

**AVCE ICT**  
**UNIT 6 Database Design**

**HMV**

I have chosen to design a new database system for HMV for this assignment so that they will be able to store information about their customers, suppliers, employees, order details, different products and shippers.

HMV is the UK and Ireland's leading specialist retailer of Music, DVD/Video, computer games and related products.

The company operates around 200 stores in key shopping locations nationwide, covering up to over 1million sq. ft. of trading space, as well as having a successful online store at [www.hmv.co.uk](http://www.hmv.co.uk).

HMV's very first store was officially opened in July 1921 by the celebrated British composer, Sir Edward Elgar on London's Oxford Street. Since that time, the company have become better and more popular with the public.

HMV is dedicated to offering its customers access to the widest possible range of recorded music titles, DVD's and computer games across all formats.

**Current problem with the company**

The main problem with the company currently is that most of their business is done by paperwork. This can lead to the staffs becoming very busy and not having time to do other work. It is also space consuming because the company will have to buy files and filing cabinets which may get full quickly and they may have to pay more in order to get extra space for the files and records.

Other than these two problems because of it, there is also the fact that it is time consuming as well and will be difficult to find the information they require quickly. This can prove to be a big problem for the company since they are a big business with lots of customers and employees etc. So if they do not organise their filing system properly then it may lead to them losing customers and therefore losing profit and sales.

**Data Requirements**

The database will be based on a list of entities and their attributes like; order number, product name, product ID, supplier name, supplier address, customer ID, employee first name, second name, employee ID, employee birth date, employee address and phone number.

**Customer Table:**

<b>Attribute name</b>	<b>Data type</b>	<b>Size</b>	<b>Validation rule</b>	<b>Description</b>	<b>Input Mask</b>
Customer ID	Auto number	3	Cannot exceed 3 characters	The ID number associated with the customer	
Contact name	Text	30	Cannot exceed 30 characters	The name of customer	
Customer Address	Text			The customer's address	
City	Text	20	Cannot exceed 20 characters	The city the customer live in	
Postcode	Text	8	Cannot exceed 8 characters	The customer's postcode	>LL00 0LL;0;_
Date of birth	Date and time			The customer's date of birth	00/00/0000;0;_
Telephone number	Number			The customer's telephone number	

**Employee Table:**

<b>Attribute name</b>	<b>Data type</b>	<b>Size</b>	<b>Validation rule</b>	<b>Description</b>	<b>Input Mask</b>
Employee ID	Number	3	Cannot exceed 3 characters	The ID number associated with the employee	
Employee address	Text			The employee's address	
Employee name	Text	30	Cannot exceed 30 characters	The employee's name	
Employee birth date	Number			The date of birth of the employee	00/00/0000;0;_
Hire date	Number			The date of which the employee was hired	00/00/0000;0;_

**Order Table:**

Attribute name	Data type	Size	Validation rule	Description	Input Mask
Order ID	Number	3	Cannot exceed 3 characters	ID number for the order made	
Customer ID	Number	3	Cannot exceed 3 characters	ID number of the customer	
Order date	Date and Time			The date the order was made	00/00/0000;0;_
Required date	Date and Time			The date the order should be delivered to the customer	00/00/0000;0;_
Unit price	Currency			The price of the item ordered	
Quantity	Number			The amount bought by the customer	
Paid	Yes/No			Whether the customer has paid or not	
Shipped date	Number			The date the item was despatched to the customer	00/00/0000;0;_

**Product Table:**

Attribute name	Data type	Size	Validation rule	Description
Product ID	Number	3	Cannot exceed 3 characters	ID number of the product
Product name	Text	30	Cannot exceed 30 characters	Name of the product
Product description	Text			The product's description
Unit Price	Currency			The price of the product
Supplier ID	Number	3	Cannot exceed 3 characters	The supplier's ID number
Stock	Number			How much stock is available

**Supplier Table:**

Attribute name	Data type	Size	Validation rule	Description	Input Mask
Supplier ID	Number	3	Cannot exceed 3 characters	The ID number of supplier	
Supplier name	Text	30	Cannot exceed 30 characters	The name of the supplier	
Address	Text			The supplier's address	
City	Text			The city which the supplier is based in	
Postcode	Text	8	Cannot exceed 8 characters	The suppliers postcode	>LL00 0LL;0;_
Telephone Number	Number			The supplier's telephone number	
Country	Text			The country which the supplier is based in	

This is the list of all the data I will include in the database. There are 6 entities with different attributes. The entities are in bold below with their attributes following :

<b><u>Customer Details</u></b>	<b><u>Employee Details</u></b>	<b><u>Order Details</u></b>	<b><u>Product Details</u></b>	<b><u>Supplier Information</u></b>	<b><u>Shipper Information</u></b>
Customer ID	Employee ID	Customer ID	Product ID	Supplier ID	Shipper ID
Customer Name	Employee name	Order ID	Product name	Supplier name	Shipper name
Customer Address	Employee Address	Product ID	Product description	Supplier address	Shipped date
City	City	Unit Price	Supplier ID	Supplier phone number	Order ID
Postcode	Postcode	Quantity	Stock		Ship address
Date of birth	Phone number	Order date			City
Telephone number	Hire date	Required date			Postcode
	Birth date				Country
	Salary per month				Phone number

**Customer:** (customer ID, contact name, customer address, city, postcode, date of birth, employee telephone number)

**Employee:** (employee ID, employee name, address, city, postcode, employee telephone number, hire date, date of birth)

**Orders:** (order ID, unit price, order date, required date)

**Product:** (product ID, product name, product description, stock)

**Shipper:** (shipper ID, shipper name, shipped date, shipped via, ship address, city, postcode, country, shipper telephone number)

**Supplier:** (supplier ID, supplier name, supplier address, city, postcode, phone number)

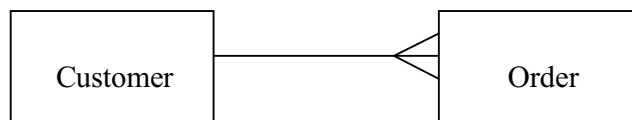
### **Entity Relationship Diagram**

There are 3 types of relationships between two entities. They are:

- One-to-one
- One-to-many
- Many-to-many

Each entity will have attributes associated with it. An attribute is a characteristic, for example the Customer entity will have attributes like; Customer ID, Customer Name, Customer Address, Customer Phone Number etc. Also each entity in a database must have at least one attribute called a Primary Key which individually identifies it. For example Customer ID would be the Primary Key of the Customer entity.

#### **Customer with Order:**



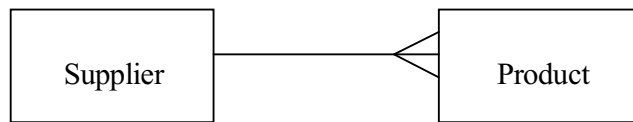
Here the relation between the Customer and Order is one-to-many. This is because there can be one customer making more than one order. The primary key that I made on the Customer table is the Customer ID because it is unique to every customer whereas a customer may have the same name as another customer, this is why Customer Name is not made as the primary key.

Order with Product:



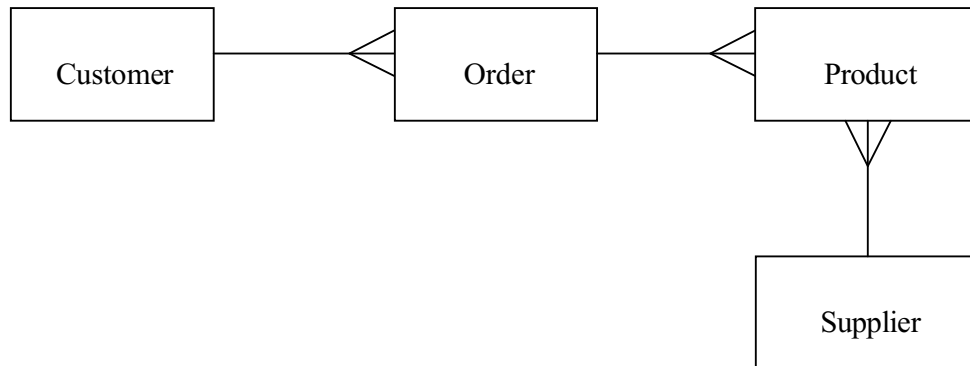
Here the relationship between the Order and Product is one-to-many. This is because there can be one order made by a customer for many products. The primary key that I made on the Order table is the Order ID because it is unique with every order.

Supplier with Product:



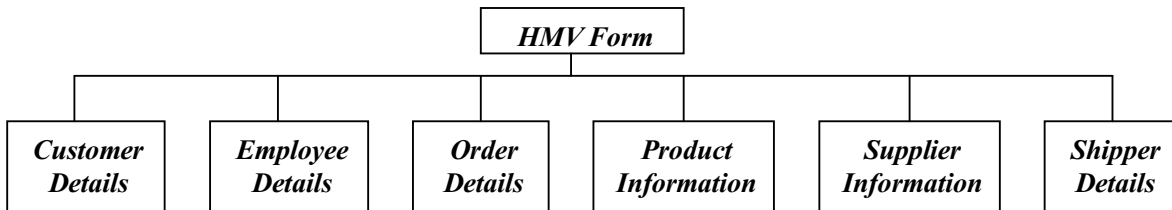
Here the relationship between Supplier and Product is one-to-many. This is because one supplier can supply more than one product to a customer. The primary key for the Product entity is the Product ID, and Supplier ID for the Supplier entity. This is because they are unique to their entities.

All these tables are linked by at least one field or attribute. The entity relationship diagram shows us how the entities are linked together. This is the entity relationship diagram for all the entities:



This is how my entities are related. A customer can have many orders, and each order can have more than one product then the supplier can provide more than one product.

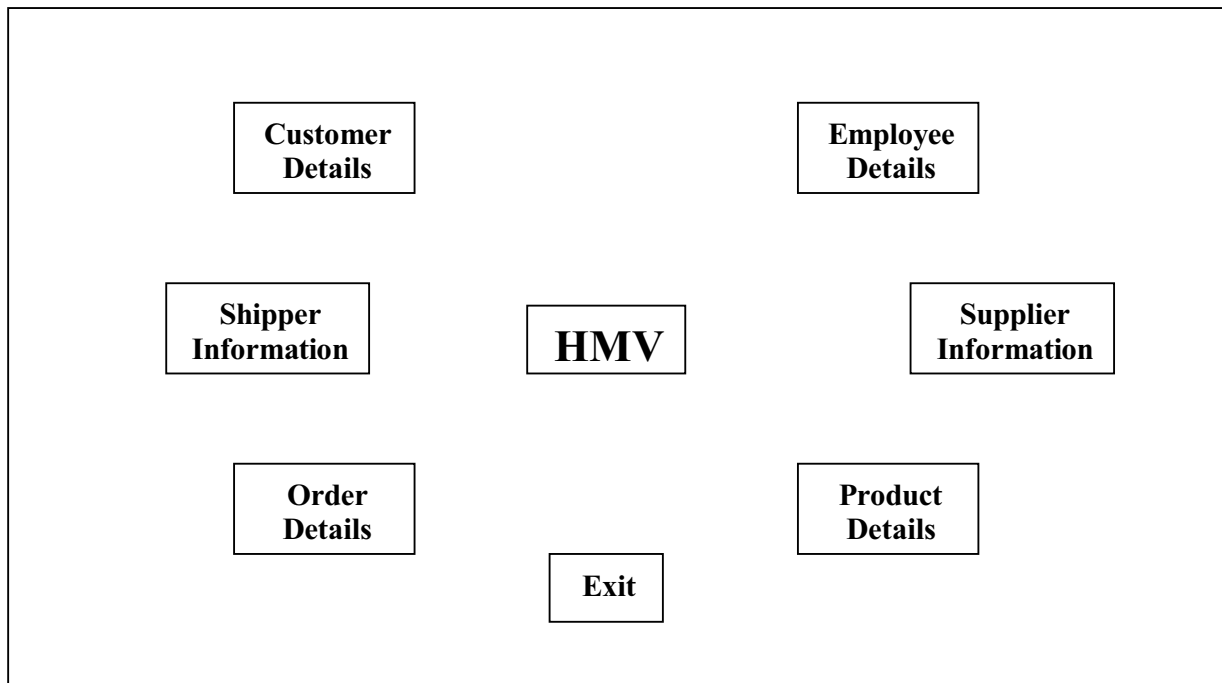
## Design



### Form Design:

Here I will show my design for my forms that I will create and show I have created later on in my implementation.

