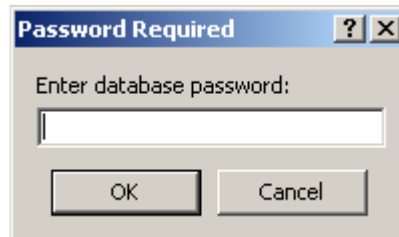


In this section I will display the work I have done and the outputs produced by the system. This section is basically evidence to my work as I intend to prove my work that I had planned in the DESIGN section.

PROTECTION AT THE BEGINNING

The first thing presented to the user when he opens the file is the password dialog box. I added this to protect the data from being accessed by the wrong people. The following screen dump shows the password dialog box:



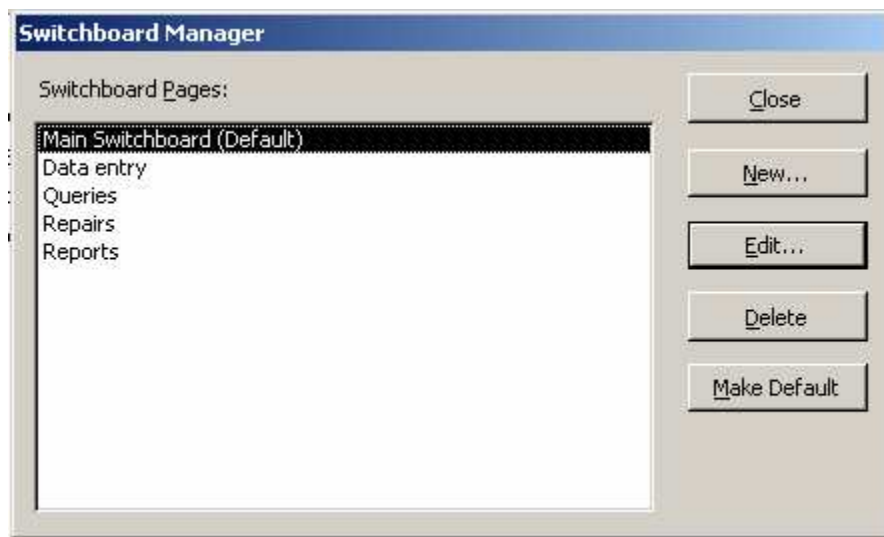
After entering the correct password the main switchboard opens up.

MENUS (SWITCHBOARDS)

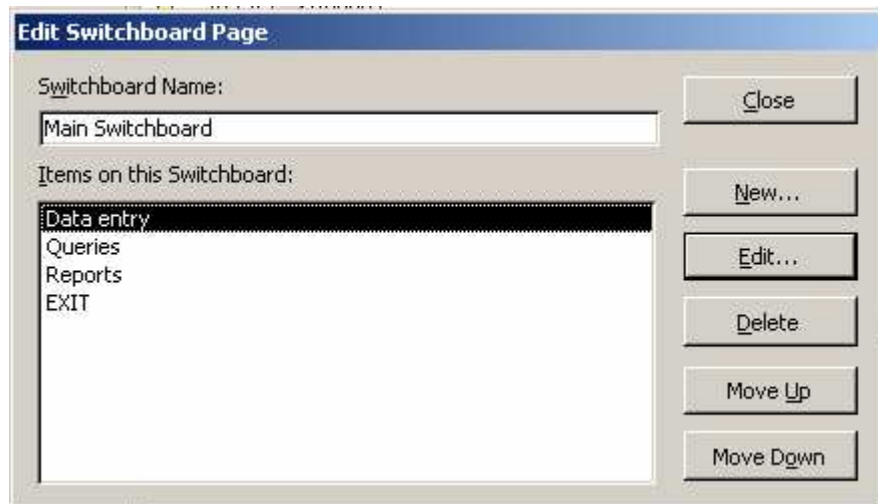
As mentioned in DESIGN, I created a menu so that the user can easily access the various parts of the database. To make things simple and easy, I made the menus using the Switchboard Manager. This creates switchboards which work like navigational menus. The Switchboard Manager can be accessed by clicking

Tools>Database Utilities>Switchboard Manager

This is how the switchboard manager looks like with the switchboards in it:



The switchboards are created by clicking the 'New' button and naming the switchboards in the dialog box that appears. To add objects to the switchboard I clicked edit and the following dialog box appeared:



Here, I added the items by clicking 'New' and entering the data into the dialog box that appeared. This is one such dialog box which I had filled in:



