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SPECIFICATION

Background on company

Welcome to Magic Herbal Products, which was founded by Sarah Lenington in 2003, who travelled across the world in search of some of the rarest herbal and organic remedies. Sarah was born in London and studied dermatology at a top university. Her passion was making others feel good about themselves so she decided to take up the opportunity to travel several countries in 1997 in the hope of finding natural ingredients instead of artificial products that are prone to cause skin deterioration and allergic reactions. Her discoveries of mineral oils and powders as well as plant extracts were tested in labs for over three years. This was a major procedure to ensure the ingredients were compatible with both skin and hair. It was important that all ingredients used in each product was natural and was not tested on animals. The ingredients were found in Indonesia, Malaysia, India and also Egypt. What makes Magic Herbal products so different to any other brand is the purity of the products as well as their campaign against testing products on animals. Furthermore the packaging of all their products is recycled to ensure they are doing their bit for the environment.

The Organic Cosmetics store is located in the centre of London with two people working in it that are in charge of customer service, stocking the products and distributing the products by postage to customers that order by mail.

Current system

The current system is a paper based system meaning that all customer details, store details, bills and employee information is all stored on paper and is filed. Once a customer wants to purchase any of the herbal products over the phone the employee will have to fill out customer details manually on a sheet containing contact details, billing information, product information and the total of items purchased. All calculations are made using a calculator, pen and paper- including a 10% discount on orders.

Problems with the current system

Having a paper based filing system of all the companies details is a major disadvantage to the company as it is generally very inconvenient to always search through hundreds of files on a daily basis just to find previous customer details. This wastes a substantial amount of time for the employees. The company very regularly offer discounts on the products which is calculated by a calculator, pen and paper however this takes time and errors are made very easily. This is due to several reasons handwriting can be unclear, it can be difficult to understand all customers of the phone and also totals have to be calculated manually. Another major disadvantage is the fact that receipts are not given to customers as proof of their purchase in case they need it in the future. It also portrays an unprofessional image of the business to customers as they have to wait impatiently while the employee has fills out all their details and also wait whilst the employee is calculating the total of items purchased. Furthermore, the confidentiality of customer information is not secure as anyone has

access to the files as they are not in a secure place meaning that customer information can be accessed by unauthorised people.

The solution

In order to overcome these fundamental problems I will create a user interface. The system will enable the user to choose one of the following options buy products, go to previous customers, see stock levels and edit customer details. If a customer wants to buy something then the user will enter the product via a catalogue and all the details of the product should appear on the screen. Once this is complete the final price will be displayed after a 10% discount of total. Therefore this will be calculated without the user physically viewing the formulas of how the total is calculated. This will ensure that all the calculations are correct which will ultimately increase customer service. This means that no one will have to work out the value themselves ensuring the correctness of the calculations. Another benefit is all the data is safe and secure as only authorised people will have access to customer information due to passwords. The solution will be easy and quick to use as the business may need to deal with several customers on a particular day, therefore if the system is quick it means that they are not loosing customers. The solution should be professional as it is a representation of the business. I will create a system where the employee will fill out details of the client whilst on the phone to them.

Input	Processing	Output
Title	Drop down list	Mr, Mrs, Ms, Miss, Dr
Forename	Text box-validation check	Forename
Surname	Text box-validation check	Surname
Address 1	Text box-validation check	House number Street name
Address 2	Text box-validation check	Town, County
Postcode	Text box – with validation check	Postcode
Contact number	Text box – with validation check – digit check	Contact number – either home number or mobile number
Email Address	Text box-no validation check	Email address
Invoice date	Text box – validation check – digit check	dd/mm/yyyy
Hair Products:		
Shampoo	Drop down menu of available shampoo will be selected by user.	Organic Shampoo Mint Shampoo Tropical Shampoo
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Conditioner	Drop down menu of available conditioner will be selected by user.	Organic Conditioner Mint Conditioner Tropical Conditioner
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Serum	Drop down menu of available serum will be selected by user.	Make it Straight Serum Curly Wurly Serum Silk Smooth Serum
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Hair Spray	Drop down menu of available hairspray will be selected by user.	Strong Hold hair spray Easy Styling hairspray Control and remould hairspray
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Skin Products		
Cream	Drop down menu of available Cream will be selected by user.	Herbal Anti Wrinkle cream Extra moisture cream Non greasy mint cream
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Lip Balm	Drop down menu of available Lip Balm will be	Fruit Lip Balm Organic lip balm

	selected by user.	Max Moisture lip balm
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Cleanser	Drop down menu of available cleanser will be selected by user.	Makeup removal cleanser Dry Skin cleanser Light non greasy clenser
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice
Oil	Drop down menu of available oil will be selected by user.	Jasmine Oil Shea butter oil Wheat germ oil
Quantity	Desired number of product wished to be purchased.	Number will show up on invoice

User Requirements

- 10% discount on products are automatically calculated once the total is made.
- All calculations need to be accurate and correct
- Invoices need to be produced quickly
- Needs to store previous transactions
- All validation checks must work

-length check and format check

- Should be able to edit information
- Should be able to add information
- Should be able to delete information
- Data should be able to be accessed again once saved by user
- The system should be able to provide the user with accurate stock levels.
- Invoice should be printed on a sheet of A4 paper after details have been submitted.
- This solution must look professional and organised
- The solution needs to be able to store customers details in order of customer number
- To be easy to user and user friendly
- New customer details should automatically be transferred to the customer details spread sheet.

Testing Strategy

Now I will go over my user requirements and explain how I will test them. It is important that they are tested because the user requirements determine whether the system is suitable for its purpose.

10% discount on products are automatically calculated once the total is made.
This will be checked by placing an order of various products and then checking what the cost is before and after the discount. This is a fundamental test because the old paper based method caused several errors as it was worked out manually also it is essential that this test works and is accurate.

All calculations need to be accurate and correct
This will be tested by placing another order and checking if the total is as it should be. The prices of each product have to be correct, the quantity of items purchased has to be correct and also 10% discount.

Needs to store all transactions
This will be checked via the customer details spreadsheet. An order will be placed and all the information from it such as customer details to items purchased will be checked after to see if these details saved.

Should be able to edit information
It will be tested whether the prices of some products can be changed. This will be done by attempting to change prices of products on the catalogue spreadsheet. This will be tested as information such as prices will not remain the same all the time therefore it will be tested whether this system can cater to a busy company.

Should be able to add information
This will be tested by filling in the registration form. If customer details can be added then it has fulfilled the requirement.

Should be able to delete information
This will be tested by deleting a customer in the customer details spreadsheet.

Data should be able to be accessed again once saved by user
The system will be closed down and then opened to see whether the data can be retrieved again.

The system should be able to provide the user with accurate stock levels.
Make and order and check if the amount purchased has been deduced from the amount in stock originally.

Invoice should be printed on a sheet of A4 paper after details have been submitted.
This will require making an order and then printing the invoice to check if has the correct details and if it fits on a page of A4.

This solution must look professional and o rganised
After someone with no knowledge of the system has used the system, I will take their feedback on appearance and attributes as a test.

The solution needs to be able to store customers details in order of customer number
Add a new customer via registration form and check customer details spreadsheet if they have been assigned a customer number furthermore to check if it is in the correct numeric order.

To be easy to user and user friendly
After someone with no knowledge of the system has used the system, I will take their feedback on appearance, attributes and professionalism as a test.