### *Menu:*



*Customer Details Form:*

<b>Customer Details</b>	
Customer ID	
Customer Name	
Address	
City	
Postcode	
Date of Birth	
Telephone Number	

<b>Preview Report</b>
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<b>Run Word</b>
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<b>Find Record</b>	<b>Add Record</b>	<b>Save Record</b>	<b>Delete Record</b>	<b>Print</b>
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<b>Exit</b>
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*Employee Details Form:*

<b>Employee Details</b>	
Employee ID	
Employee Name	
Address	
City	
Postcode	
Date of Birth	
Hite Date	
Salary Per Month	
Telephone Number	

<b>Print</b>
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<b>Find Record</b>	<b>Add Record</b>	<b>Save Record</b>	<b>Delete Record</b>
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<b>Exit</b>
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*Shipper Information Form:*

<b>Shipper Information</b>	
Shipper ID	
Shipper Name	
Shipped Date	
Order ID	
Ship Address	
City	
Postcode	
Country	
Telephone Number	
<b>Find Record</b>	<b>Add Record</b>
<b>Save Record</b>	<b>Delete Record</b>
<b>Print Record</b>	
<b>Exit</b>	

*Supplier Information Form:*

<b>Supplier Information</b>	
Supplier ID	
Supplier Name	
Supplier Address	
City	
Postcode	
Country	
Telephone Number	
<b>Find Record</b>	<b>Add Record</b>
<b>Save Record</b>	<b>Delete Record</b>
<b>Print</b>	
<b>Exit</b>	

*Order Details Form:*

<b>Order Details</b>	
Order ID	
Customer ID	
Product ID	
Unit Price	
Quantity	
Order Date	
Required Date	
Paid?	
<b>Find Order</b>	<b>Add</b>
<b>Save</b>	<b>Delete</b>
<b>Print</b>	<b>Preview Report</b>
<b>Exit</b>	

*Product Details Form:*

<b>Product Details</b>	
Product ID	
Product Name	
Product Description	
Supplier ID	
Stock	
<b>Find Product</b>	<b>Add Record</b>
<b>Save Record</b>	<b>Delete Record</b>
<b>Print</b>	
<b>Exit</b>	

All of these forms can be accessed through my menu page (shown first). Each button on the menu page is linked to each of these forms for easy access and exit.

Report Design:

Here I will show my design for my reports that I will create and show I have created later on in my implementation.

*Invoice Report:*

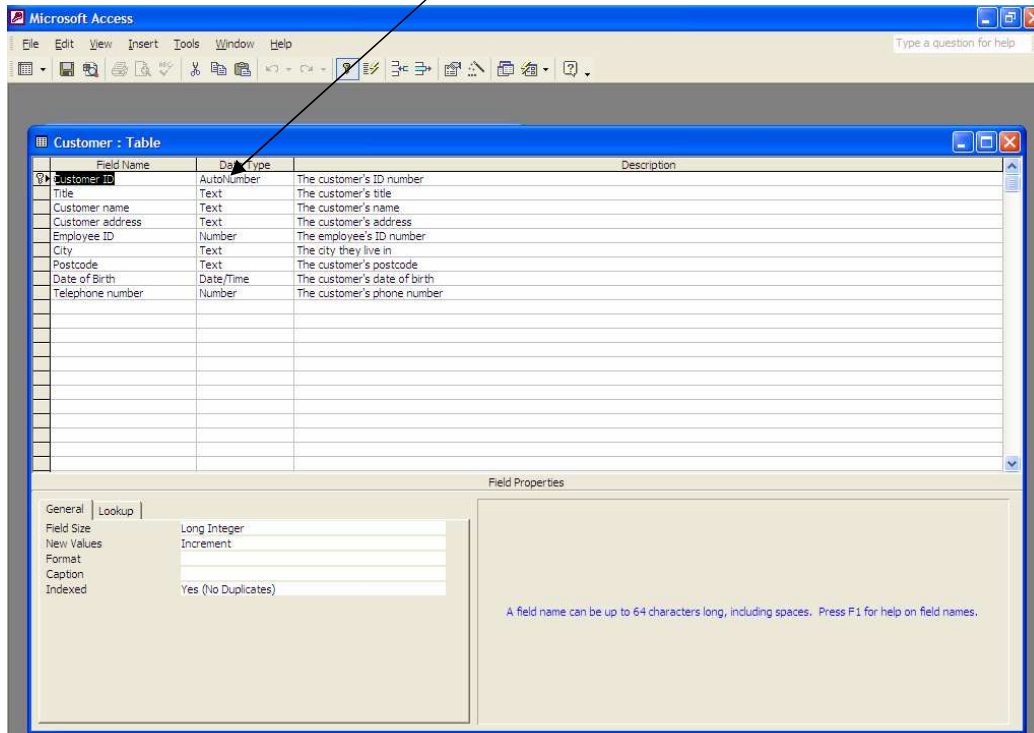
<u>Invoice</u>	
Order ID	<input type="text"/>
Order Date	<input type="text"/>
Required Date	<input type="text"/>
Product ID	<input type="text"/>
Unit Price	<input type="text"/>
Quantity	<input type="text"/>
Paid?	<input type="checkbox"/>
Total Invoice	<input type="text"/>
Customer ID	<input type="text"/>
Title	<input type="text"/>
Customer Name	<input type="text"/>
Customer Address	<input type="text"/>
City	<input type="text"/>
Postcode	<input type="text"/>

## Implementation

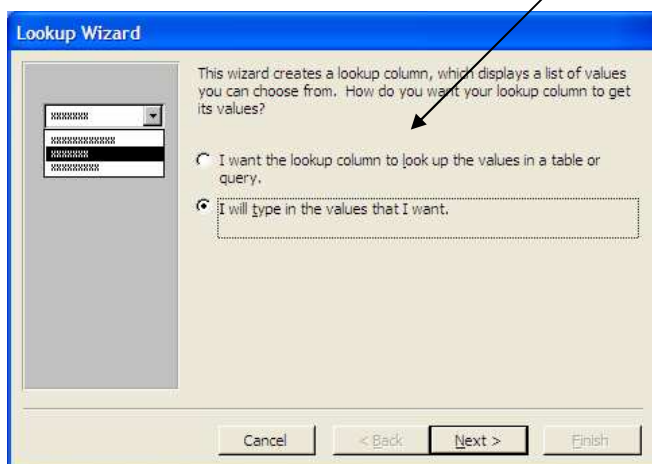
### Table

The first thing I did when creating my database system is creating the table. I made 6 different tables which include; Customer Details, Employee Details, Order Details, Product Details, Supplier Information, and Shipper Information.

In my first table (Customers) I entered fields that are relevant to gaining information about the customer, like their name, address, phone number etc. I also entered the data type for that field like whether it was an AutoNumber, Text, Date/Time etc.



After this I added a lookup on the Title field that I entered. By doing so, you can now select which Title belongs to you. I did this by clicking on the Data Type section where it said Text, and selected Lookup Wizard from the list. This window came up



I selected the option 'I will type the values that I want' then it took me to the next window where I was asked to enter what I would like to enter in the field.

Lookup Wizard

What values do you want to see in your lookup column? Enter the number of columns you want in the list, and then type the values you want in each cell.

To adjust the width of a column, drag its right edge to the width you want, or double-click the right edge of the column heading to get the best fit.

Number of columns: 1

Col 1
Mr
Mrs
Miss
Other
*

Cancel < Back Next > Finish

After typing in all the values I wanted to add, I clicked *Next* and it took me to the window where I was asked to give this column a label, which I called Title.

Lookup Wizard

What label would you like for your lookup column?

Title

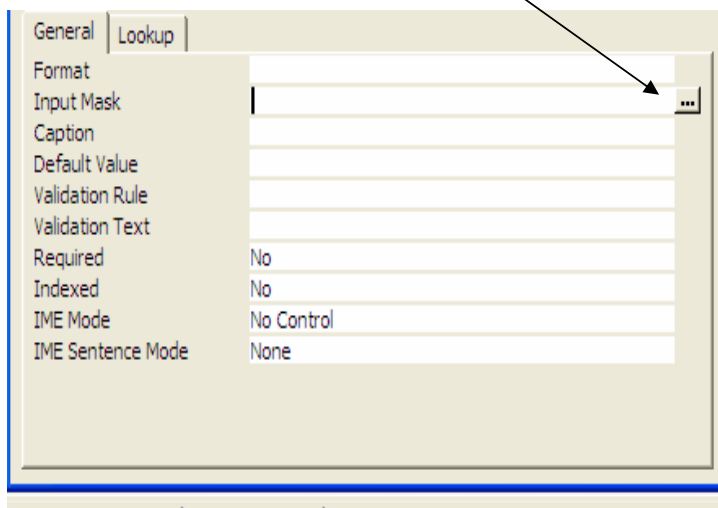
Those are all the answers the wizard needs to create your lookup column.

Display Help on customizing the lookup column.

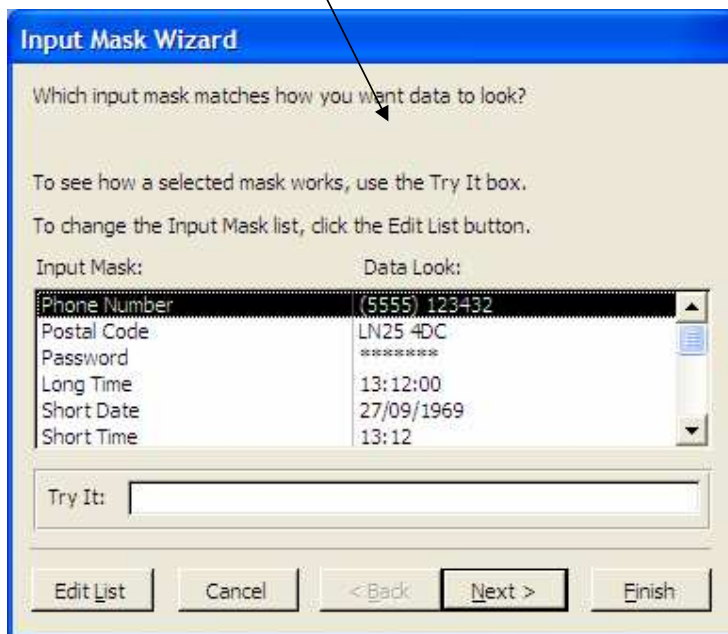
Cancel < Back Next > Finish

I clicked *Finish* and it was done.

Next I inserted an Input Mask for the Postcode and Date of Birth. I did this by clicking on the Postcode or Date of Birth field, then going to Input Mask on the bottom of the screen and clicked on the '...' symbol



It then took me to this window



I selected the Postcode for when I was creating my postcode, and the Short Date for when I was creating the date of birth section.

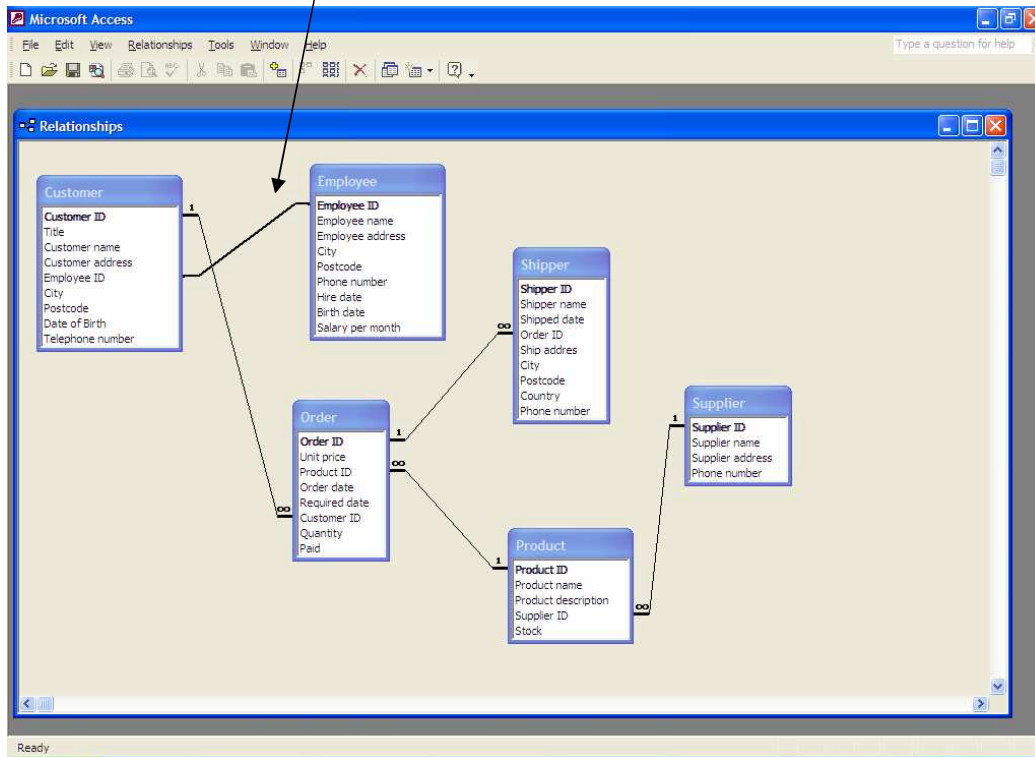
Once I clicked next it asked me what placeholder character I would like to use then I clicked *Next* and then it told me that all the information needed to create the Input Mask has been taken, so I clicked *Finish* and it was done

After creating the fields, I added all the customer names and details

Customer : Table									
	Customer ID	Title	Customer name	Customer address	Employee ID	City	Postcode	Date of Birth	Telephone number
+	1	Mr	Steven Monze	13 Marly Road	0	Birmingham	BM4 5ER	12/04/1976	2077245246
+	2	Mr	Mark Johnson	54 Queensbury Stre	0	London	NW8 6RT	30/06/1968	2077345653
+	3	Other	Larry Goodman	92 Yale Road	0	Manchester	MR2 9GH	02/03/1957	2087435334
+	4	Mr	Kevin Peterson	43 Parkinson Street	0	Essex	EX2 4DC	14/07/1981	2073254235
+	5	Mr	Michael Clarke	34 Knights Road	0	London	SE4 6TY	19/01/1972	2074239098
+	6	Mr	Mohammed Abdi	867 Pembridge Roa	0	Brighton	BN9 8UI	25/09/1973	2083245239
+	7	Mrs	Lorena Pity	12 Yellar Street	0	Birmingham	BM5 2ER	04/05/1983	2083498092
+	9	Miss	Clare Fretty	432 Pook Road	0	Newcastle	NE12 6YU	31/01/1966	2074387489
+	10	Mr	Ronald Johnson	23 Lever Town	0	Cornwall	CL56 2ER	12/12/1975	2083298743
+	11	Mrs	Tara Brookes	53 Timson Road	0	Essex	EX12 6RT	18/04/1978	2076343269
+	12	Mr	Rodger Bert	32 Edge Street	0	London	SW13 3NP	26/02/1988	2073428704
*	(AutoNumber)				0				0

I did the same thing, including Lookup Wizard, Input Mask, and filling in the details for all my forms (employee, order, supplier, shipper, and product information).

