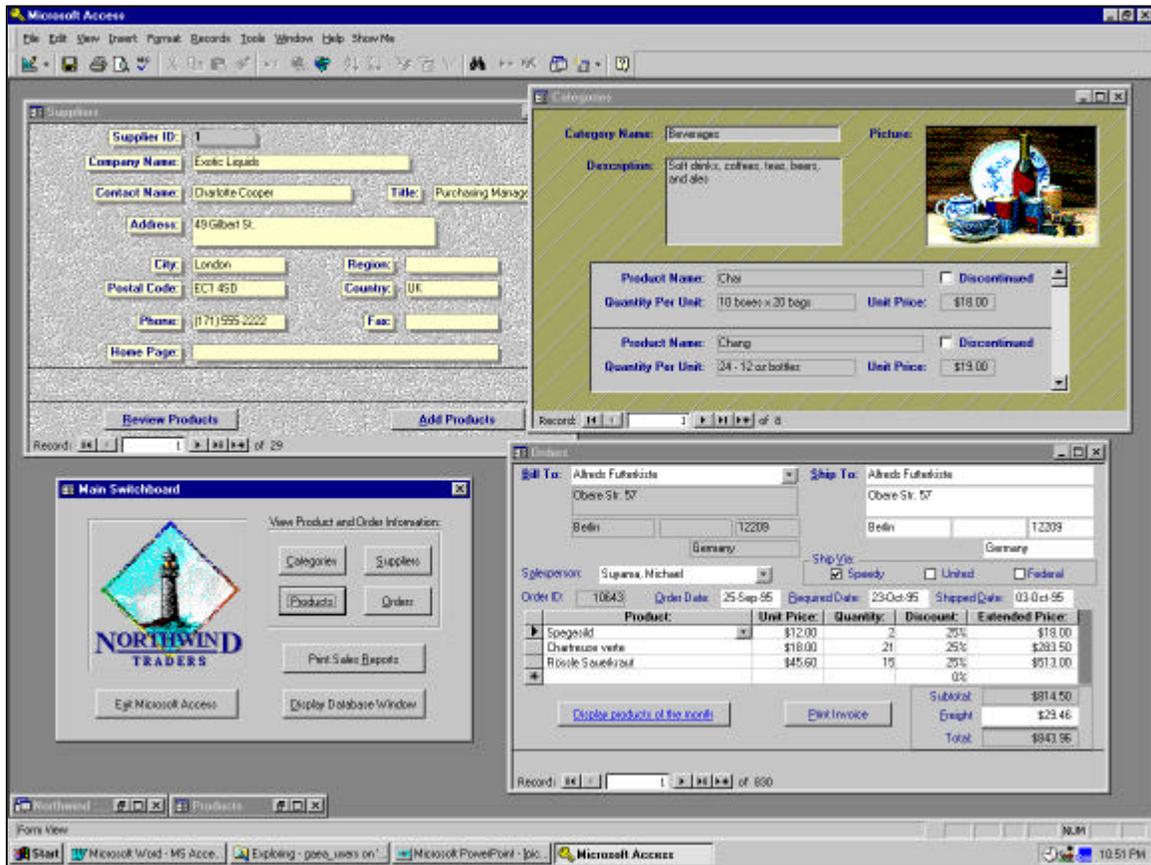
Creating a form without a wizard

1. Go to **Insert → Form → Design View** (Fig.2)
2. Click the name of the table or query that includes the data you want to base your form on. If the form won't contain data (for example, if you want to create a form to use as a switchboard to open other forms or reports, or if you want to create a custom dialog box), don't select anything from this list.

Note If you want to create a form that uses data from more than one table, base your form on a query that includes the tables you want to include.

3. Click OK.
4. With this option you can TOTALLY customize and control everything you would like to have and see in your forms.

Examples: Various kinds of Forms in Northwind.mdb



Report: Introduction

A report is an effective way to present your data in a printed format. Because you have control over the size and appearance of everything on a report, you can display the information the way you want to see it.

The diagram shows two report examples. The first is titled "Northwind Traders Sales by Date" for 15-Mar-96. It features a logo, a table with columns "Shipped Date", "Order ID", and "Sale Amount", and a "Total" row. The second is titled "Sales by Category" for 15-Mar-96, featuring a bar chart with a title "Axxxx Sxxxx Nxxxx".

Annotations in the diagram include:

- Add a logo or picture.
- Create mailing labels.
- Show totals in a chart.
- Group records into categories.
- Calculate totals.

Report: Information in a report

Most of the information in a report comes from an underlying table, query, or SQL statement, which is the source of the report's data. Other information in the report is stored in the report's design.

The diagram shows a "Print Preview" of a report titled "Sales by Date" for 8-Mar-96. It contains a table with columns "Shipped Date", "Order ID", and "Sale Amount".

Annotations in the diagram include:

- The report title and column headings are stored in the report's design.
- The date comes from an expression, which is stored in the report's design.
- Data comes from fields in the underlying table, query, or SQL statement.
- Totals come from expressions, which are stored in the report's design.