The following few pages are displays of all the switchboards that I have created:

TABLES

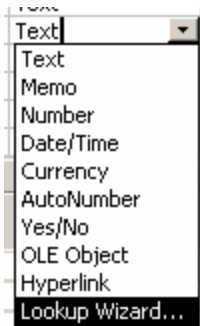
Just as I said, I created the tables in design mode. The first part of this mode consisted of 3 columns - FIELD NAME, DATA TYPE and DESCRIPTION (not really necessary, acts as a comment). The second part consisted of the FIELD PROPERTIES. This is how the FIELD PROPERTIES looks like:

Property	Value
Field Size	50
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	Please enter the item name
Required	No
Allow Zero Length	Yes
Indexed	No
Unicode Compression	Yes
IME Mode	No Control
IME Sentence Mode	None

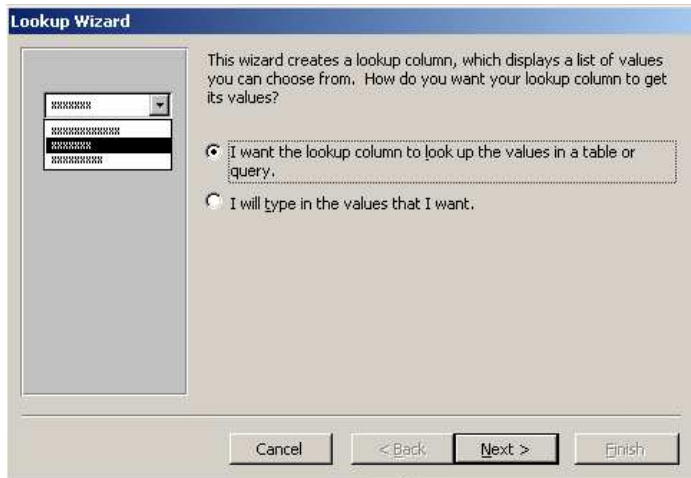
As you can see, here's where I control the properties of each field. Here I can enter the input mask, the validation rule and the validation text. This is a small section of the SUPPLIERS table:

SCODE	SUPPLIER	POBOX	CITY	TELEPHONE
3218	Atlas Telephones Corp.	4216	Abu Dhabi	0198745484
3220	Shivaki Electronics Inc.	5208	Dubai	0454357098
3840	Siemens Electronics Corp.	2568	Dubai	0826738841
3990	A4 Tech Electronics Inc.	4521	Dubai	0910229934
4120	Imation Hardware Corp.	1105	Dubai	0018211541
4987	Yamaha Electronics Corp.	8521	Dubai	0984016885
5506	Compaq Computers Inc.	7498	Sharjah	8756502303
5520	Apple Computers Inc.	4054	Abu Dhabi	0015867541
5530	National Electronics Inc.	5205	Dubai	0860105254
5632	Sonashi	4054	Abu Dhabi	0018323685
5840	Bose Corp.	5841	Sharjah	0014028851
5990	Sony Electronics Inc.	1004	Sharjah	0813284140
6510	Philips Electronics Inc.	5415	Dubai	0879498405
6541	Black and Decker Hardware	9546	Fujairah	0879408745
6852	Panasonic Electronics Corp	7410	Dubai	0984384312
7445	Softwarehouz	4865	Abu Dhabi	0984065168
7550	Creative Electronics Inc.	8282	RAK	0018654248
7651	Mercury Computers Inc.	6587	UAQ	0446842560

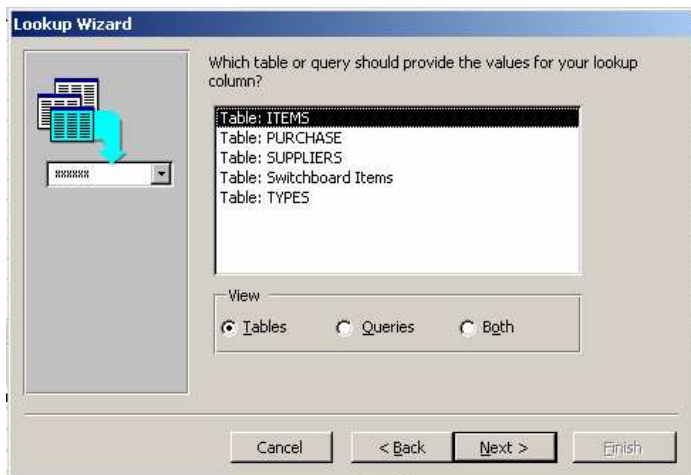
In the DESIGN section, you have seen that some of the fields in my tables have lookup values. This is how I created the lookup fields:



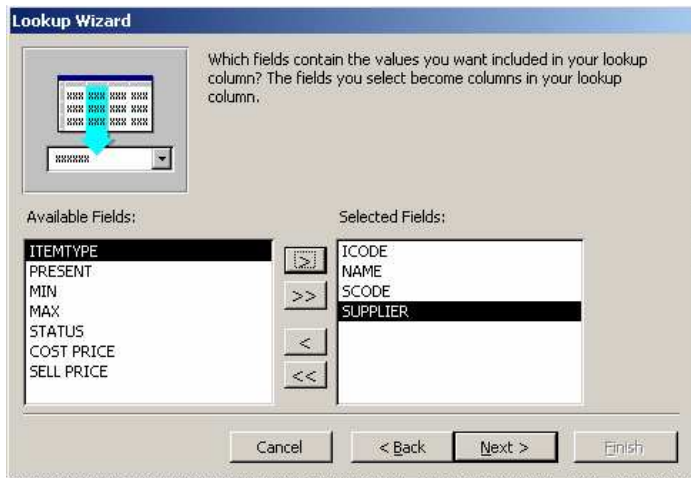
In the data type of the field I chose the Lookup Wizard.



The wizard first asks me whether I want the lookup column to look up the values in a table or query or whether I will type in the values I want. I choose what I want and click next.



If I choose 'I want the lookup column to look up the values in a table or query' the following screen is displayed. The wizard asks me which table or query I want to look up my data from. I choose the required table and click next.

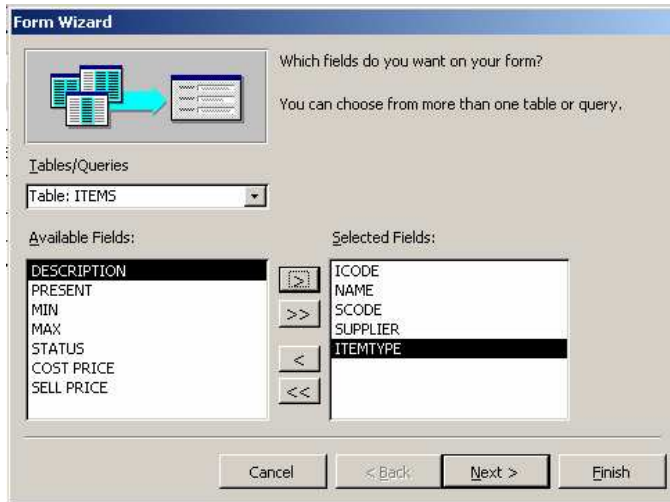


Here I choose the field(s) where the lookup field should look up its data from and click next.

As I mentioned, this view is not really suitable for the user to enter data so hence I had created forms which I could customize to make it more attractive to the user and to place the fields in a proper way. I also added buttons to make it more user friendly. Forms are explained below.

FORMS

I must say that the forms created on the PC look amazing. It went above my expectations and the forms produced had excellent colour schemes and a very friendly user interface. I created forms by using the Form Wizard. The following screen dumps show the steps involved when creating a form:



Form Wizard

Which fields do you want on your form?
You can choose from more than one table or query.

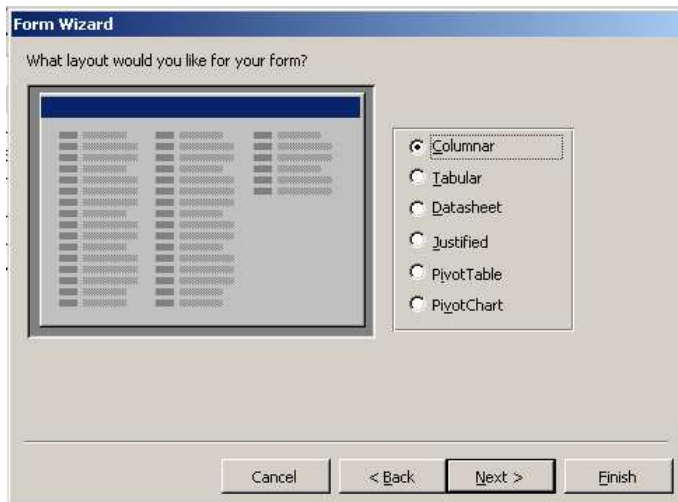
Tables/Queries
Table: ITEMS

Available Fields:
DESCRIPTION
PRESENT
MIN
MAX
STATUS
COST PRICE
SELL PRICE

Selected Fields:
ICODE
NAME
SCODE
SUPPLIER
ITEMTYPE

Buttons: Cancel, < Back, Next >, Finish

Here I choose the fields that I want to include in the form.