Once I had created and filled in all my forms, I was able to link them together. This is how my forms are linked together:



This relationship diagram shows how each table is linked together.

## Reports

Once this was done, I created my reports. I did this by clicking on 'Create report by using wizard'. Once clicked on this, a window popped up like this

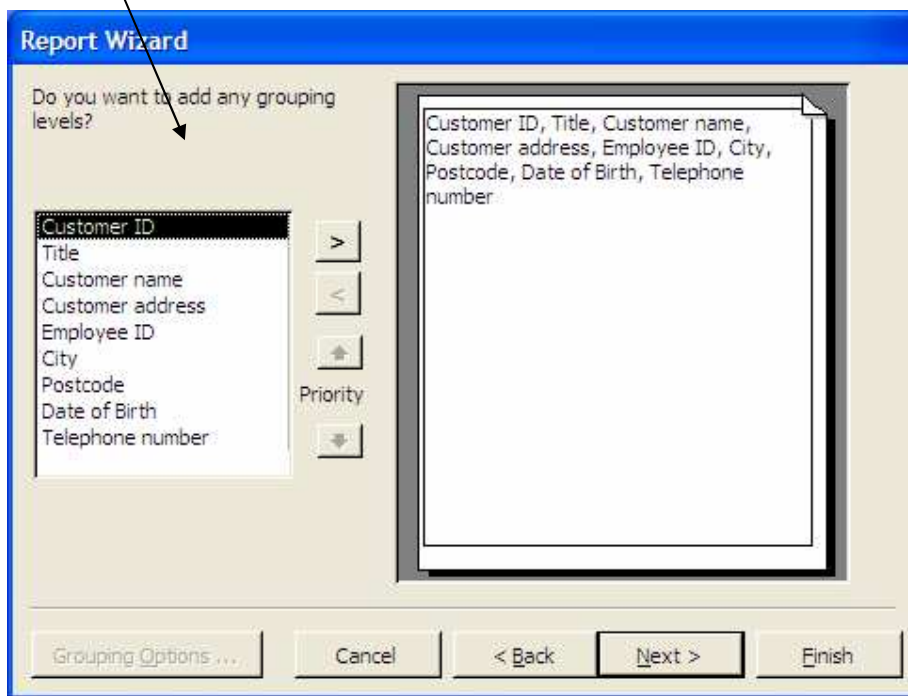
The screenshot shows the Report Wizard dialog box. It asks, "Which fields do you want on your report?" and notes, "You can choose from more than one table or query." The "Tables/Queries" dropdown is set to "Table: Customer". The "Available Fields" list includes:

- Customer ID
- Title
- Customer name
- Customer address
- Employee ID
- City
- Postcode
- Date of Birth

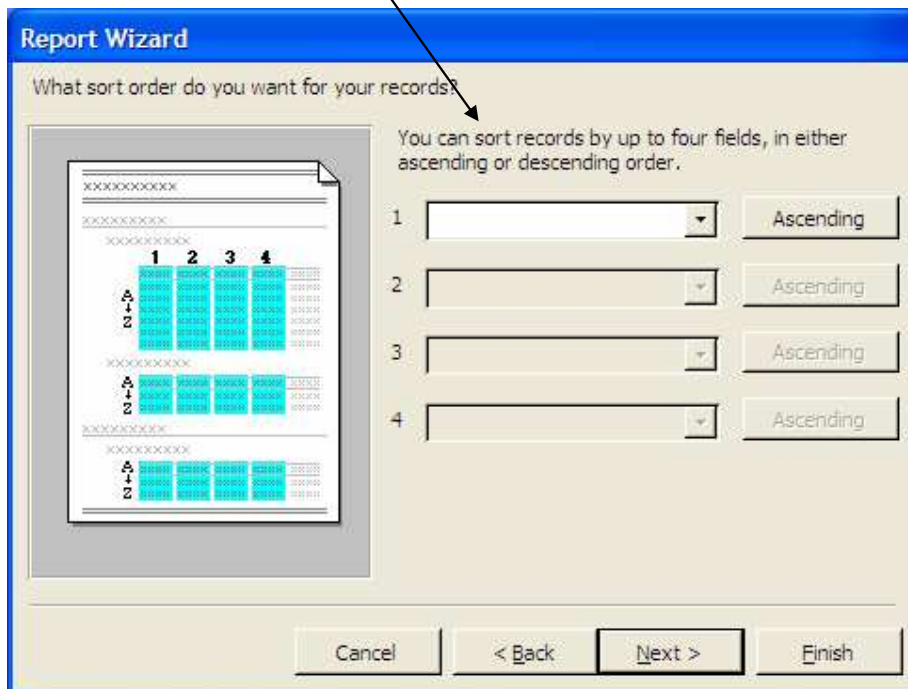
The "Selected Fields" list is currently empty. The wizard has buttons for "Cancel", "< Back", "Next >", and "Finish".



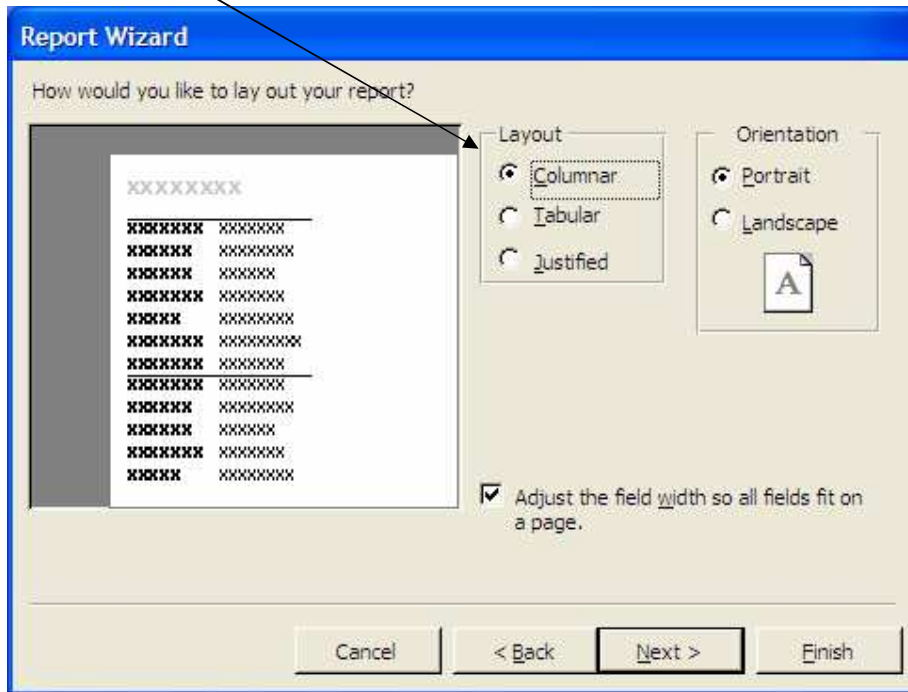
I selected all the appropriate fields to do with the report I was creating (Invoice report). Once I select all the fields I needed I clicked on *Next* and a next window came up asking if I want to add any group levels.



I clicked *Next* because I didn't need any so it took me to the next page which was allowing me to sort records in either ascending or descending order.



Next I was asked how I want the layout of my report to look. I selected Columnar and clicked on *Next*.



After this I was asked what style I would like to use. I selected Corporate and clicked *Next* again.



Finally I was asked to give the report a name. I named it Invoice and clicked *Finish*.

Report Wizard

What title do you want for your report?

Invoice

That's all the information the wizard needs to create your report.

Do you want to preview the report or modify the report's design?

Preview the report.

Modify the report's design.

Display Help on working with the report?

Cancel < Back Next > Finish

This is what the Invoice Report looked like once I had finished.

## *Invoice*

*Order ID* 3

*Order date* 19/02/2003

*Required date* 27/02/2003

*Product ID* 3

*Unit price* €22.50

*Quantity* 6

*Total Price*

*Customer ID* 5

*Title*

*Contact name* Michael Clarke

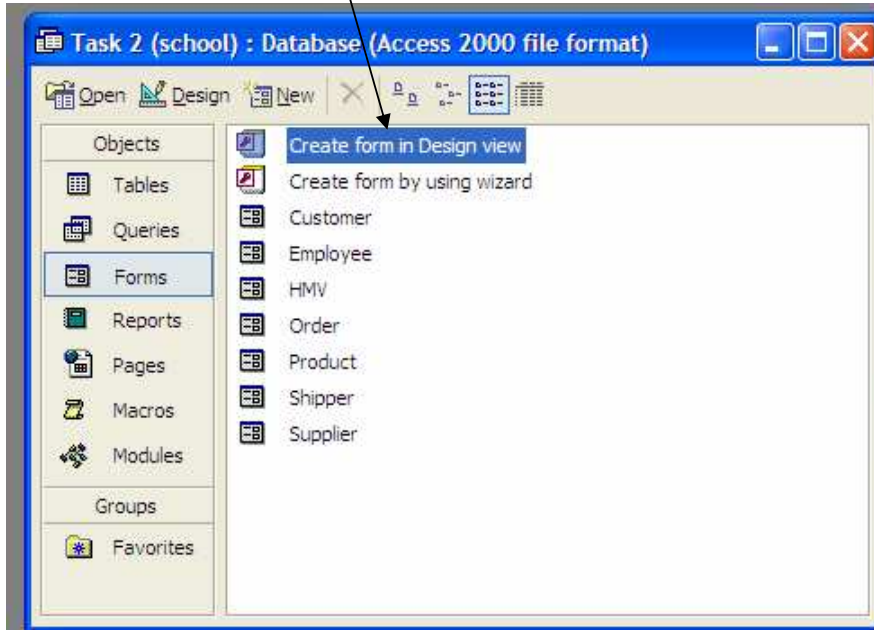
*Customer address* 34 Knights Road

*City* London

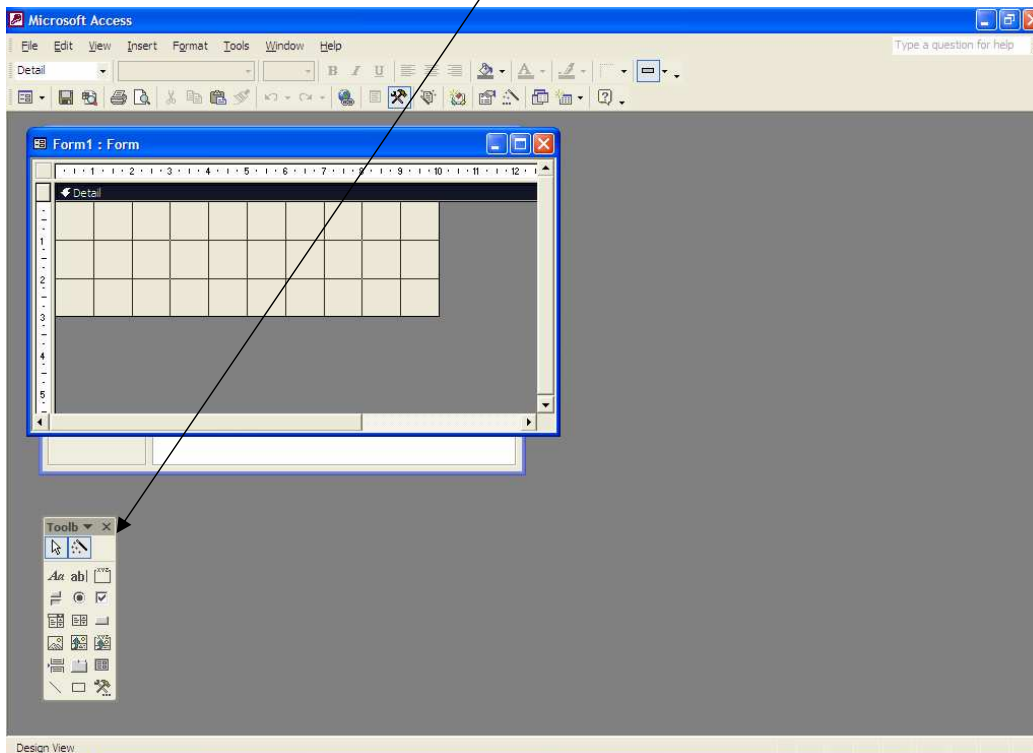
*Postcode* SE4 6TY

## Forms

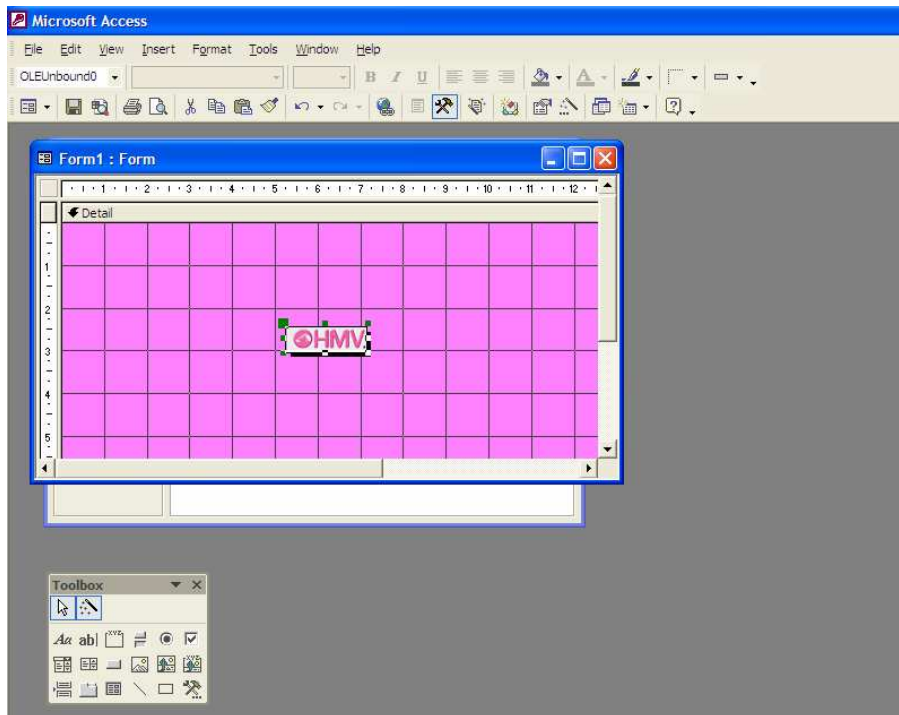
Once all of this was done, I began creating my forms. I made my Main Menu page first so that I know what will be going where. I started by clicking on *Forms*, then I clicked on *Create form in Design view*