Shipped Date	Order ID	Sale Amount
4-Mar-96	10951	459
	10990	4,289
	10991	2,296
Total:		7,044
5-Mar-96	10924	1,836
	10927	800
	10966	1,098
Total:		3,734

Report: Link between a report and its record source

You create the link between a report and its record source by using graphical objects called controls. Controls can be text boxes that display names and numbers, labels that display titles, and decorative lines that graphically organize the data and make the report more attractive.

Design view

These lines are decorative.

These labels display descriptive text.

These text boxes display data from the Sales by Date query.

This text box uses an expression to calculate a total.

Select Query: Sales by Date

Shipped Date	Order ID	Sale Amount
04-Mar-96	10951	\$458.74
04-Mar-96	10990	\$4,288.85
04-Mar-96	10991	\$2,296.00

Creating a report

You can create a report on your own or you can have Microsoft Access create a report for you using a Report Wizard. A Report Wizard speeds up the process of creating a report because it does all the basic work for you. When you use a Report Wizard, it prompts you for information and creates a report based on your answers. Even if you've created many reports, you may want to use a Report Wizard to quickly lay out your report. Then you can switch to Design view to customize it.

Creating a report using AutoReport

AutoReport creates a report that displays **ALL** fields and records in the underlying table or query.

1. Go to **Insert** → **Report** → **AutoReport** (you can choose columnar or tabular) (Fig. 3)
 - AutoReport: Columnar. Each field appears on a separate line with a label to its left.
 - AutoReport: Tabular. The fields in each record appear on one line, and the labels print once at the top of each page.
2. Click the **Table** or **Query** that contains the data you want to base your report on.
3. Click OK.

Note: Microsoft Access applies the last autoformat you used to the report. If you haven't created a report with a wizard before or haven't used the AutoFormat command on the Format menu, it uses the Standard autoformat.

Create a report with a wizard

1. Go to **Insert** → **Report** → **Report Wizard** (or just click on **Objects** → **Form** → **Create Report by Using Wizard**)



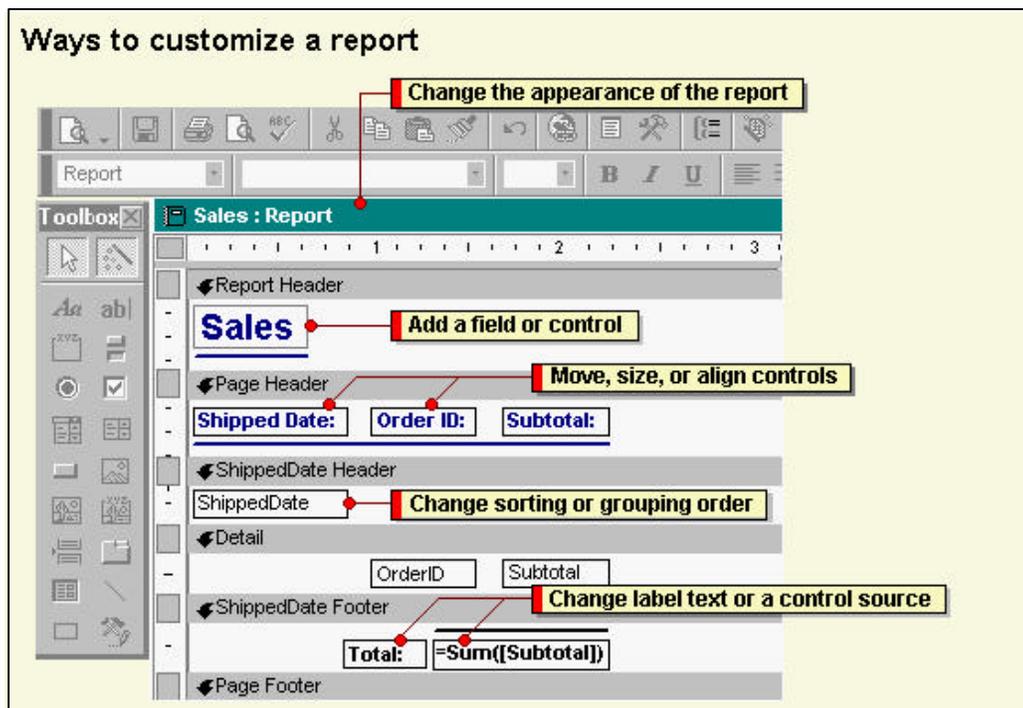
Fig. 3: New Report Dialog Box

2. Click the table or query that contains the data you want to base your report on.

Note Microsoft Access uses this table or query as the default record source for the report. However, you can change the record source in the wizard and select fields from other tables and queries.

3. Click OK.
4. Follow the instructions on the screen to format and output the report the way you want it

Note: If the resulting report doesn't look the way you want, you can change it in **Design view**.



Example: Sales by Category Report in Northwind.mdb



You have just created your first form and report. Play around with the layout and design option until you find one that you like. Use your creativity !!