New customer details should automatically be transferred to the customer details spread sheet.
This will be tested by registering a new customer and then checking the spreadsheet to see if the details have also transferred there.

Test plan

Below is a table of factors in my system that I will test once the system is complete. This will show whether my system is fit for its purpose and matches what it is aimed to do. Once the system has been made the tests will run.

Test number	Purpose	Test data used	Expected outcome
1	Check if 'products-stock button works'	Click on the button 'Products-stock'	Once this is clicked it should be taken to the stock user form where they can search quantities available of for a product
2	Check if 'back to main menu' button works.	Click on the 'back to main menu' button.	Should be re-directed back to the home page.
3	Check if 'Go shopping button' works	Press the 'Go shopping' button	The user form should go to the 'buy products' section.
4	Check if combo buttons work-title	Press on the drop down list asking for a title.	Option of titles should be displayed i.e. user chooses 'Miss, Mr, Mrs, Dr'
5	Check if combo button works-catalogue number	Press on the drop down list for catalogue number.	Various catalogue numbers should appear. 3 catalouge number per group of product. E.g. 3 different shampoos, 3 different

			conditioners. All should have unique catalogue number.
6	Check if 'exit' buttons work.	Click on exit button	User forms should disable.
7	Make sure that all necessary information transfers on to the invoice	Make an order purchasing products.	All product details should transfer on to the invoice. Printed invoice should display correct details
8	When a new customer is registered check if they are automatically transferred to customer details spreadsheet.	Add a new customer and check the 'customer details' spread sheet to see if it has been copied there.	All details filled out should automatically transfer to this customer details spread sheet.
9	When a new customer is registered ensure that they have a unique customer number.	Create a new customer	The customer will have a unique customer number.
10	Ensure that 10% discount is deduced from end total.	Buy products.	10% deduced from the total of purchased items
11	Ensure VLOOKUP works correctly for product name on 'buy	Make an order by selecting a catalogue number.	The name of product from the selected catalogue number should appear.

	products' user form and invoice.		
12	Ensure VLOOKUP works correctly for stock.	Go to stock and using the combo box select a product number.	The name of the product and the and the quantity available should show up

IMPLEMENTATION

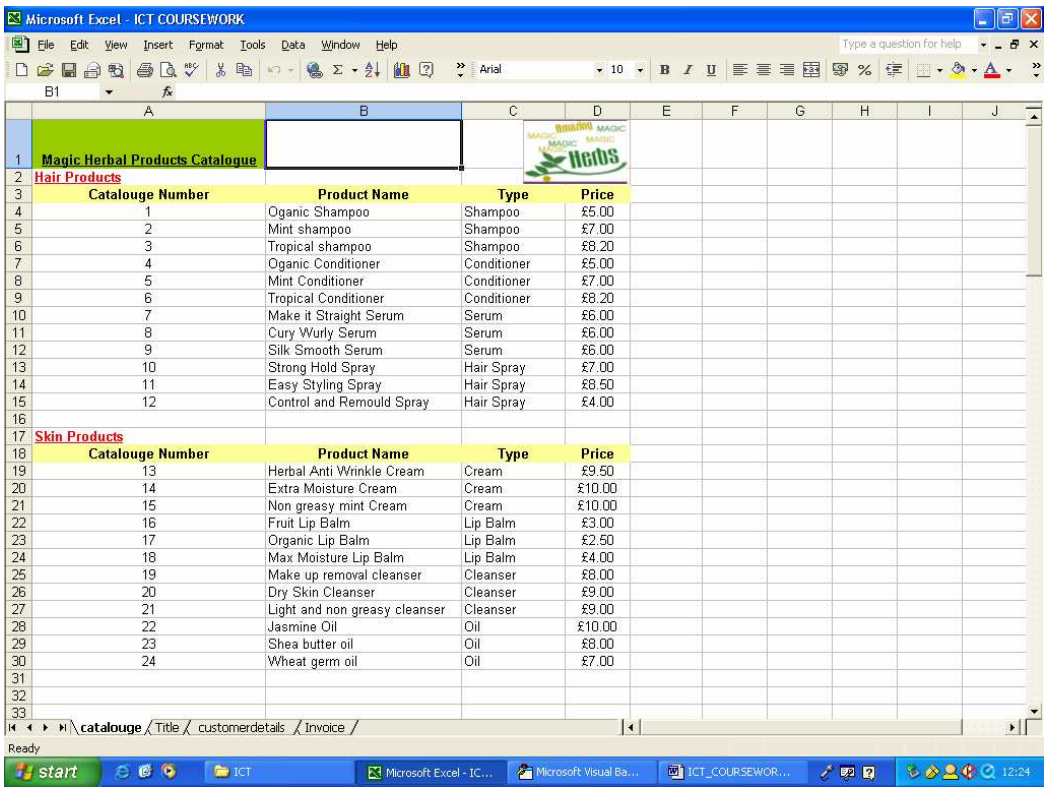
Implementation

The software package I used in creating my project was Microsoft Excel. I was able to create the spreadsheets and the user forms on Visual Basic Editor with this software package. As mentioned earlier the major flaw with the previous paper based system was that it was time consuming and had a negative portrayal of the company due to the lack of professionalism. Also many of the calculations were incorrect and took too long to work out.

However, when designing the system the main obligation was to keep the system simple and easy to use. Ultimately if it is simple and easy to use, then it wont take long to work out how to use it. The calculations are done behind the user form with the use of formulas which inhibits the likelihood of error. This overcomes all the negative attributes of the old system such as time consuming and lack of professionalism.

Catalogue Of Products

The spreadsheet below is my catalogue of my products. This displays the catalogue number, product name, type and the price of each product. This gives the user all the relevant information of products on one page.



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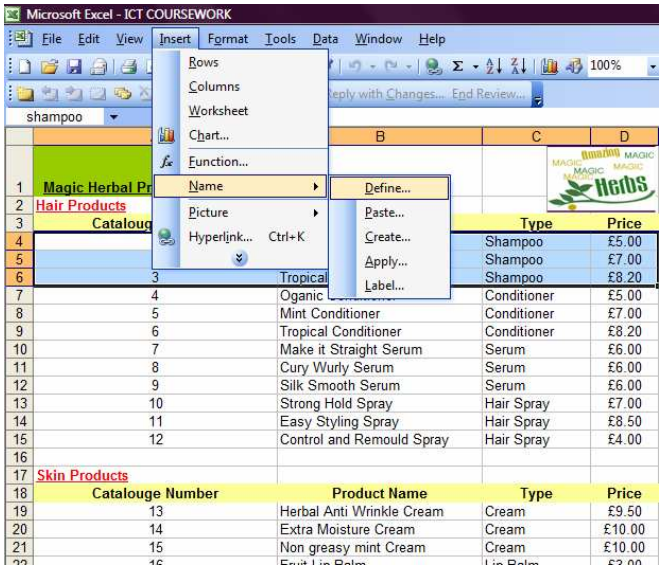
A6 1