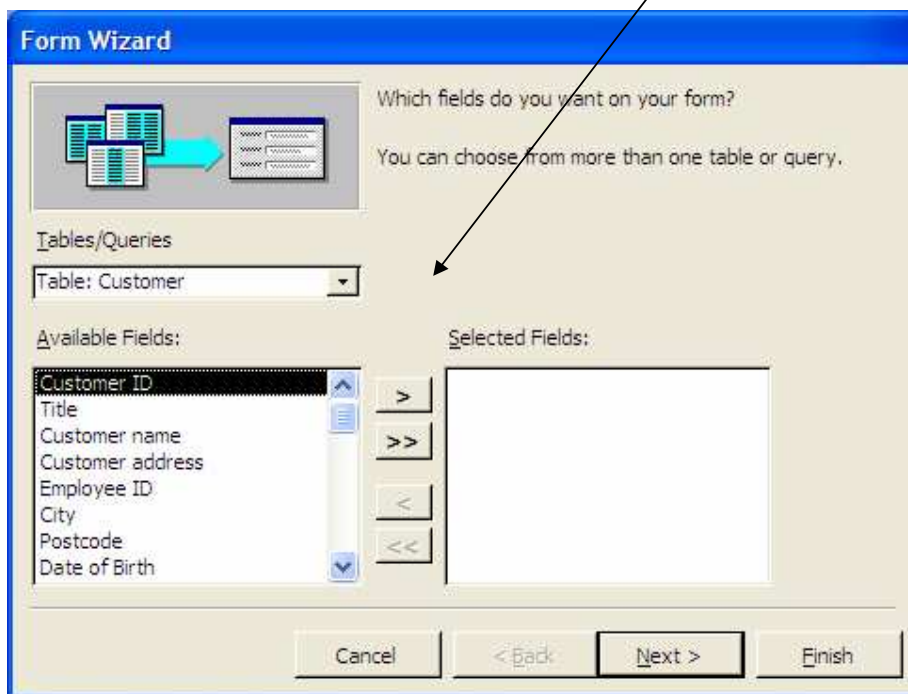
Once I clicked on this it took me to this page, where I was able to edit it and add what ever button etc. I wanted by using the Toolbox



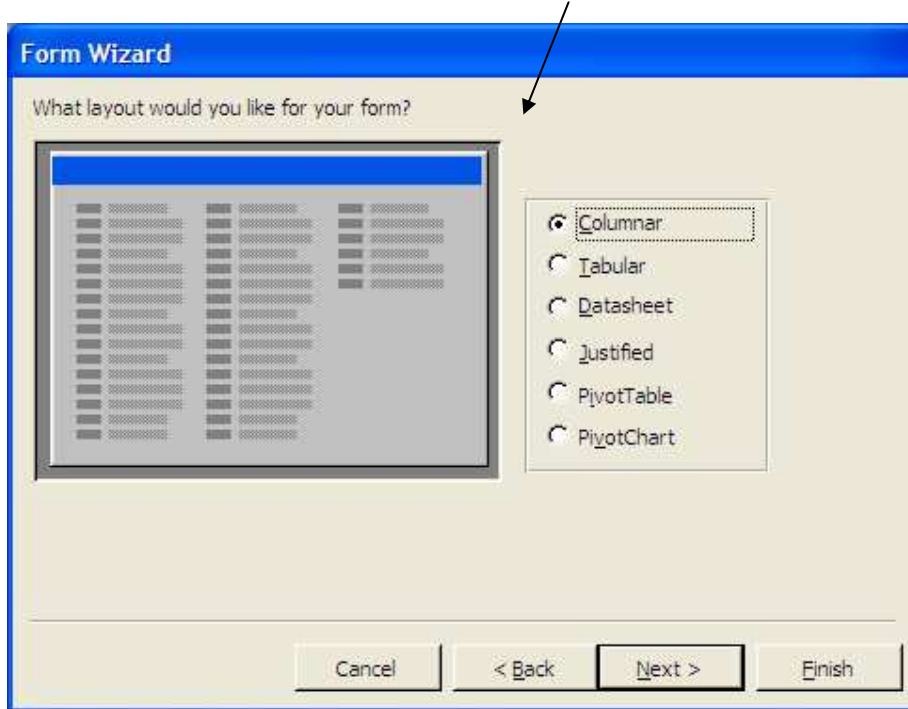
I turned the background to pink so that it goes well with the HMV logo I added



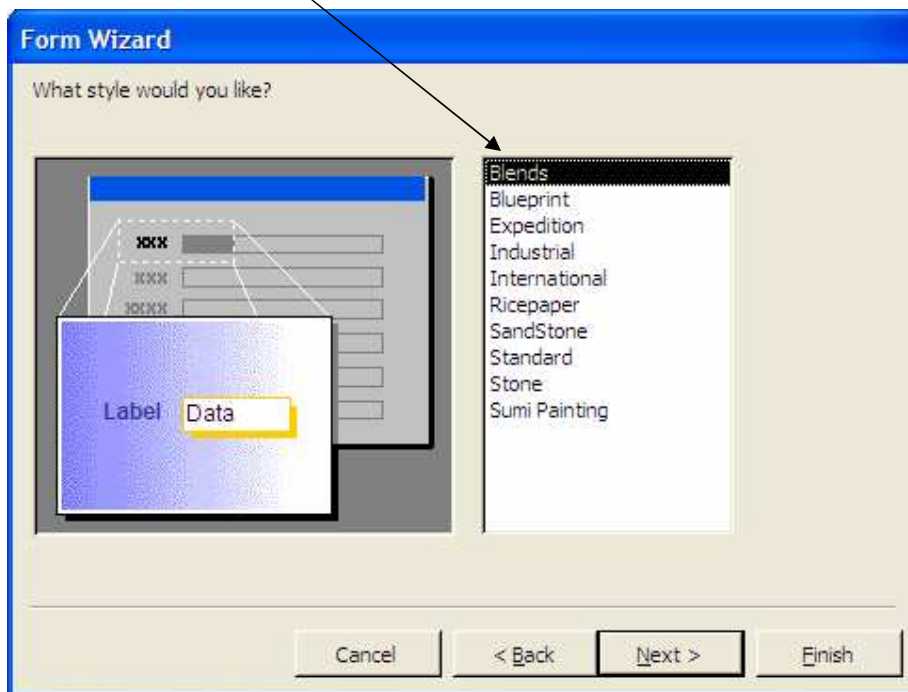
Since I had started this, I had to begin creating the rest of the forms that will be linked to the buttons created here. I started with the Customer Details form. To do this I had to click on *Create form by using wizard* which took me to this window



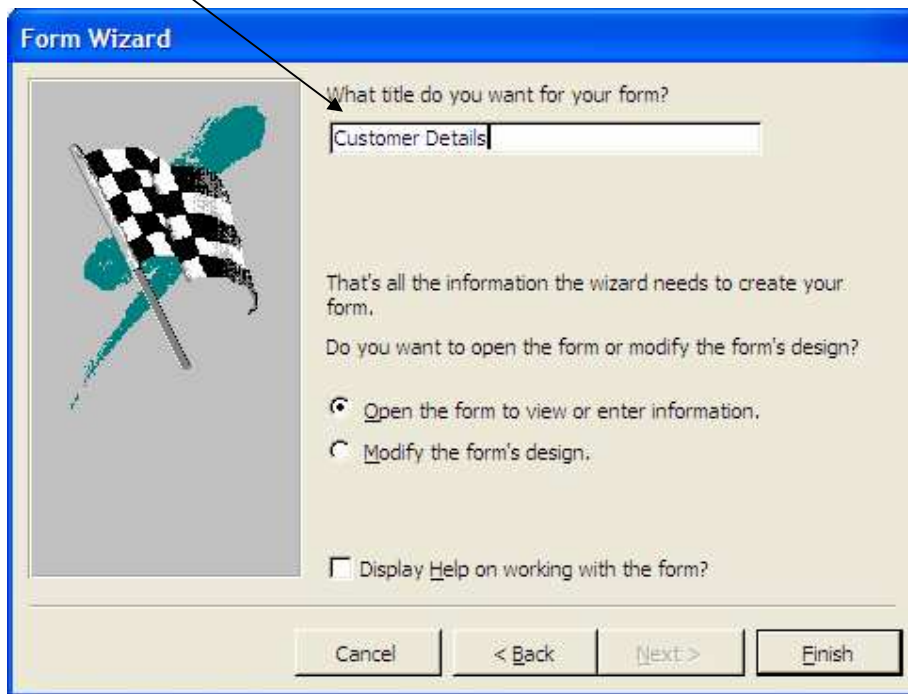
I added all the available fields in the order required into the selected fields section and clicked *Next*. I was then taken to a screen like this



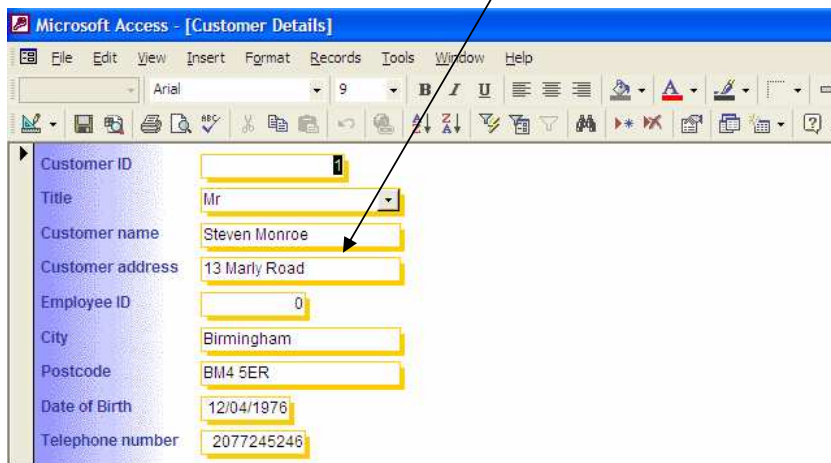
Here I can choose what kind of layout I would like to use for my form. There are six different types of layouts, but I chose Columnar for mine. After this window I was asked what style I will like for the form, I selected the style I wanted and clicked *Next*



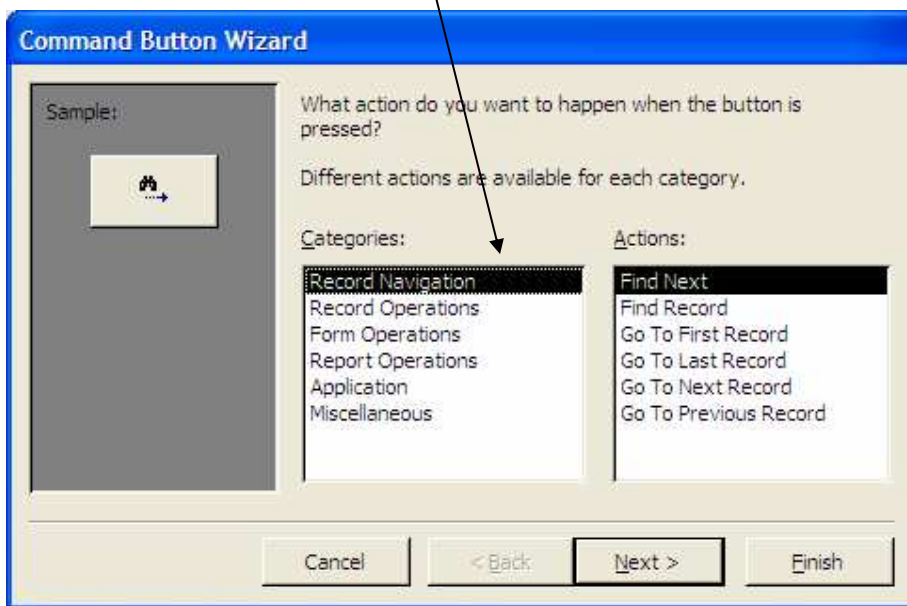
The final step was to give my form a title, which I named 'Customer Details' then clicked *Finish*