Form Wizard

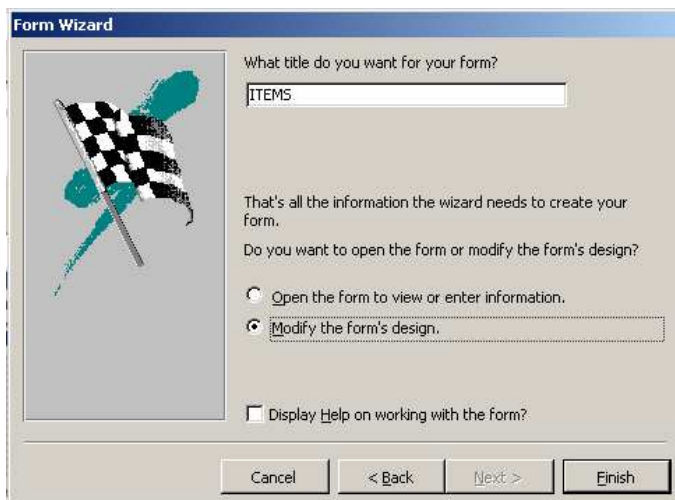
What layout would you like for your form?

Layout preview: A grid of 10 columns and 5 rows.

Layout options:
☒ Columnar
☐ Tabular
☐ Datasheet
☐ Justified
☐ PivotTable
☐ PivotChart

Buttons: Cancel, < Back, Next >, Finish

Here I choose the layout of my form (Columnar). The next window asks which color scheme I want. I select the Industrial scheme as it looks casual yet seems formal.



Form Wizard

What title do you want for your form?
ITEMS

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

Do you want to open the form or modify the form's design?

☐ Open the form to view or enter information.
☒ Modify the form's design.

☐ Display Help on working with the form?

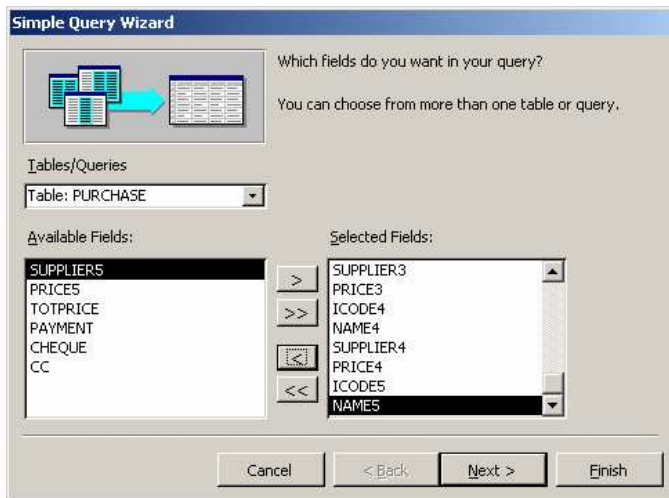
Buttons: Cancel, < Back, Next >, Finish

Here I choose the name of the form and also to open the form in design mode so I can modify the form's design. The following pages are displays of all the forms I have created:

In the DESIGN section I mentioned that I would add some 'codes' to some fields. This was done using the CODEBUILDER. CODEBUILDER allows Microsoft Visual Basic coding to be integrated into the MS Access database. This is how I did it:

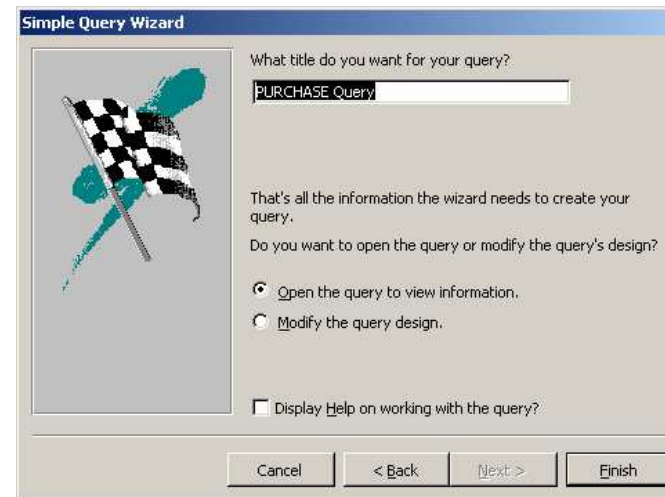
QUERIES

As mentioned before, I am creating queries so that data can be filtered. I had created the queries in wizard mode and then edited the criteria in design mode. These are the steps that were involved in wizard mode:



In this window I can choose the fields that I wish to display in my query. The screen dump shows some fields being inserted. Another window appears after clicking next. This window only appears if there is a field with numbers as the data type. This window asks whether I want summary details or not.