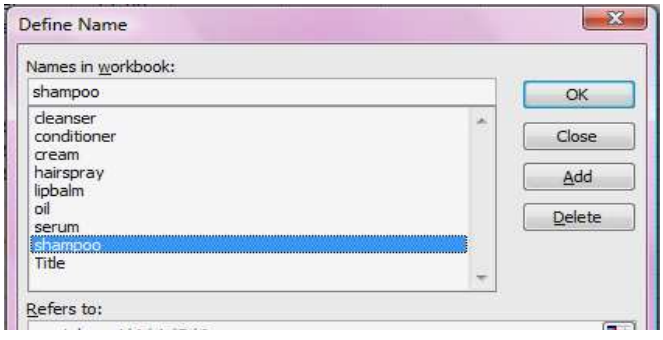
	A	B	C	D	E
1	STOCK LIST				
2					
3					
4	Hair Products				
5	Catalouge Number	Product Name	Type	In Stock	
6	1	Oganic Shampoo	Shampoo	30	
7	2	Mint shampoo	Shampoo	20	
8	3	Tropical shampoo	Shampoo	30	
9	4	Oganic Conditioner	Conditioner	40	
10	5	Mint Conditioner	Conditioner	35	
11	6	Tropical Conditioner	Conditioner	30	
12	7	Make it Straight Serum	Serum	40	
13	8	Cury Wurly Serum	Serum	40	
14	9	Silk Smooth Serum	Serum	40	
15	10	Strong Hold Spray	Hair Spray	30	
16	11	Easy Styling Spray	Hair Spray	35	
17	12	Control and Remould Spray	Hair Spray	25	
18					
19	Skin Products				
20	Catalouge Number	Product Name	Type		
21	13	Herbal Anti Wrinkle Cream	Cream	20	
22	14	Extra Moisture Cream	Cream	60	
23	15	Non greasy mint Cream	Cream	40	
24	16	Fruit Lip Balm	Lip Balm	35	
25	17	Organic Lip Balm	Lip Balm	70	
26	18	Max Moisture Lip Balm	Lip Balm	100	
27	19	Make up removal cleanser	Cleanser	68	
28	20	Dry Skin Cleanser	Cleanser	95	
29	21	Light and non greasy cleanser	Cleanser	20	
30	22	Jasmine Oil	Oil	30	
31	23	Shea butter oil	Oil	25	
32	24	Wheat germ oil	Oil	40	
33					
34					

I defined each product in different categories such as shampoo, conditioner, serum etc. Therefore when doing my vlookup on the invoice, the system will look up information on the defined categories for example the price.

In order to define each product you must highlight the relevant product you desire to define, in this case I want to define the shampoo so I have highlighted all shampoo products.



Once the desired products are highlighted the user clicks on the 'Insert' tab and scrolls down to the 'Name' tab and should click the 'Define' tab. After this a dialogue should appear.

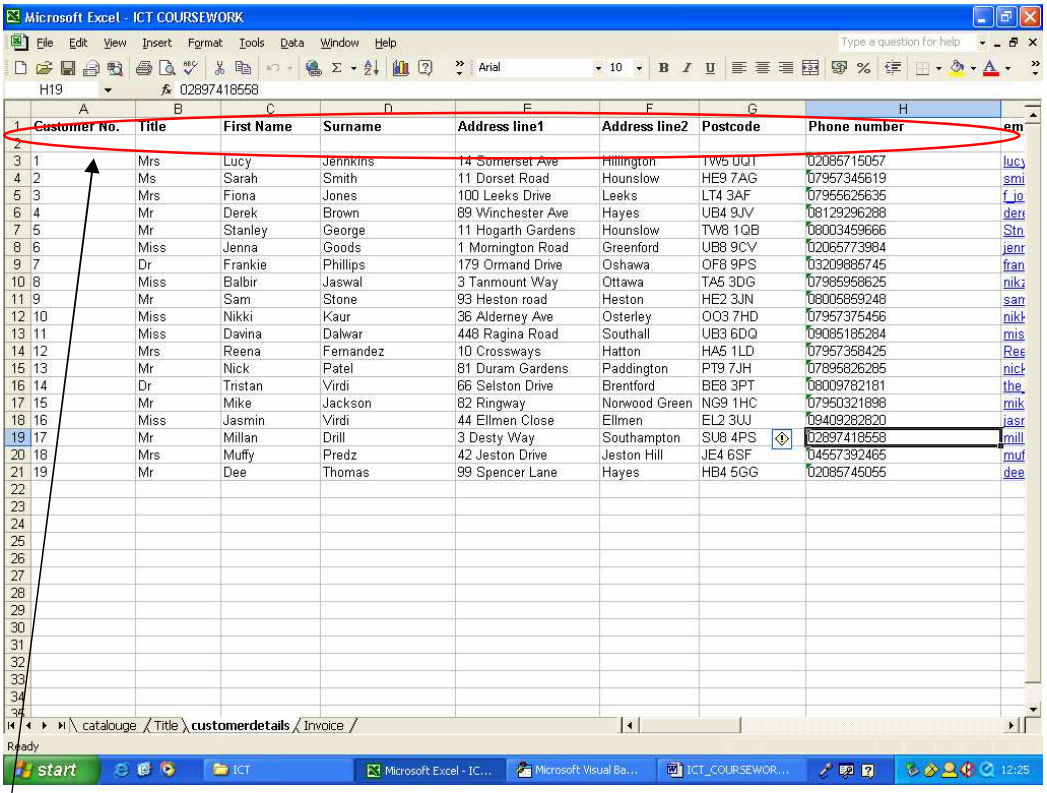


Then the name of what you would like to define has to be keyed in, once this is complete press the OK button. Evidently only one type of product has been defined here i.e. shampoo. However, the

same process must be repeated for all products.

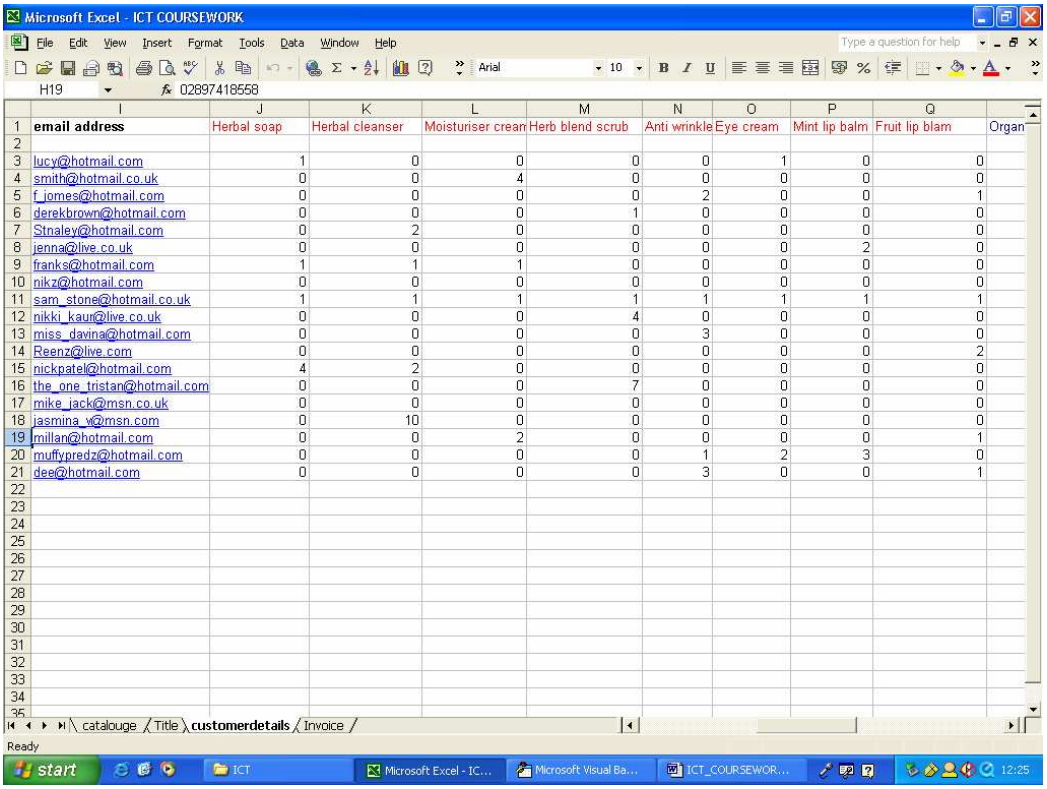
Customer Details Database

Below is the spread sheet in which the customer details will be saved in. This is important as it has all the customer information stored on it. Every time a new customer registers their details will automatically transfer onto this spread sheet via a macro. The macro inserts another row and provides a unique customer number for that customer.