This is what my customer details page looked like once I clicked on finish



I then added buttons to the page by clicking on the *Command Button* from the Toolbox and made a little command button on the form where I wanted to put it. By doing so, a window popped up like this

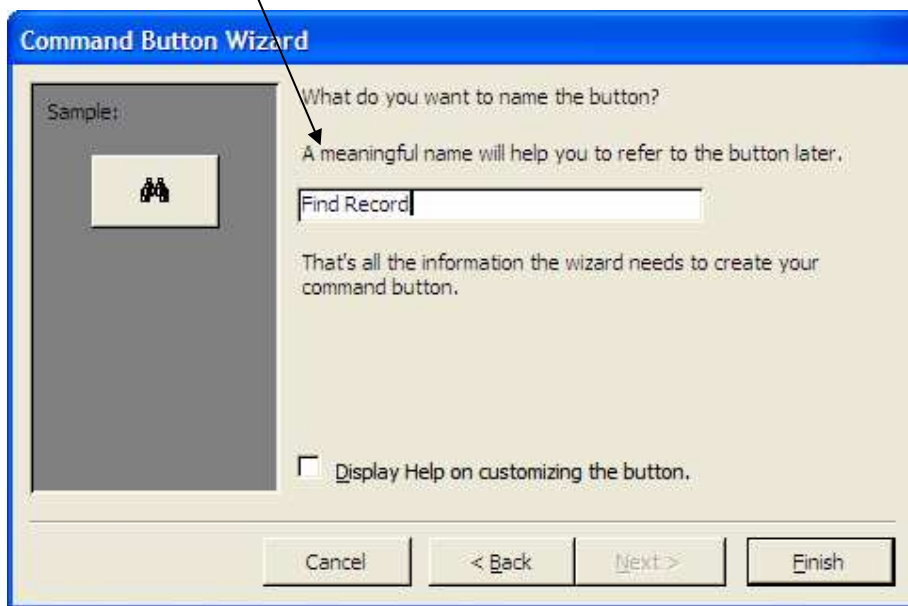


From here I could choose any command for the button I want. For example if I wanted to find a record, I would click on the Record Navigation category, then from the actions section I would click on Find Record. This is what comes up when I click *Next*



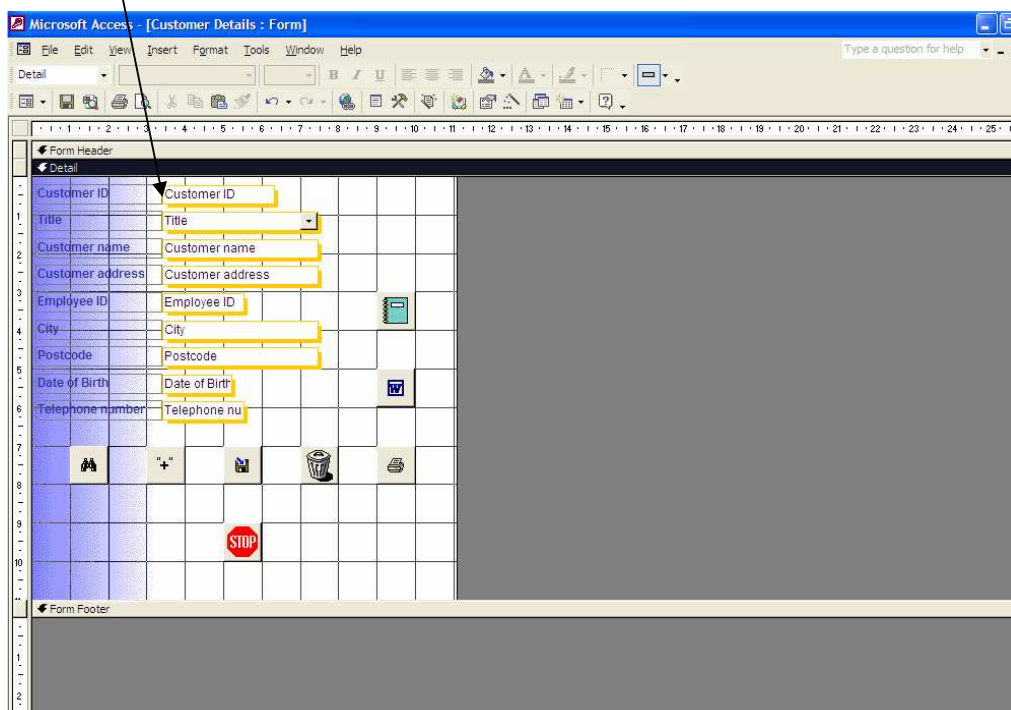


It gives me the option of choosing between giving the button a picture or a name. Once I have selected it, I click *Next* and it takes me to the next window asking me to give the button a name



I named it 'Find Record' then clicked on *Finish*.

I did this with all the buttons I added in. The buttons I added include adding new records, saving records, deleting records, printing records, opening word and previewing the report. This is how the customer form looked like when I had finished creating it



I did this to all the forms I created. This is how each one of them looks now

Customer Details:

Customer Details

Customer ID:

Title:

Customer name:

Customer address:

Employee ID:

City:

Postcode:

Date of Birth:

Telephone number:

Icons: Search, Add, Delete, Print, Stop

Record: 1 of 11

Employee Details:

Employee

Employee Details

Employee ID:

Employee name:

Employee address:

City:

Postcode:

Phone number:

Hire date:

Birth date:

Salary per month:

Icons: Search, Add, Delete, Print, Stop

Record: 1 of 6

Shipper Information:

The screenshot shows a window titled 'Shipper' with a sub-header 'Shipper Information'. The form contains the following fields:

Shipper ID	<input type="text"/>
Shipper name	Maraca
Shipped date	15/08/1995
Order ID	4
Ship address	13 Gorrow Road
City	Birmingham
Postcode	B1M4 7TY
Country	England
Phone number	2074656754

Below the form are five icons: a group of people, a plus sign, a trash can, a floppy disk, and a printer. A red 'STOP' sign icon is positioned below these. At the bottom, a status bar shows 'Record: 1 of 2'.

Supplier Information:

The screenshot shows a window titled 'Supplier' with a sub-header 'Supplier Information'. The form contains the following fields:

Supplier ID	<input type="text"/>
Supplier name	Fendex
Supplier address	118 Gerrow Road
Phone number	2073245445

Below the form are five icons: a group of people, a plus sign, a trash can, a floppy disk, and a printer. A red 'STOP' sign icon is positioned below these. At the bottom, a status bar shows 'Record: 1 of 5'.

### Order Details:

Order

## Order Details

Order ID:

Customer ID:

Product ID:

Unit price:

Quantity:

Order date:

Required date:

Paid?

Icons:

STOP

Record: 1 of 4

### Product Details:

Product

## Product Details

Product ID:

Product name:

Product description:

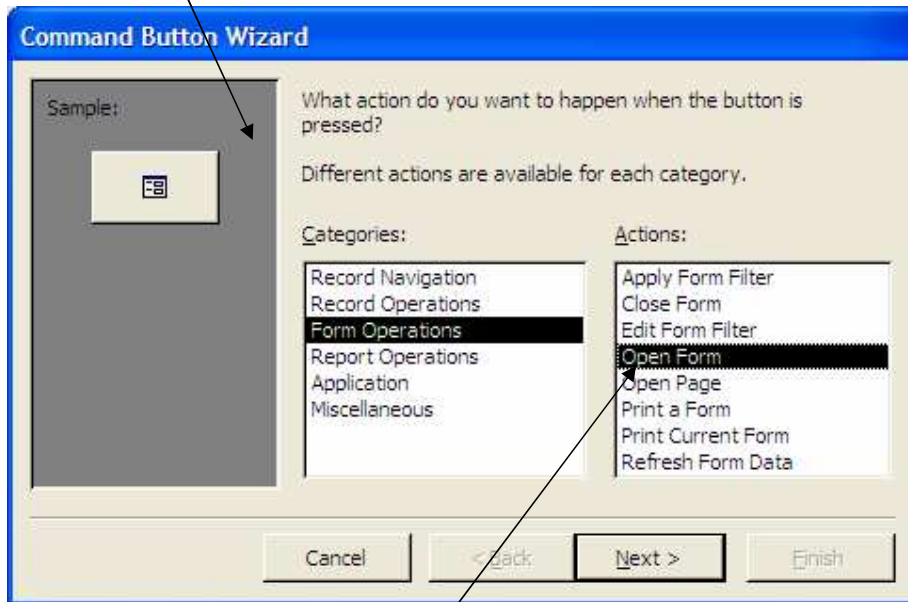
Supplier ID:

Stock:

Icons:

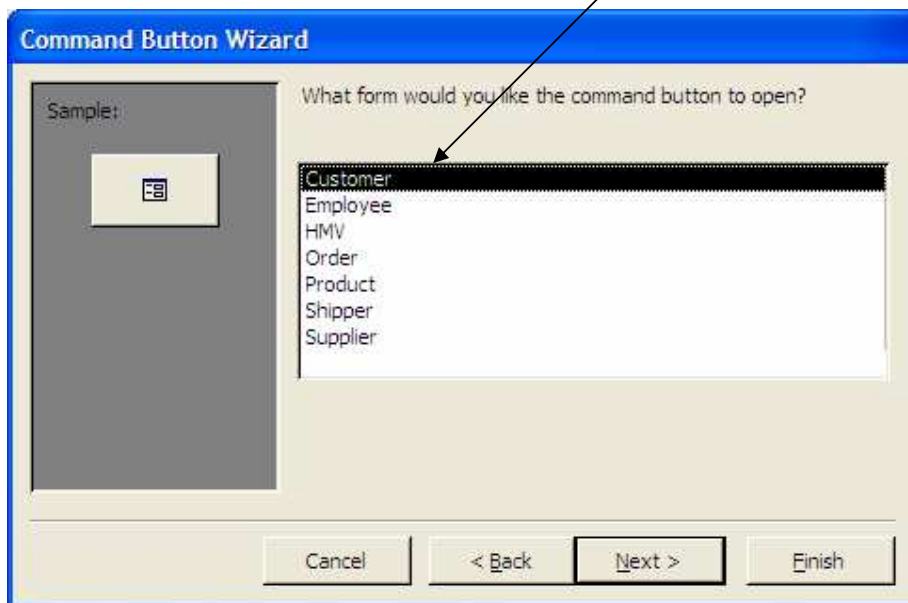
STOP

After I created my forms, it was time to finish my Main Menu page. I started adding in buttons linked to these forms. I did this by going to the design view of my main menu, then creating a command button on it. When I did this, a window popped up like this

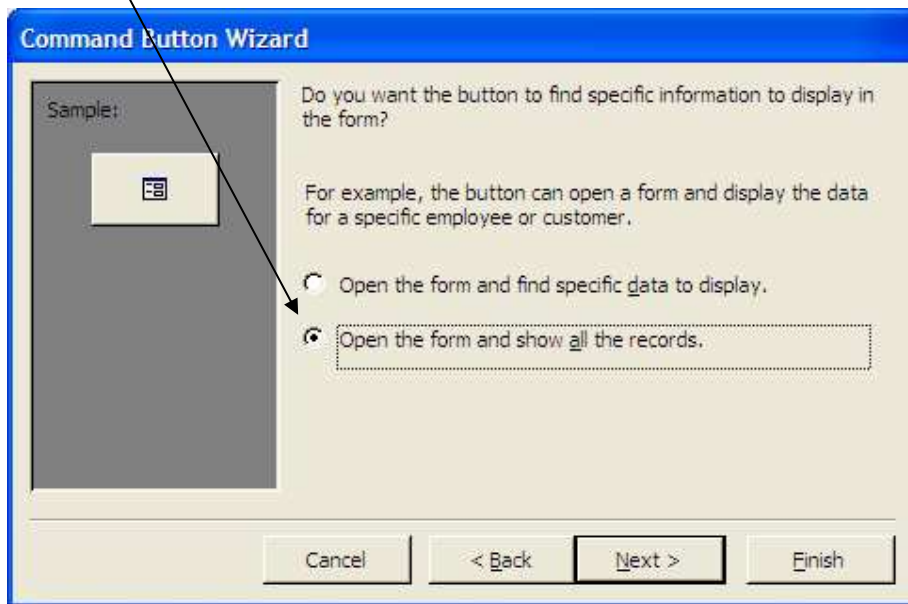


I went to Form Operations from the categories section and from there I went to Open Form.