Here the computer asks me what name I want for my form and whether I want to open the query or modify its design. I type in the name and click Modify the query design since I have to enter the criteria.



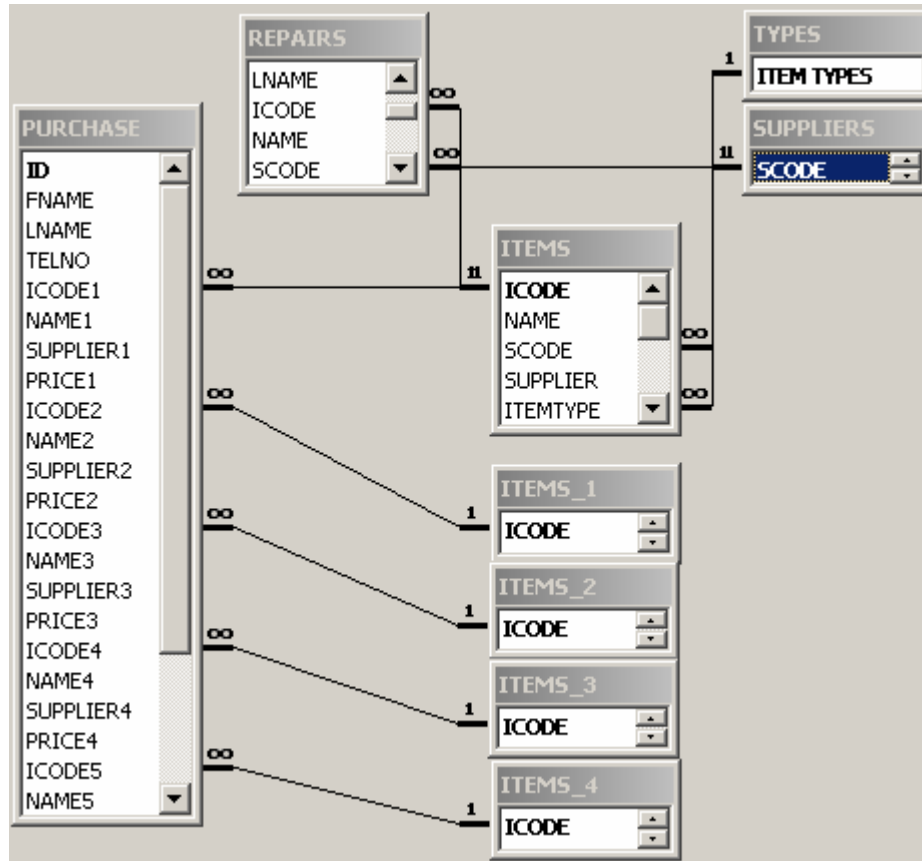
The following screen dump shows my BARRY query, which displays the repairs that Barry has to handle as shown, queries form some sort of a filter:

	ID	LNAME	ITEMTYPE	TECHNICIAN	COLLECT	COST
►	5050	Dsouza	Tv	Barry	11-05-03	Dhs. 112.00
	8805	Dantis	Desktop Theatre	Barry	01-06-03	Dhs. 290.00
	6981	Perera	Desktop Theatre	Barry	10-04-03	Dhs. 75.00

CRITERIA = Barry

RELATIONSHIPS

This is a very important feature and so I created it to increase the integrity of the data as duplicates cannot be added. The following is the display of my relationships window:

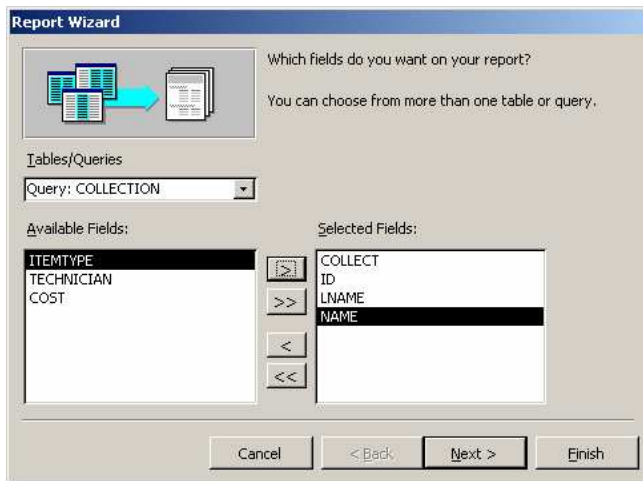


SUBFORMS

After creating relationships, I can create subforms. I create it using the wizard, just like creating normal forms, except this time I choose fields from two tables. The following is the output of my subform:

REPORTS

The reports are very vital in my system. Since I like the easy way, I made them using the wizard. These are the displays of the Report Wizard and how it can be used to create reports the quick and easy way:



Report Wizard

Which fields do you want on your report?
You can choose from more than one table or query.

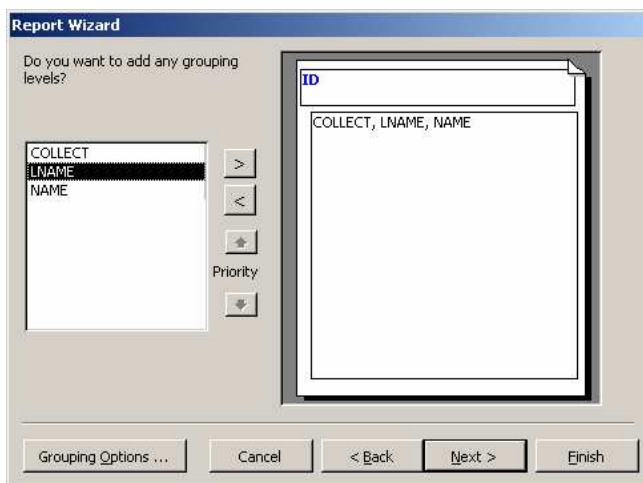
Tables/Queries
Query: COLLECTION

Available Fields:
ITEMTYPE
TECHNICIAN
COST

Selected Fields:
COLLECT
ID
LNAME
NAME

Buttons: Cancel, < Back, Next >, Finish

Here I choose the fields I want in my report.



Report Wizard

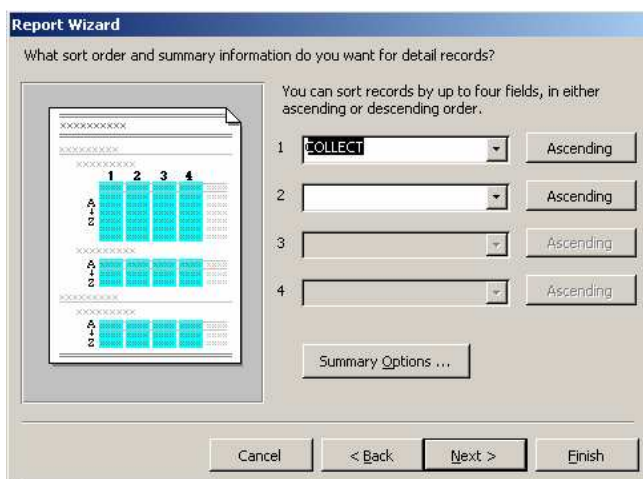
Do you want to add any grouping levels?

Available Fields:
COLLECT
LNAME
NAME

Grouping Options: ID, COLLECT, LNAME, NAME

Buttons: Grouping Options..., Cancel, < Back, Next >, Finish

Here I can choose whether I want any grouping in my report or no.



Report Wizard

What sort order and summary information do you want for detail records?
You can sort records by up to four fields, in either ascending or descending order.

Sort Order:
1. COLLECT Ascending
2. Ascending
3. Ascending
4. Ascending

Summary Options...

Buttons: Cancel, < Back, Next >, Finish


Here I choose the ascending order and whether I want any summary information or not. The next few windows display the structure and the color scheme of the report. The next few pages display the output of my reports.