Customer No.	Title	First Name	Surname	Address line1	Address line2	Postcode	Phone number	em
1	Mrs	Lucy	Jennkins	14 Somerset Ave	Hillington	TW5 0QT	02085715057	luc
2	Ms	Sarah	Smith	11 Dorset Road	Hounslow	HE9 7AG	07957345619	smi
3	Mrs	Fiona	Jones	100 Leeks Drive	Leeks	LT4 3AF	07955625635	f_jo
4	Mr	Derek	Brown	89 Winchester Ave	Hayes	UB4 9JV	08129296288	der
5	Mr	Stanley	George	11 Hogarth Gardens	Hounslow	TW8 1QB	08003459666	Stn
6	Miss	Jenna	Goods	1 Mornington Road	Greenford	UB8 9CV	02065773984	jenr
7	Dr	Frankie	Phillips	179 Ormand Drive	Oshawa	OF8 9PS	03209885745	fran
8	Miss	Balbir	Jaswal	3 Tanmount Way	Ottawa	TA5 3DG	07985958625	nik
9	Mr	Sam	Stone	93 Heston road	Heston	HE2 3JN	08005859248	sam
10	Miss	Nikki	Kaur	36 Alderney Ave	Osterley	OO3 7HD	07957375456	nikk
11	Miss	Davina	Dalwar	448 Ragina Road	Southall	UB3 6DQ	09085185284	mis
12	Mrs	Reena	Fernandez	10 Crossways	Hatton	HA5 1LD	07957358425	Ree
13	Mr	Nick	Patel	81 Duram Gardens	Paddington	PT9 7JH	07895826285	nick
14	Dr	Tristan	Virdi	66 Selston Drive	Brentford	BE8 3PT	08009782181	the
15	Mr	Mike	Jackson	82 Ringway	Norwood Green	NG9 1HC	07950321898	mik
16	Miss	Jasmin	Virdi	44 Ellmen Close	Ellmen	EL2 3UJ	09409282820	jasr
17	Mr	Millan	Drill	3 Desty Way	Southampton	SU8 4PS	02897418558	mill
18	Mrs	Muffy	Predz	42 Jeston Drive	Jeston Hill	JE4 6SF	04557392465	muf
19	Mr	Dee	Thomas	99 Spencer Lane	Hayes	HB4 5GG	02085746055	dee

When a new customer joins a new row is made and all their details transfer there. This happens at the same time the end user is registering them which means they don't have to input the data twice. This is extremely beneficial as it saves time which is what the business wants.



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	I	J	K	L	M	N	O	P	Q	
1	email address	Herbal soap	Herbal cleanser	Moisturiser crean	Herb blend scrub	Anti wrinkle	Eye cream	Mint lip balm	Fruit lip blam	Organ
2										
3	lucy@hotmail.com	1	0	0	0	0	1	0	0	
4	smith@hotmail.co.uk	0	0	4	0	0	0	0	0	
5	f_jomes@hotmail.com	0	0	0	0	2	0	0	1	
6	derekbrown@hotmail.com	0	0	0	1	0	0	0	0	
7	Stnaley@hotmail.com	0	2	0	0	0	0	0	0	
8	jenna@live.co.uk	0	0	0	0	0	0	2	0	
9	franks@hotmail.com	1	1	1	0	0	0	0	0	
10	nikz@hotmail.com	0	0	0	0	0	0	0	0	
11	sam_stone@hotmail.co.uk	1	1	1	1	1	1	1	1	
12	nikki_kaur@live.co.uk	0	0	0	4	0	0	0	0	
13	miss_davina@hotmail.com	0	0	0	0	3	0	0	0	
14	Reenz@live.com	0	0	0	0	0	0	0	2	
15	nickpatel@hotmail.com	4	2	0	0	0	0	0	0	
16	the_one_tristan@hotmail.com	0	0	0	7	0	0	0	0	
17	mike_jack@msn.co.uk	0	0	0	0	0	0	0	0	
18	jasmina_v@msn.com	0	10	0	0	0	0	0	0	
19	millan@hotmail.com	0	0	2	0	0	0	0	1	
20	muffypredz@hotmail.com	0	0	0	0	1	2	3	0	
21	dee@hotmail.com	0	0	0	0	3	0	0	1	

catalouge Title customerdetails Invoice

Ready

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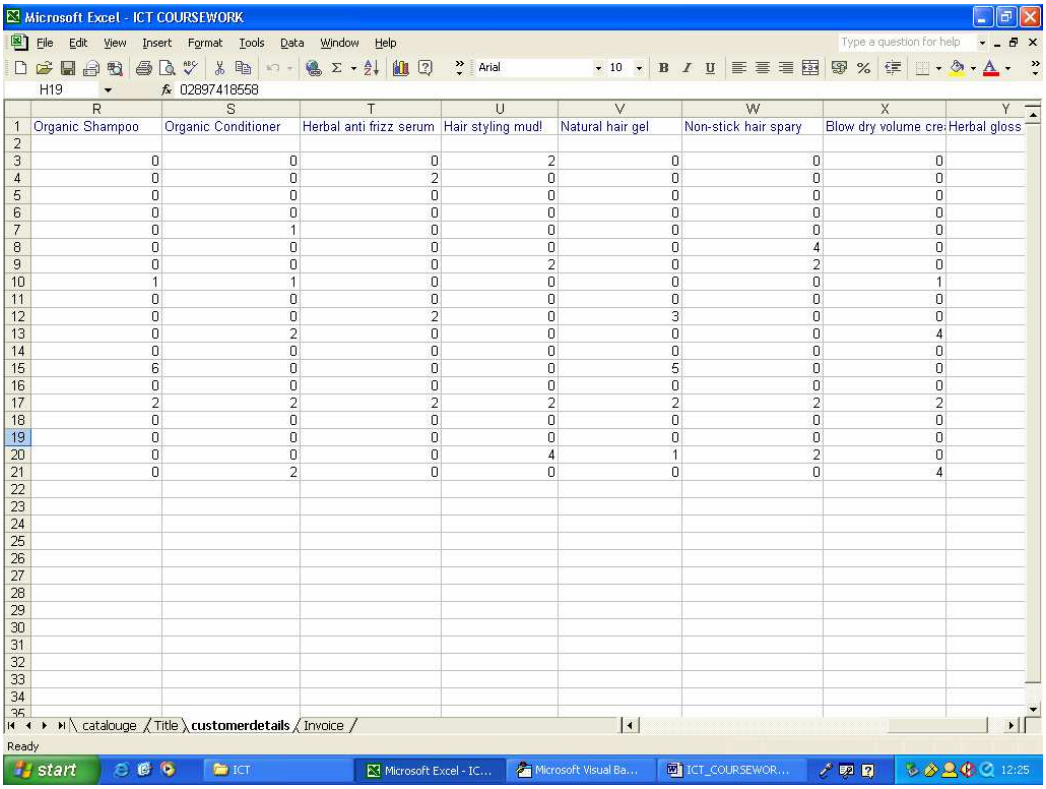