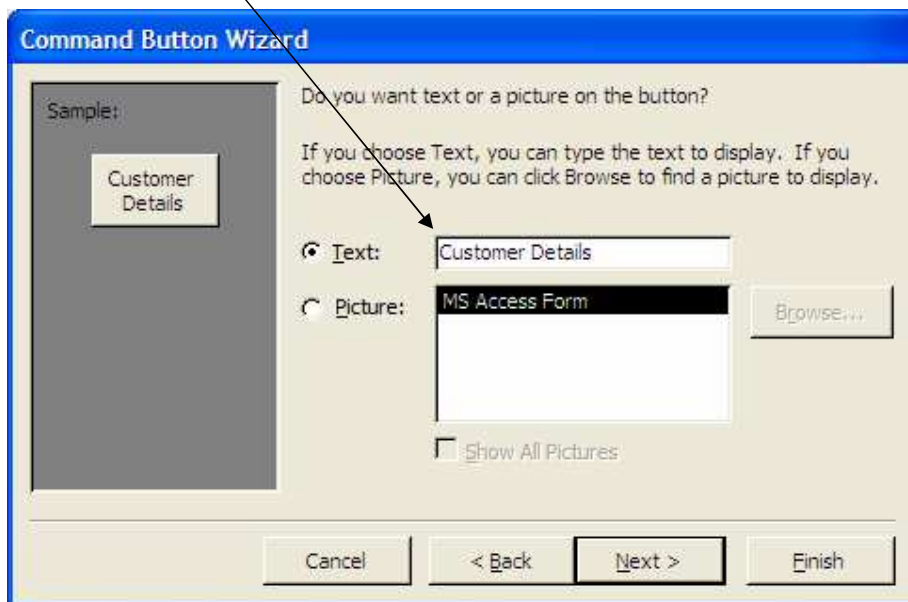
I then had to select which form I would like the command button to open



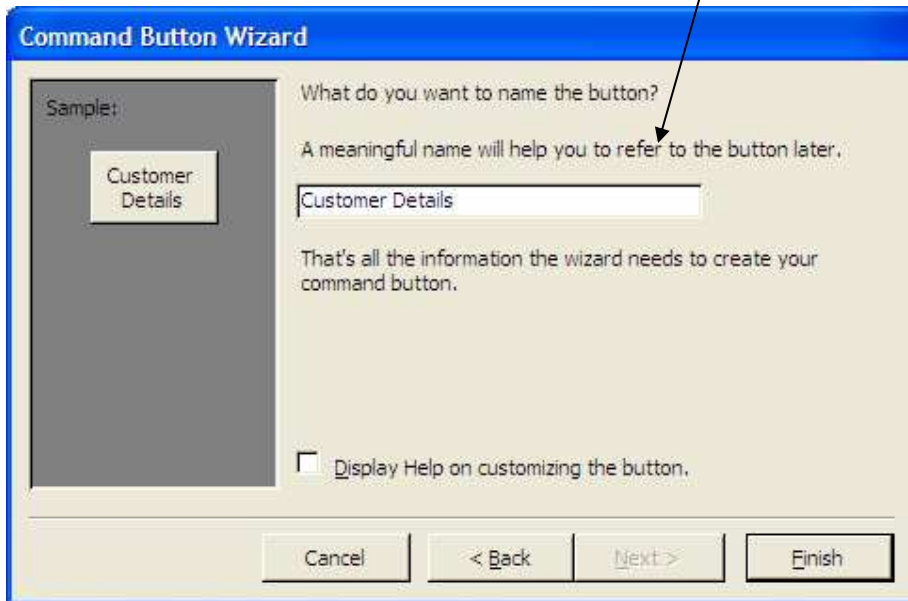
For the Customer Details button, I selected the 'Customer' form. Then after clicking *Next* it took me to this next window which I clicked on 'Open the form and show all the records.'



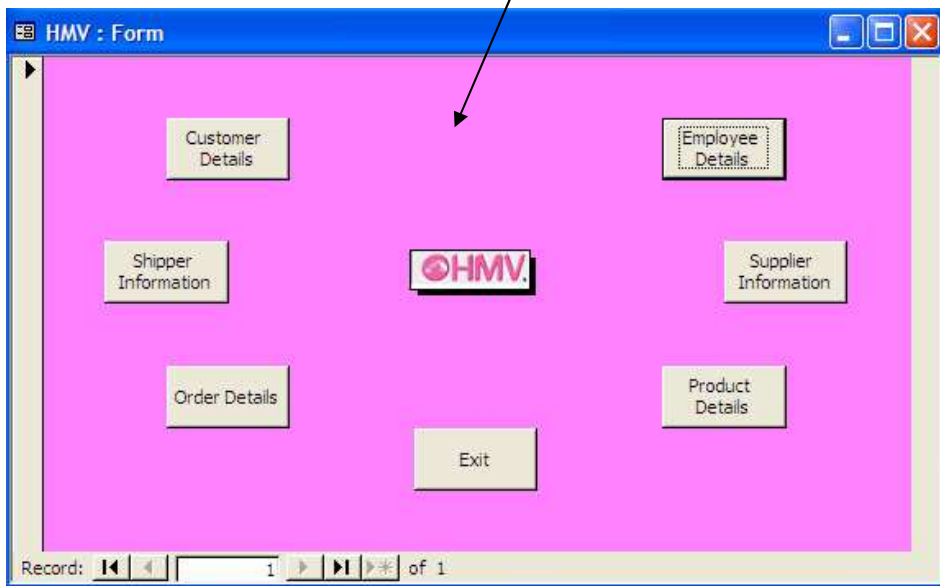
After clicking *Next* on this window, I was taken to another window where it asked me to either give the button a name or give it a picture. I chose to give it the name 'Customer Details'.



It finally took me to the last window where I was asked to give the command button a name. I named it 'Customer Details', then clicked *Finish* and the button was created.

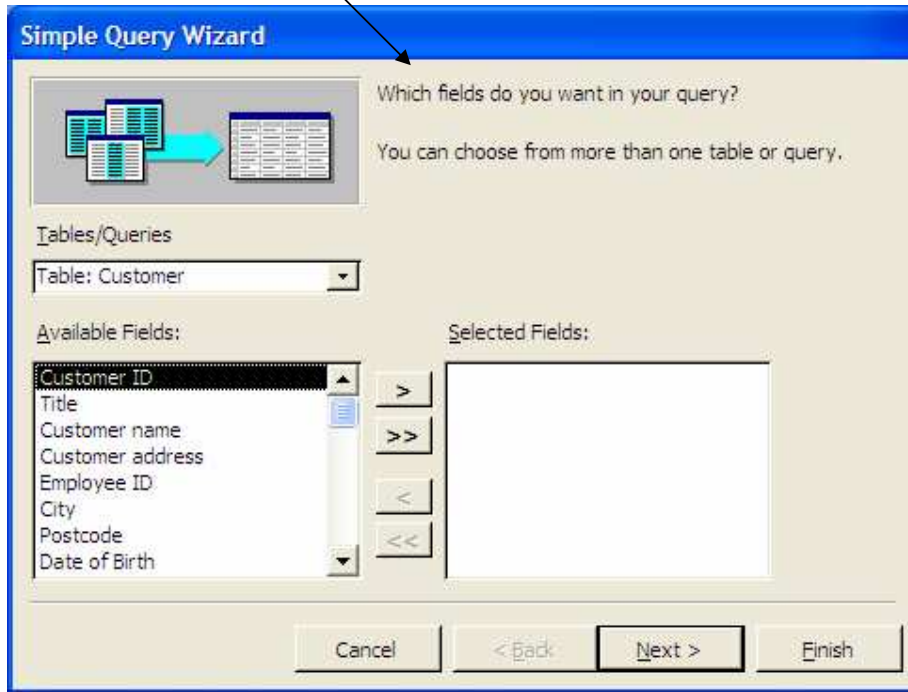


I did the same thing for every button, linking them to their appropriate page. This is how the Main Menu looked when it was finished



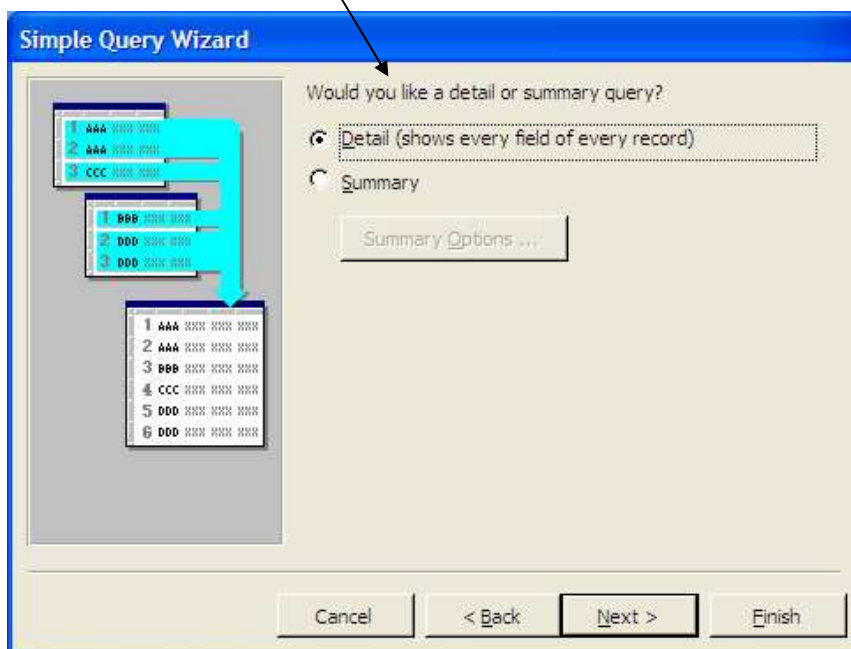
## Queries

Once I had finished my forms, I went on to do my Query's. I created my query by going to *Queries* then clicking on 'Create query by using wizard' and this window popped up



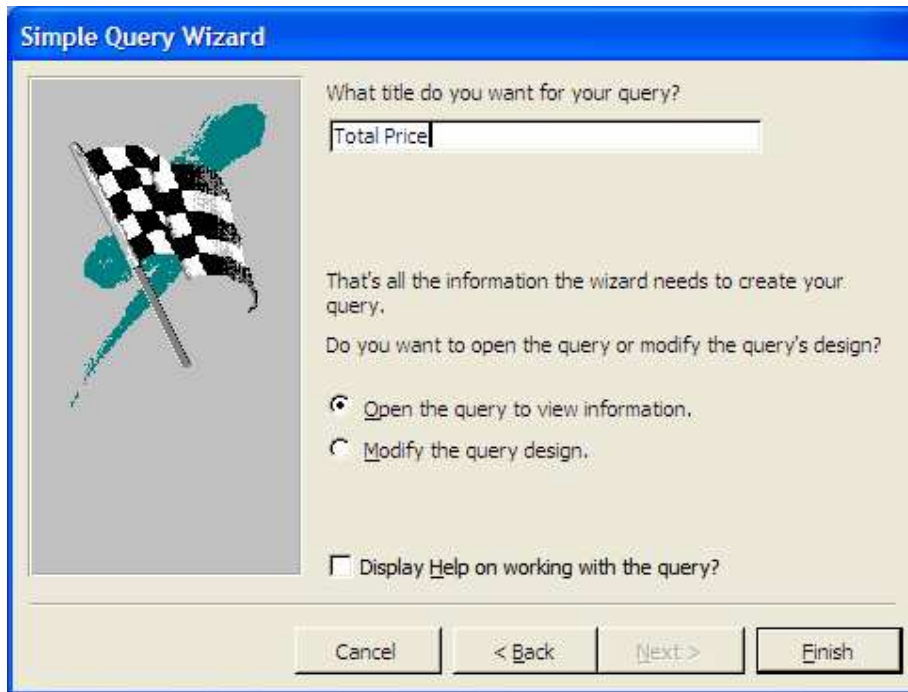
Here I was asked to select all the appropriate fields into the query.

Once I selected all the fields I needed it took me to this next window where I was asked whether I would like a detailed or summary query.





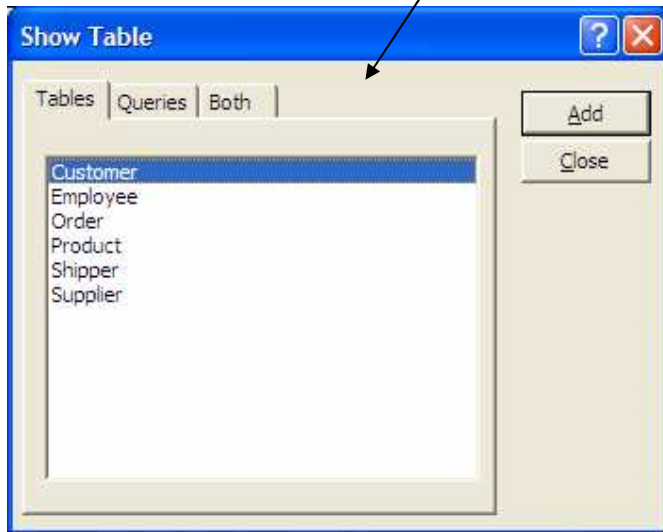
I chose 'Detailed' and clicked *Next* which took me to this window where I was asked to enter a name for this query.