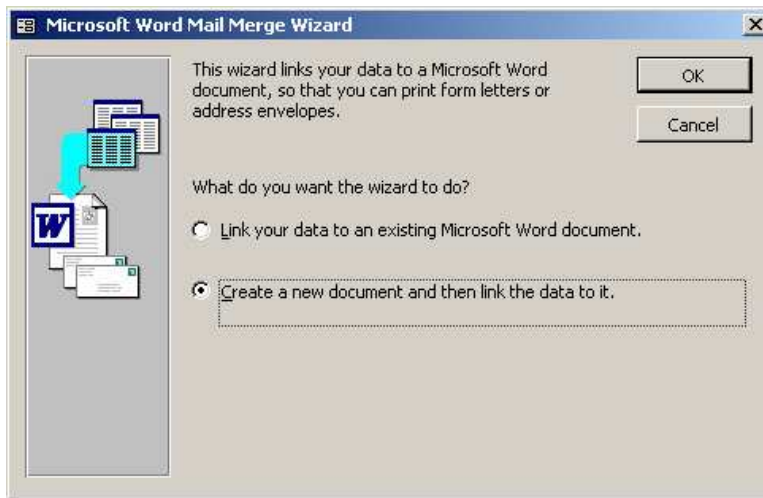
MACROS

Since switchboards do not have functions to open queries, I will need macros to open it. I created the macros in design mode as it was similar to the table design mode. Here you just choose the action which is selected from a combo box. Then you just have to change the parameters in the Action Arguments section. This is the display of the Action Arguments section:


Action Arguments	
Query Name	<100
View	Datasheet
Data Mode	Add

MAIL MERGING

I did the mail merging in a simpler way. I highlighted the MAILMERGE query and clicked  (Merge It with MS Word). This is much faster than opening MS Word and then selecting the options for merging. Then the following dialog box appears:



I choose 'Create a new document and then link the data to it'. In the company, if they have made a preset letter, they can choose the first option and choose the file that contains the letter. Then MS Word opens up and it prompts for the database password. Once this is entered Word asks for the table or query required. I choose the mail merge query

and then a new toolbar (mail merge toolbar) appears. Then I typed out the standard letter and inserted the fields from the  button. The following pages show examples of my mail merged letters:

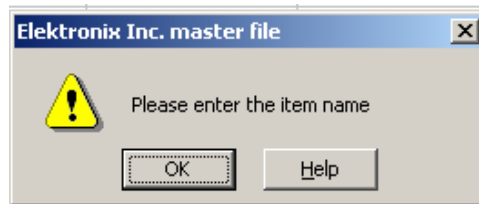
Now that I have shown basically my whole system, I will now summarize the test plan.

TESTING

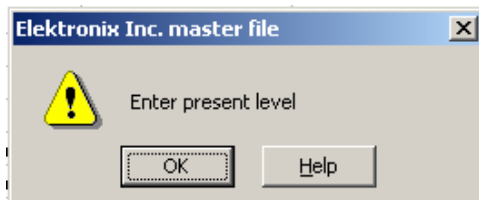
Here I will show the error messages that have been displayed when the Validation Rules have been violated. I will go table-wise to make it easier to understand what's going on:

Items

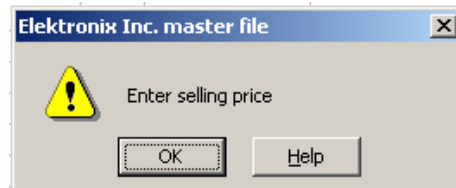
All my tables have the validation rule 'Is Not Null'. Thus I have just displayed the error messages with the conditions below:



NAME field is blank.



PRESENT field is blank.

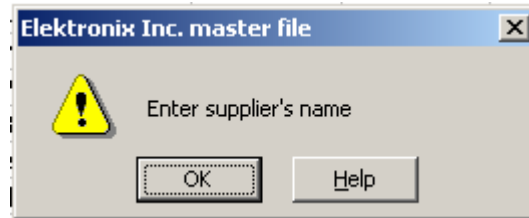


SELL PRICE field is blank.

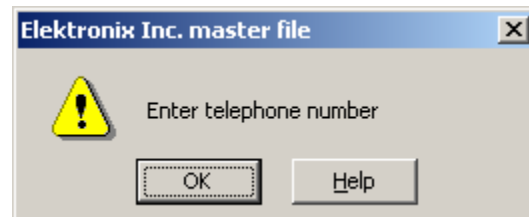


SCODE not present in SUPPLIERS table.

Suppliers

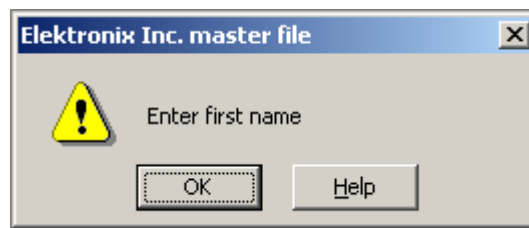


SUPPLIER field is blank.