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File Edit View Insert Format Tools Data Window Help

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	R	S	T	U	V	W	X	Y
1	Organic Shampoo	Organic Conditioner	Herbal anti frizz serum	Hair styling mud!	Natural hair gel	Non-stick hair spary	Blow dry volume cre	Herbal gloss
2								
3	0	0	0	2	0	0	0	
4	0	0	2	0	0	0	0	
5	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	
7	0	1	0	0	0	0	0	
8	0	0	0	0	0	4	0	
9	0	0	0	2	0	2	0	
10	1	1	0	0	0	0	1	
11	0	0	0	0	0	0	0	
12	0	0	2	0	3	0	0	
13	0	2	0	0	0	0	4	
14	0	0	0	0	0	0	0	
15	6	0	0	0	5	0	0	
16	0	0	0	0	0	0	0	
17	2	2	2	2	2	2	2	
18	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	
20	0	0	0	4	1	2	0	
21	0	2	0	0	0	0	4	

catalouge Title customerdetails Invoice

Ready

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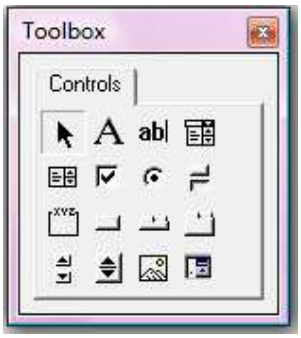
Above is a record of what has been purchased from these customers for future references. So if the user is talking to a customer about their order he can see what was and was not purchased

Creating User Forms

In the making of these user forms I will be referring to the text box frequently therefore its important to no exactly what each icon in the textbox actually controls.



This icon should be pressed when inserting a label. For example I have used this in my user form when labelling products and heading of the uses form.

In order to create a text box this should be selected.

This icon indicates a combo box this is associated with a drop down list.

This is a list box

The check box can be used next to products in a way that shows what items are to be purchased.

In the same way the check box is used, this option button can be used.

Toggle button

This is a frame icon.

This is the command button and is used frequently in my user forms. I used this for exit buttons, next buttons and also back buttons.

Scroll bar

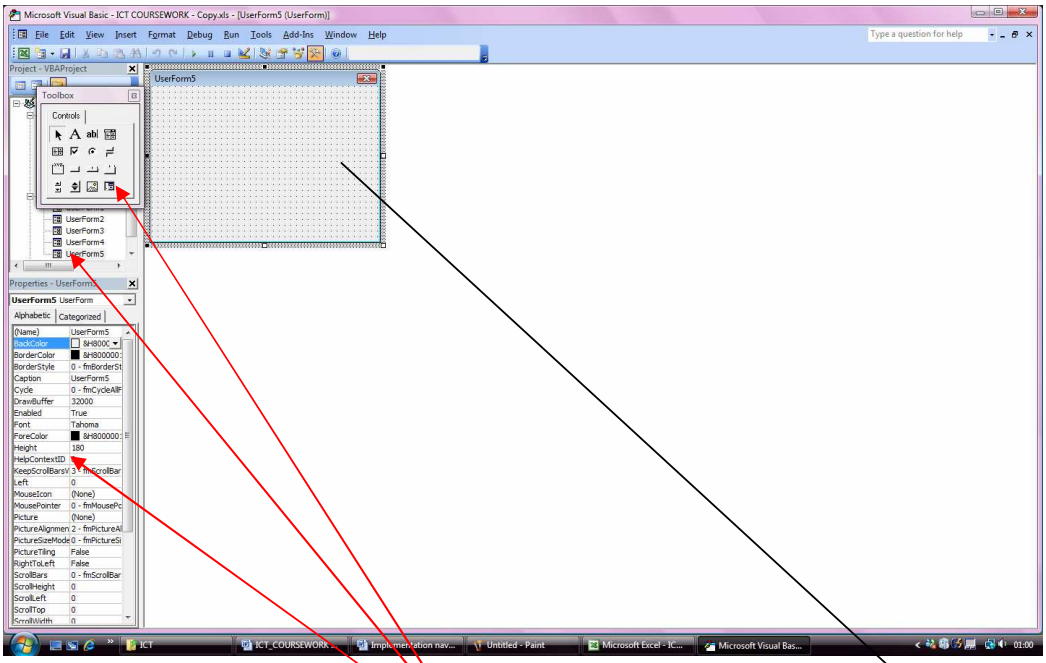
Spin button

This button is pressed when a image is to be browsed on the user form.

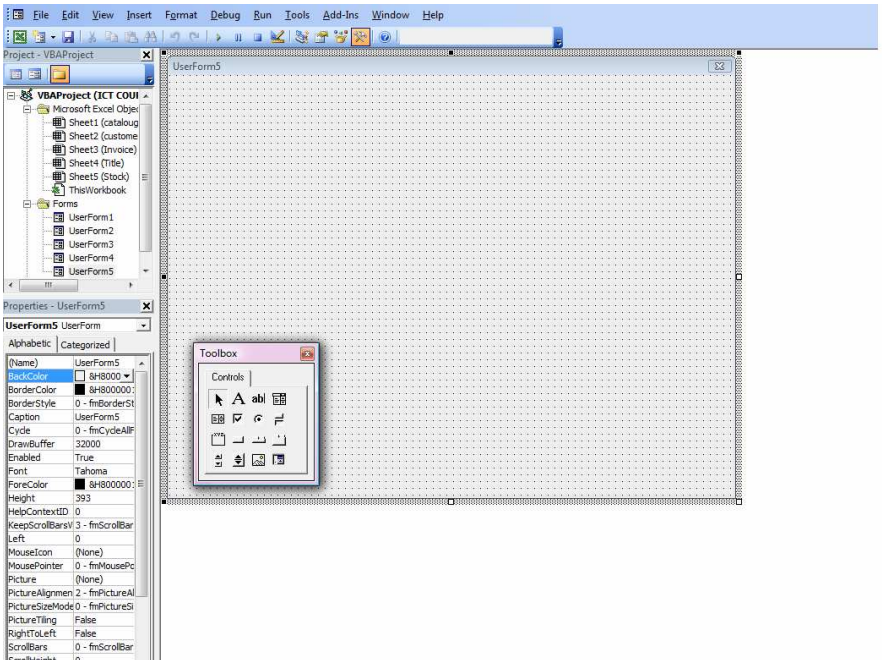
Red/edit

User form 1

This section is the main body of my project as it is what the new system is made up of. This will have to be done Visual Basic Editor which can be accessed from Microsoft Excel, Tools tab, Macro tab and then to the Visual Basic Editor option.