I named it Total Price and clicked *Finish*. This query was now completed and this is what it looks like when I select the query

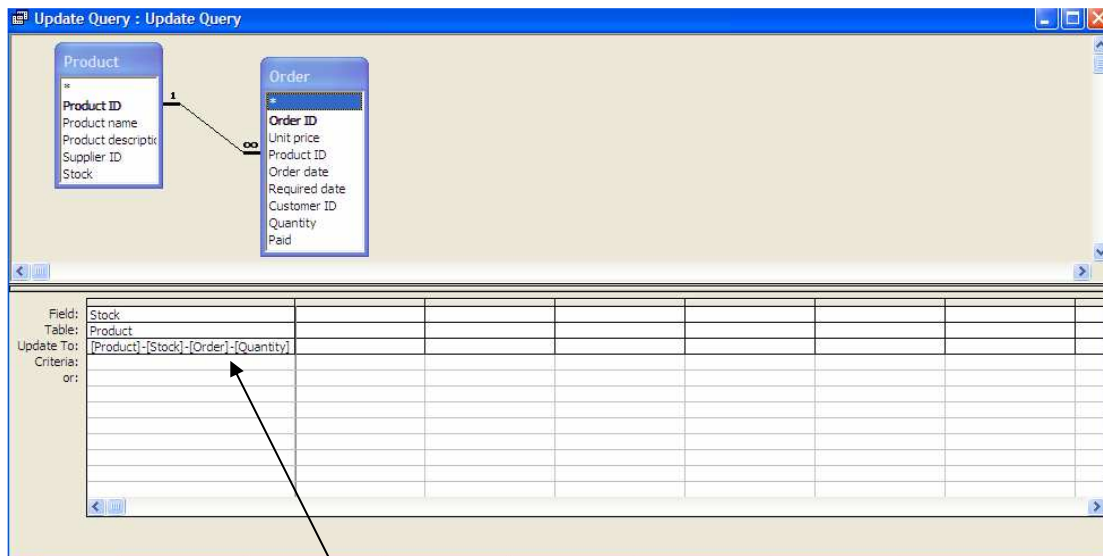
	Unit price	Quantity
▶	£15.00	5
	£22.50	6
	£10.00	1
	£12.00	4
*	£0.00	0

Next thing I did was to create an update query to deduct the orders from the product table. I did this by clicking on 'Create query in design view', then a window like this showed up asking me to select which tables I would like to include in my update query.



I added Product and Order then clicked on *Add*.

I then added Stock into the Field section by dragging it in there and I also linked the Product ID from the Product table to the Product ID in the Order table



I also added the following formula into the Update To section:

`[Product]-[Stock]-[Order]-[Quantity]`

This deducts the quantity ordered from the stock level in stock. After the update the new value for the quantity in stock will appear in the Product table.

## Testing

This is how I will test the database:

- Test each object (form, report, and query) to make sure it meets requirements.
- Testing each menu item and command button under differing circumstances.
- Testing the effects of invalid and extreme data.
- Testing the system as a whole, checking results against expected results.

Test No.	Test	What the Test will be	Expected Outcome	Actual Outcome
1	Test date of birth field in the Customer Details Form.	Type an invalid date like "54/75/6543".	An error message will appear.	An error message appeared.
2	Test Main Menu options.	Click the Exit button.	Closes form.	Closed the form.
3	Add new customer in Customer Details form.	Add new customer by clicking the 'Add' button and filling in the details.	Will allow me to fill out all the details.	Let me fill out all the details.
4	Delete a customer record.	Delete customer detail.	Deletes customer's detail.	Deleted company's detail.
5	Print Customer Detail	Print Customer Detail	Print Customer Detail	Print Customer Detail
6	Preview Invoice Report.	Click on Preview Report button.	Open up Invoice form.	Opened the invoice report.
7	Find a record in Customer form.	Click the find a record button and type a customer ID number.	Bring up the customer with that ID number.	Brought the customer up with that ID number.
8	Test number of characters allowed in customer name field.	Type the same letter several times.	Shouldn't exceed 30 characters.	Wouldn't let me type more than 30 characters.
9	Test customer postcode.	Type an invalid postcode in the customer's postcode field.	Shouldn't allow me to type anything	Didn't allow me to type it.

**(Test No.1)**

Here you see how I tested the date of birth field by typing in 54/75/6543

Customer ID	Title	Customer name	Customer address	Employee ID	City	Postcode	Date of Birth	Telephone number
1	Mr	Steven Monroe	13 Marly Road	0	Birmingham	BM4 5ER	12/04/1976	2077245246
2	Mr	Mark Johnson	54 Queensbury Stre	0	London	NW8 6RT	30/06/1968	2077345653
3	Other	Larry Goodman	92 Yale Road	0	Manchester	MR2 9GH	02/03/1957	2087435334
4	Mr	Kevin Peterson	43 Parkinson Street	0	Essex	EX2 4DC	14/07/1981	2073254235
5	Mr	Michael Clarke	34 Knights Road	0	London	SE4 6TY	19/01/1972	2074239098
6	Mr	Mohammed Abdu	867 Pembridge Roa	0	Brighton	BN9 8UI	25/09/1973	2083245239
7	Mrs	Lorena Pity	12 Yellar Street	0	Birmingham	BMS 0ER	04/05/1983	2083498092
9	Miss	Clare Fretty	432 Pook Road	0	Newcastle	NE12 6KU	31/01/1966	2074387489
10	Mr	Ronald Johnson	23 Lever Town	0	Cornwall	CL56 2ER	12/12/1975	2083298743
11	Mrs	Tara Brookes	53 Timson Road	0	Essex	EX12 6RT	18/04/1978	2076343269
12	Mr	Rodger Bert	32 Edge Street	0	London	SW13 3NP	26/02/1988	2073428704
13	Other	Harris Taylor	59 Ion Road	0	Newcastle	NE12 8KL	54/75/6543	0
(AutoNumber)				0				0

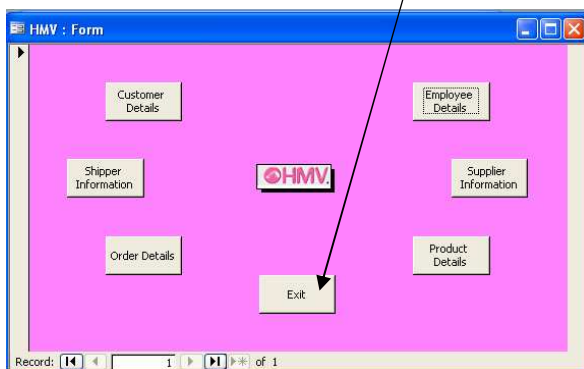
This is what popped up when I pressed enter or clicked away



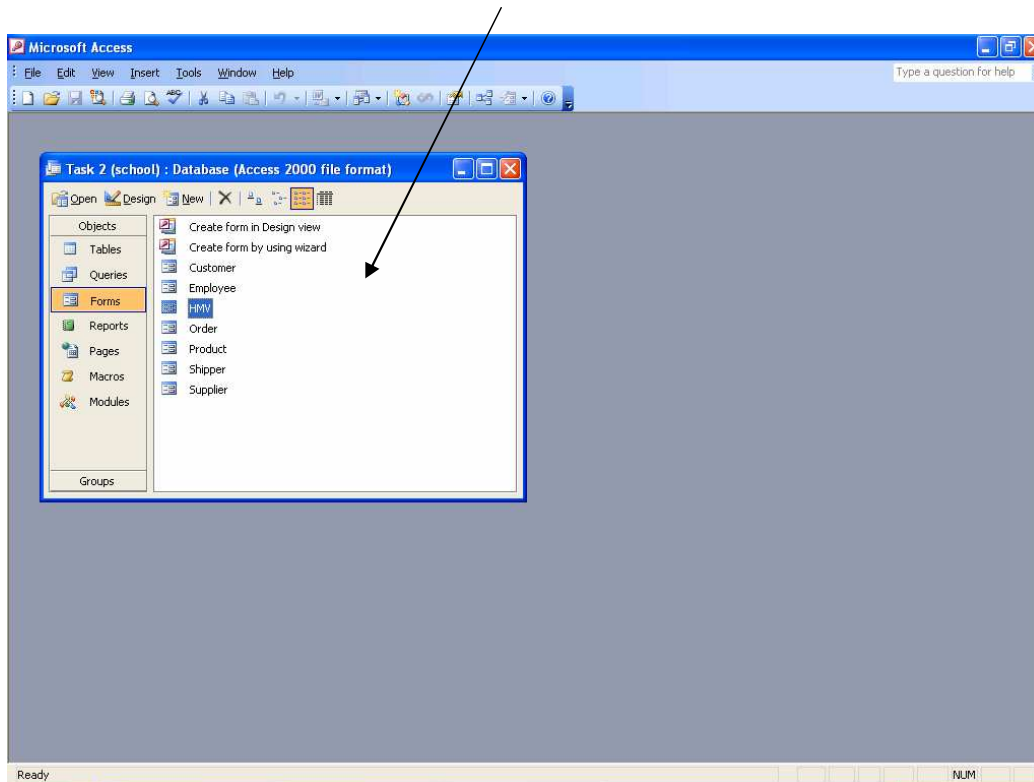
It does not allow me to enter an invalid date.

**(Test No.2)**

Here I opened my Main Menu form and click the Exit button near the bottom.

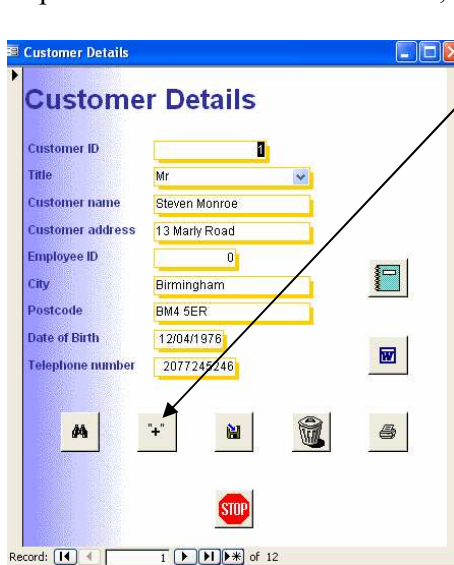


It then closed the form and returned to this screen.



### (Test No.3)

I opened the Customer Details form, and then I clicked on the 'Add Record' button

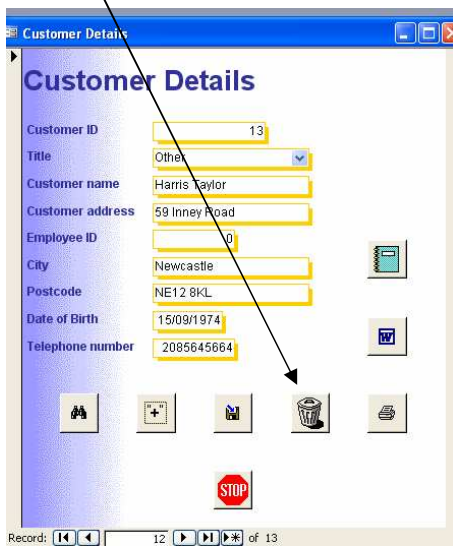


It then takes me to a blank form where I can type in new customer details.



**(Test No.4)**

Once I open the Customer Details form, I go to a record and click on the 'Delete Record' button.

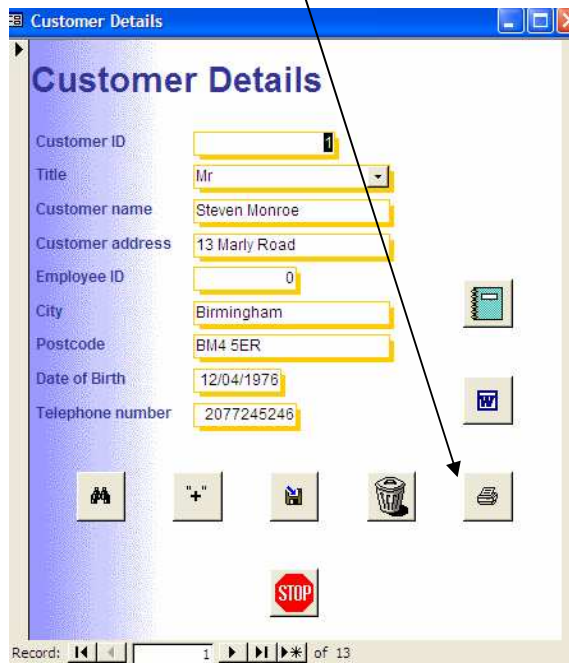


When I click on this, the following message pops up. I simply click Yes then the record will be deleted .



**(Test No.5)**

To print out the form, I simply opened the Customer Details form and clicked on the 'Print' button. It automatically printed out my form.