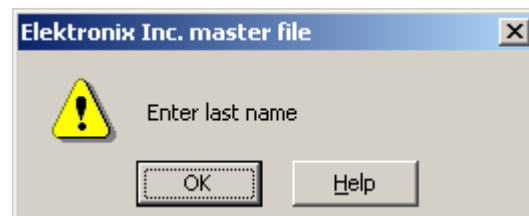


TELEPHONE field is blank.

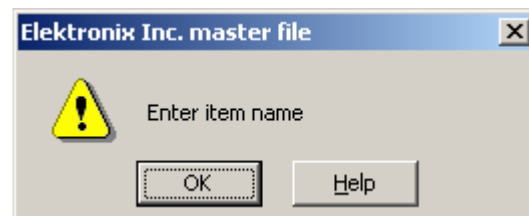
Purchase



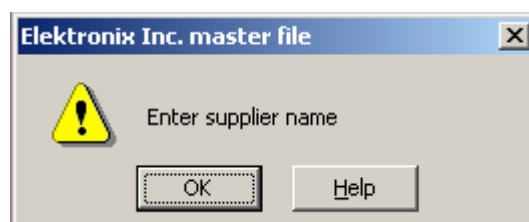
FNAME field is blank.



LNAME field is blank.

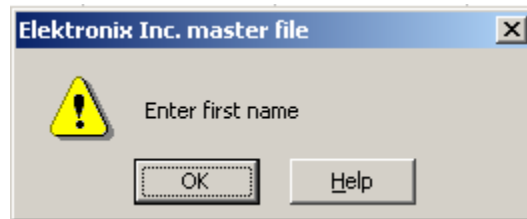


NAME1 field is blank.

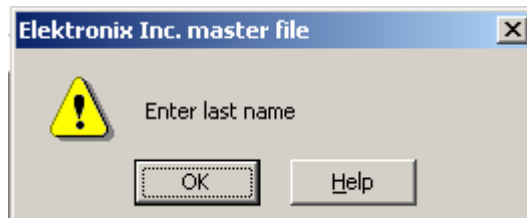


SUPPLIER1 field is blank.

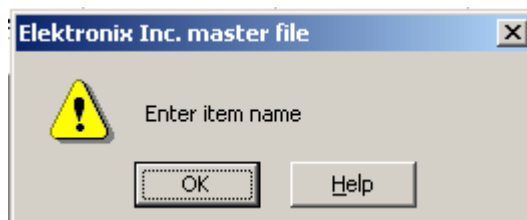
Repairs



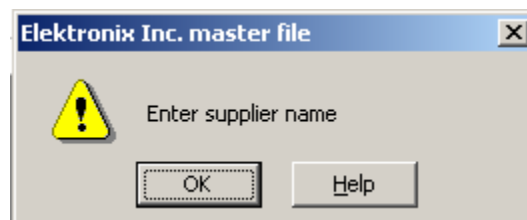
FNAME field is blank.



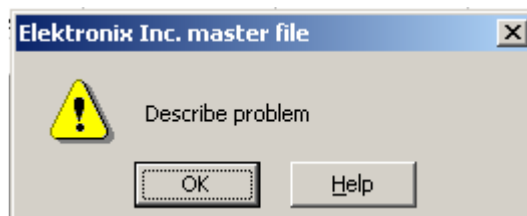
LNAME field is blank.



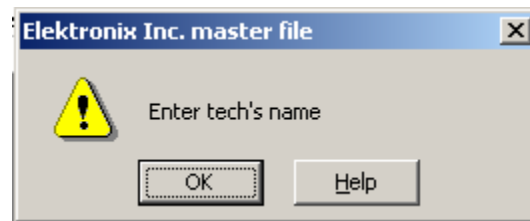
NAME field is blank.



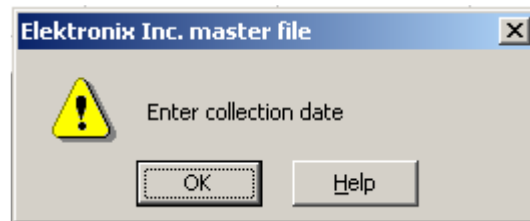
SUPPLIER field is blank.



PROBLEM field is blank.



TECHNICIAN field is left blank.



COLLECT field is blank.