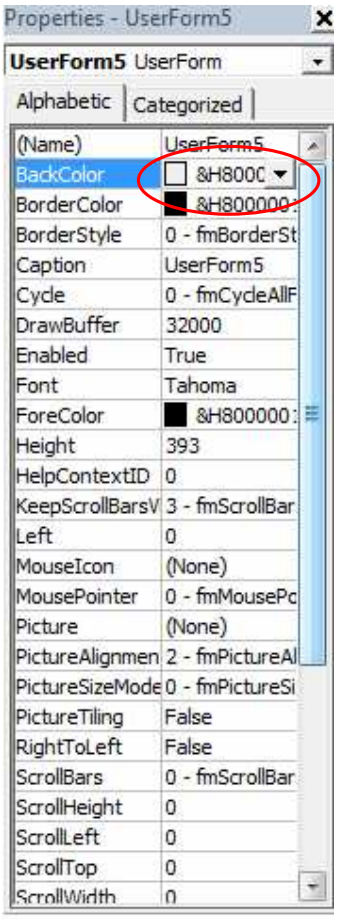


Above is an example of a user form before any work has been done to it. This box can be resized accordingly by dragging. There are a number of features surrounding the user form such as the tool box and relevant boxes that show the user forms properties etc.

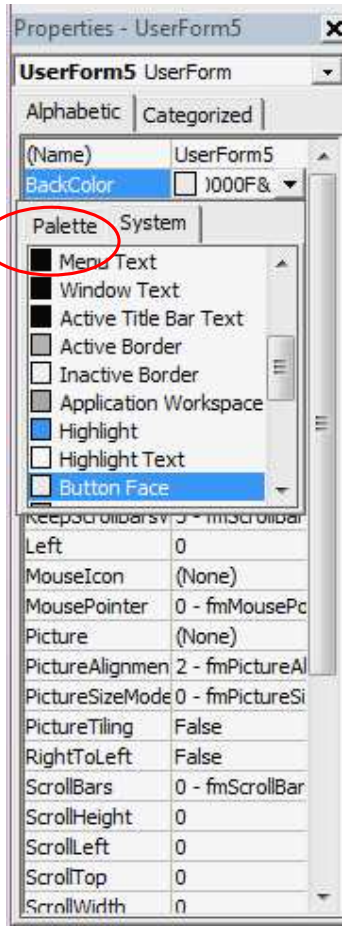


Here is an example of a user form resized and ready for designing. I will change the colour of the background as a starting point.

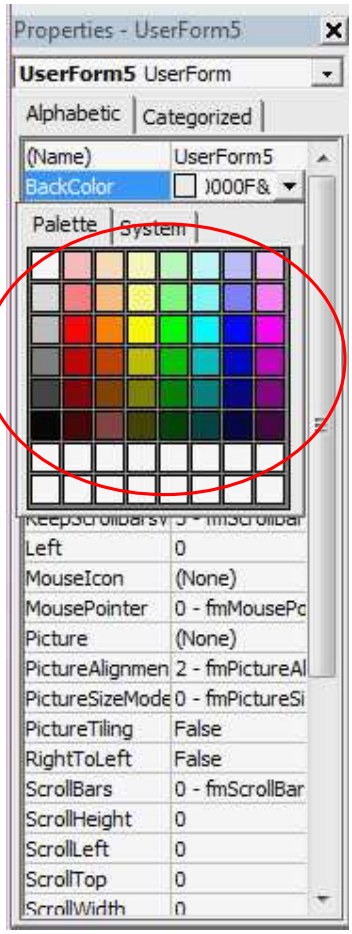
1



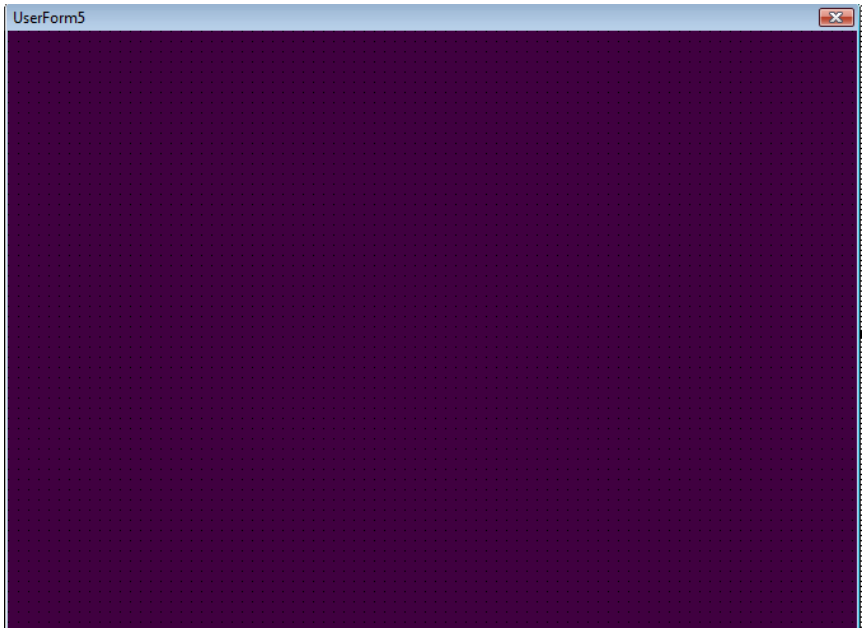
2



3

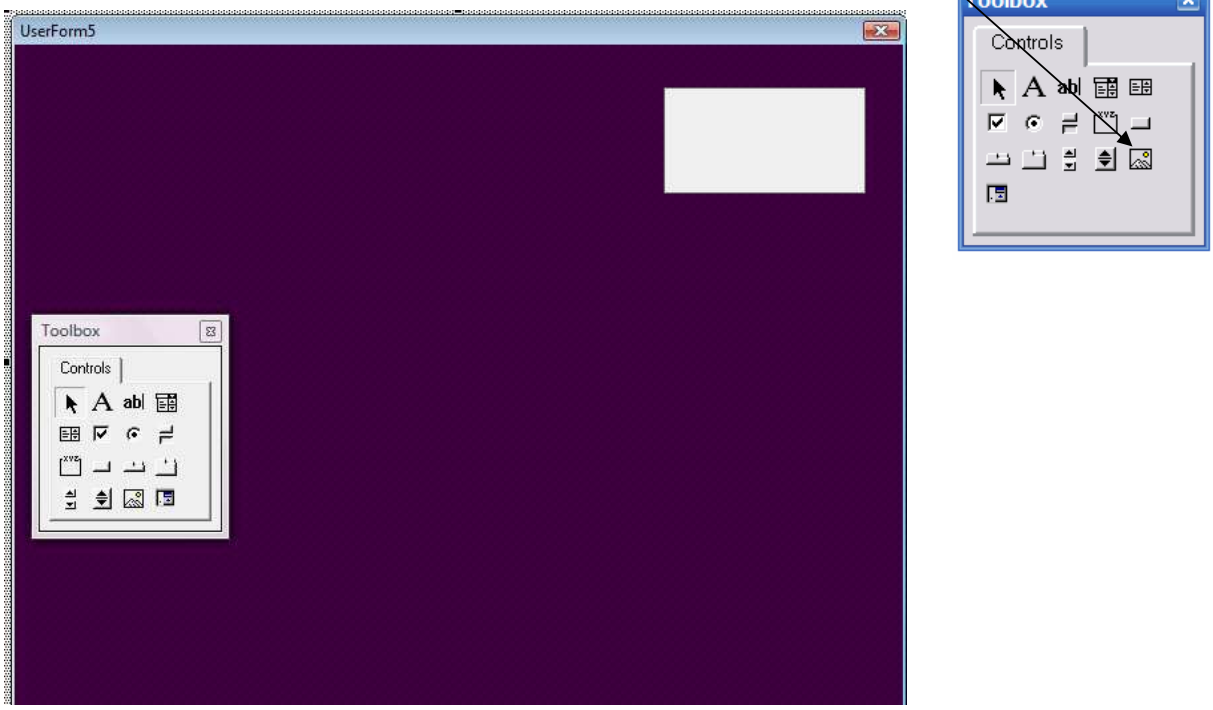


The print screens above demonstrate how to change the background colour of your user form. The red rings indicated which tabs or buttons should be pressed and at what stage. Stage 1 shows how you should go to the list and click the drop down menu button next to the heading 'BackColour'. Stage 2 then shows what the result of selecting 'BackColour' will be. The red ring is circled on the tab 'Palette' therefore pressing this will show the colour palette. Stage 3 shows the palette and you can choose from the range of colour provided.