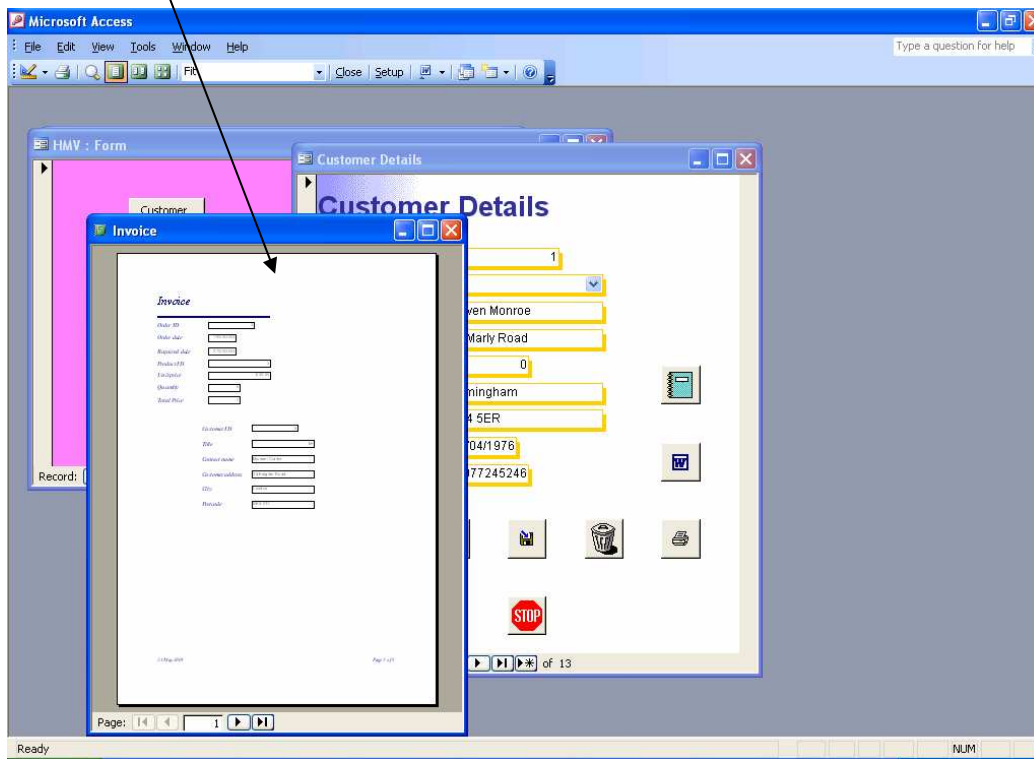


**(Test No.6)**

I opened up the Customer Details form and clicked on the 'Preview Form' button

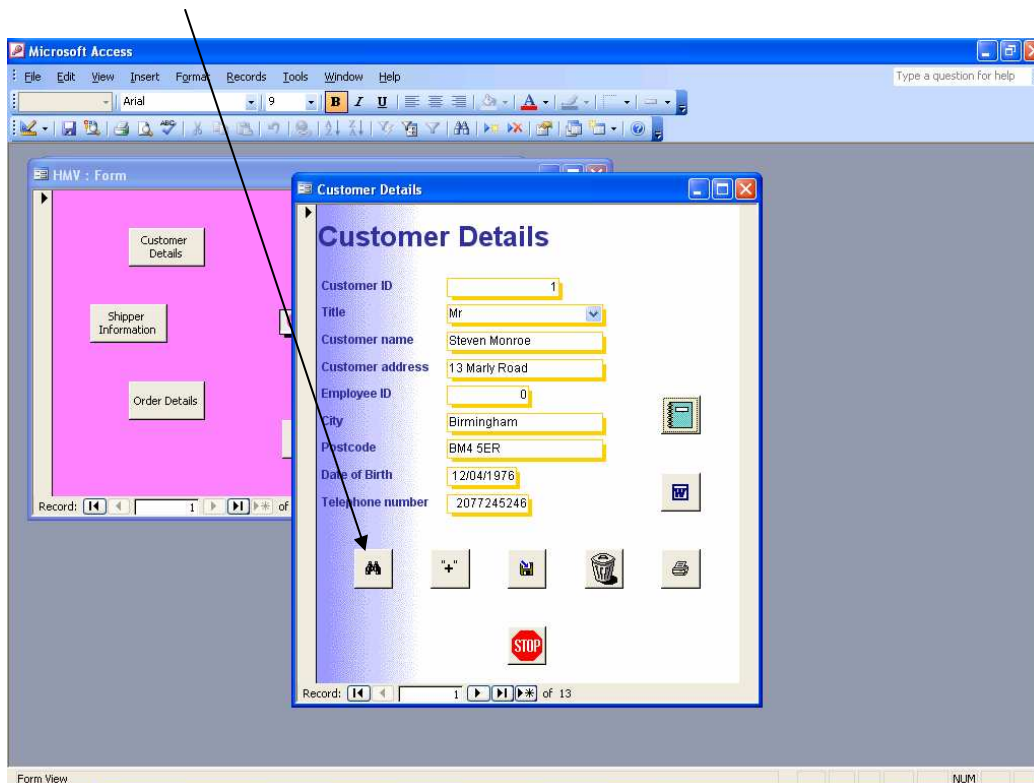


It then opened up the invoice report.



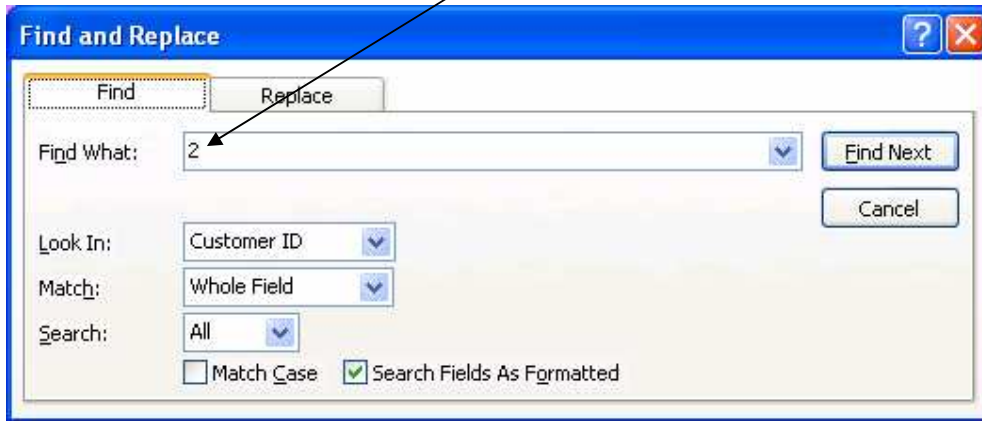
**(Test No.7)**

To test the 'Find Record' button, I opened up a Customer Details form the clicked on the 'Find Record' button

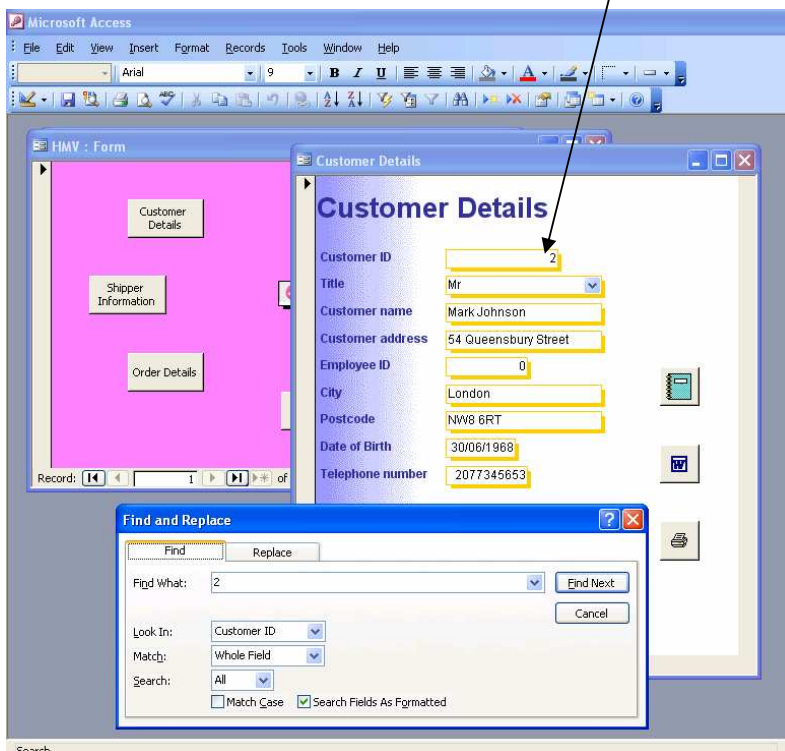




It then took me to the following window where I had to type in the Customer ID number that I was searching for. I typed in the number 2 then pressed Find Next.

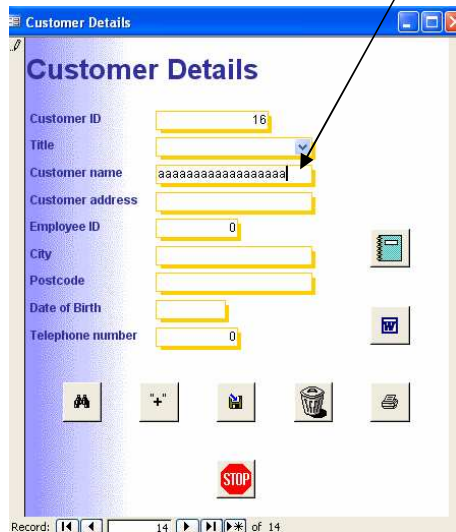


Once I did this it took me straight to the customer details of the customer ID number 2



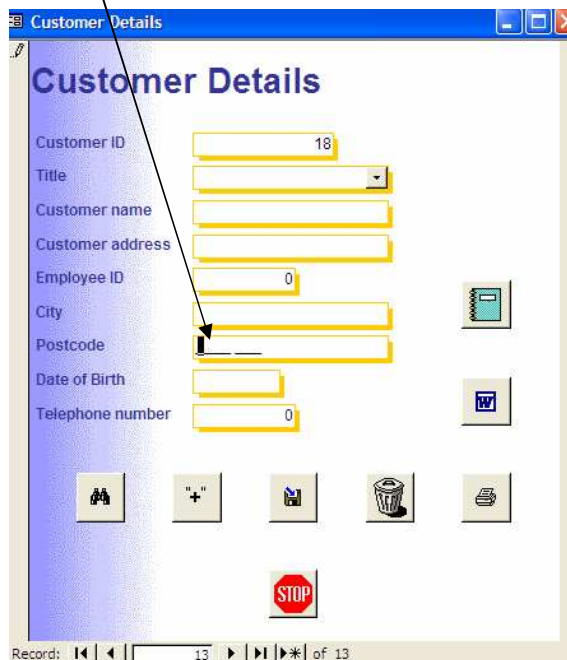
**(Test No.8)**

I opened the Customer Details form again and clicked 'Find Record', then I typed in the letter 'a' several times until it finally stopped. I counted it and there was exactly 30 characters there just as I had made it.



**(Test No.9)**

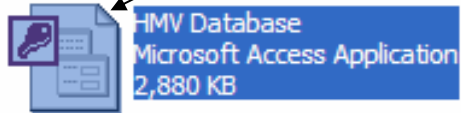
To begin this test, I first opened up the Customer Details form. Then I clicked on 'Add Record'. From here I was presented with a blank form to fill out. I simply type in a number first in the postcode section but it wouldn't allow me to type anything because it is invalid.



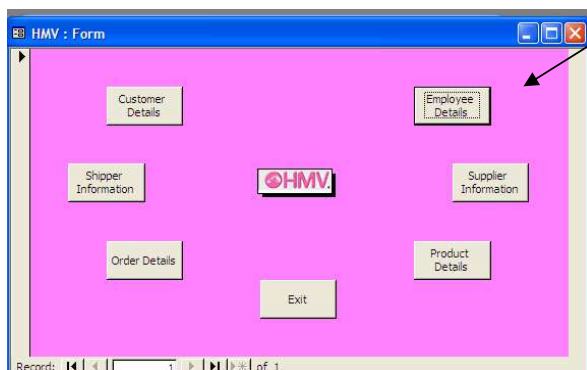
This proves that it will not allow an invalid postcode to be written.

## User Guide

Firstly you must open the database. You do this by clicking on My Computer, then clicking on 'HMV Database'



The database should now have opened. The Main Menu form should also have come up automatically when you get on to the database. The form will look like this



You will then be able to click on any of the buttons to get to the desired form. First is the Customer Details button. If you click on this you will enter the customer details page



On this form you will be able to view all the customer's details and also add new ones. If you wish, you may also use the buttons below the details to do more things. These include; finding another record, adding a new record, saving the form, deleting a record, printing a record, opening word and viewing the invoice report. Once you have finished on this form you may exit the page by clicking on the 'Stop' button at the bottom. By doing so you will return to the main menu again.

Next button on the main menu screen is the Employee Details page. Once you have clicked on this button, the employee details form will appear

Employee

### Employee Details

Employee ID:

Employee name:

Employee address:

City:

Postcode:

Phone number:

Hire date:

Birth date:

Salary per month:

Record: 1 of 12

From here you may use the bottom buttons to; find a record, add a new record, delete a record, print a record or save the form. Once you have finished you can click the 'Stop' button to exit.

Next button on the main menu is the Shipper Information button. This button will take you to the following form

Shipper

### Shipper Information

Shipper ID:

Shipper name:

Shipped date:

Order ID:

Ship address:

City:

Postcode:

Country:

Phone number:

Record: 1 of 2

On this form you may wish to; find a shipper, add a new shipper detail, delete a shipper, save the form, or print the form from the buttons near the bottom. Click 'Stop' again and you will return to the main menu screen.

After the shipper information button there is the Supplier Information form. When you click on this button you will be taken to the following form

Supplier ID:   
Supplier name:   
Supplier address:   
Phone number:

Record: 1 of 12

Here you may; find a supplier, add a new supplier, delete supplier information, save the form, or print the form. Then you may exit from the 'Stop' button.

Order Details is next on the list, from there you will be able to find a specific order, add a new order information, delete an order, print an order, save the form, or view the invoice report.

Order ID:   
Customer ID:   
Product ID:   
Unit price:   
Quantity:   
Order date:   
Required date:   
Paid?

Record: 1 of 11

Press 'Stop' to return to the main menu again.

Product Details is the last button on the form. It takes you to the page with details about the products. Here you may; find a new product, add a product, delete a product, save the form, or print the form. Once you have finished you may click the 'Stop' button to return to the main menu again.

Once you have finished using the whole database system, you may wish to exit it completely by clicking on the 'Exit' button on the bottom of the main menu screen.