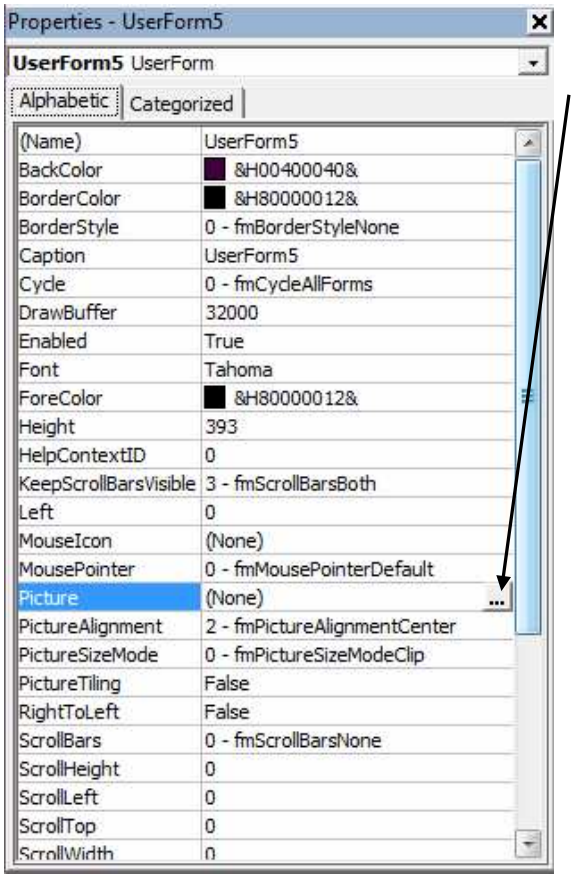


The choice of colour for my user form is a dark purple. I experimented with other colours but some were too bright and could be distracting and painful on the eye to the user. So I decided that dark purple was a unisex

colour and was not too bright or too dull.
Not only do I want to browse a picture but I also want to browse a logo for this user form. Therefore I must go to the toolbox and click on the photo icon.

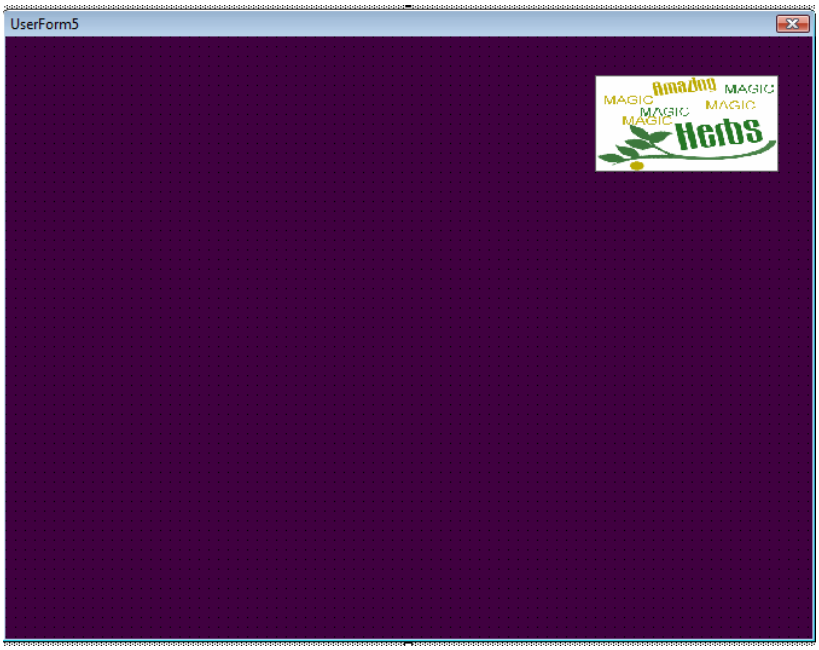


Once this icon has been selected a box appears and can be resized and rearranged in places you want it to be. My logo is going to be on the right hand side for each user form. To upload this picture on to the user form we must go back to the properties tool box of the user form (the same box that we went to when changing the back ground colour) .



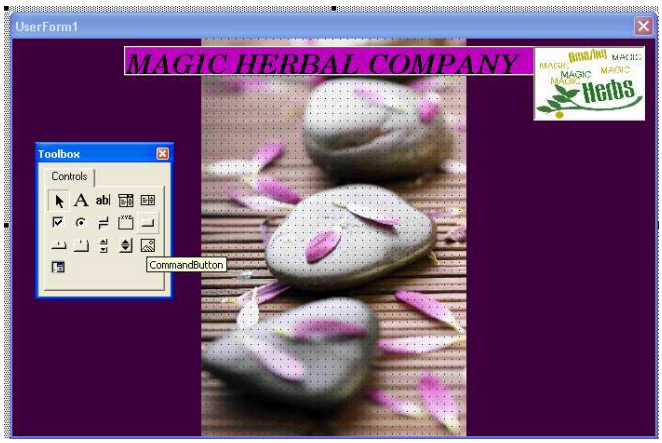
Click on the button with the three dots next to the 'picture' header. This will open up a dialogue where you will select the file you would like to upload. This will require knowing where you saved it.

I will upload the file 'logo' by double clicking on it or selecting the file and pressing 'Open'.



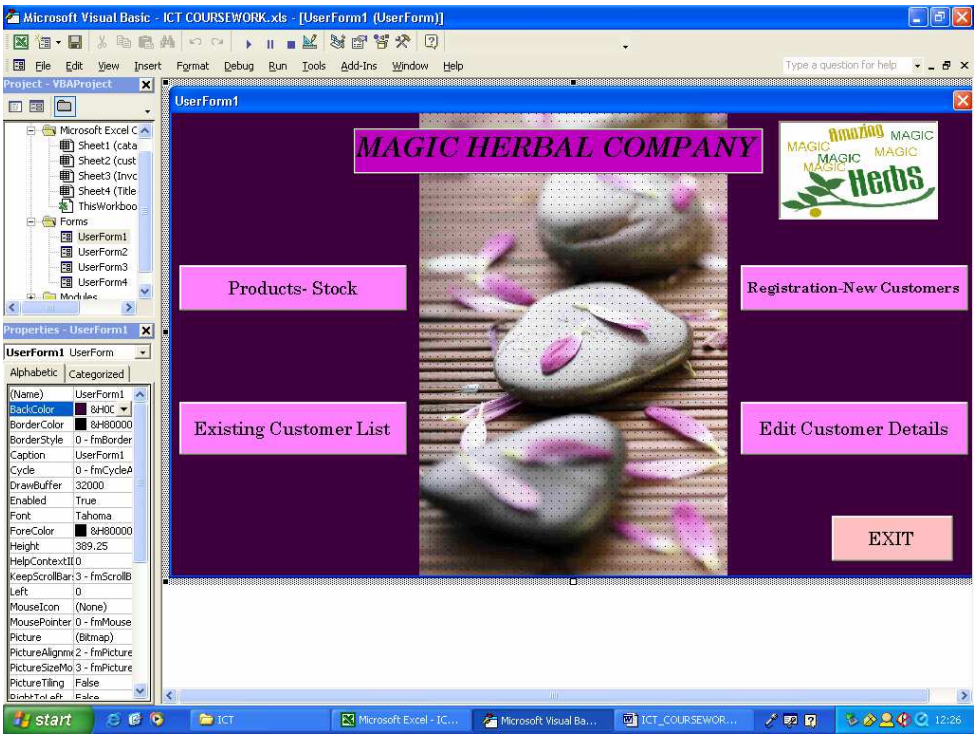
The file I uploaded now appears in the box that I sized and allocated. The next image that I want to use will be imported in the exact same way as just indicated.

Now I want to add a command button on to the user form which enables you to redirect to other user forms. This involves going to the toolbox and clicking on the command button icon.



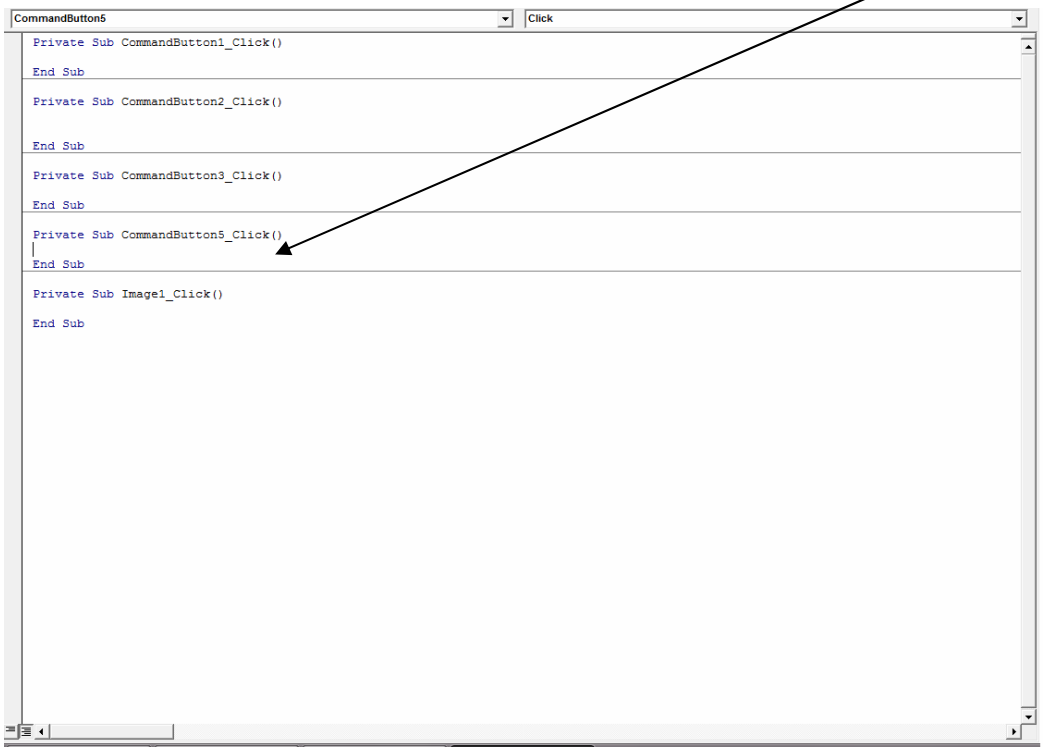
After clicking this icon then a text box will occur on the user form which then can be resized and a name of the button can be keyed in.

The vision I had for my menu page was for it to be simple yet appealing to look at and importantly have relevance to the company. Important factors that had to be considered whilst making the menu page was the fact that logo were made to be consistent as is it a representation of the company. Also the significance of the arrangement of buttons around the picture was so the user form does not become cluttered. Each of the buttons are linked to other relevant user forms. Below is the end result of my first user form, where designing is concerned. As you can see all the buttons have been added and formatted accordingly.

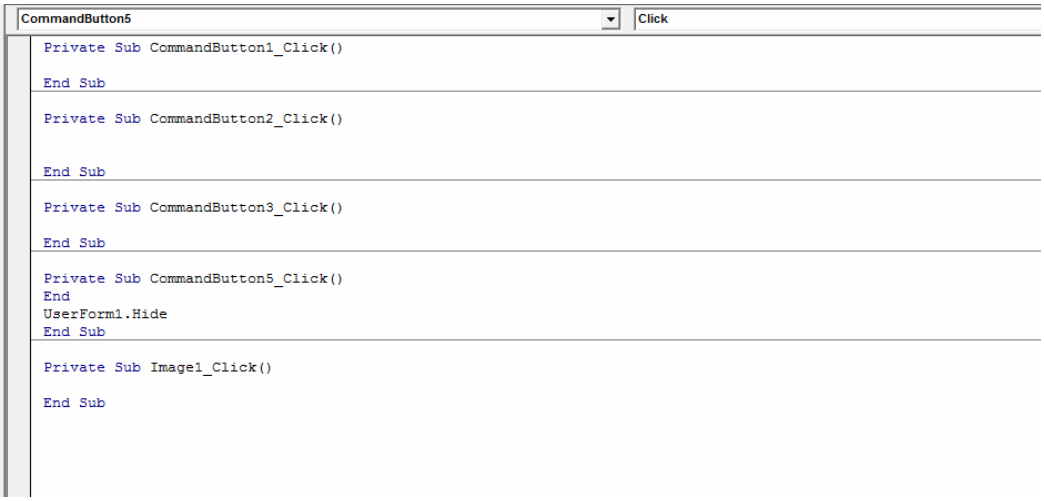


As I have not made any other user forms at this stage I cannot link the buttons with anything. The only button I can link at the moment is the 'exit' button. I will had to double click the command button i.e. the exit button. A dialogue will appear on the

screen. This is what links each user form together via the command buttons. The exit button is command button 5 therefore I will fill in the relevant caption there.



The caption entered will be 'Hide' then press the enter button and type 'UserForm1.Hide'.



The end result of this first user form is ideal for the business as it simple yet provides all the necessary features required on the first form. Additionally the use of simple colours and images adds to the professionalism.

User form 2

The next user form that I am going to make is the customer details page. The form was designed in a simple yet efficient way, so the page was not too cluttered yet had all the necessary information on a single user form. There is a drop down that I used for the title of a customer. This is to inhibit the chances of a spelling error to be made.

This is an example of the layout of the with all labels in the correct position. Next the buttons have to be added and the text boxes. The customers 'title' will be selected via combo box. This is because there are only 5 options and it inhibits the chance of human error.

In order to add the textboxes and the combo box the toolbox will have to be allocated.

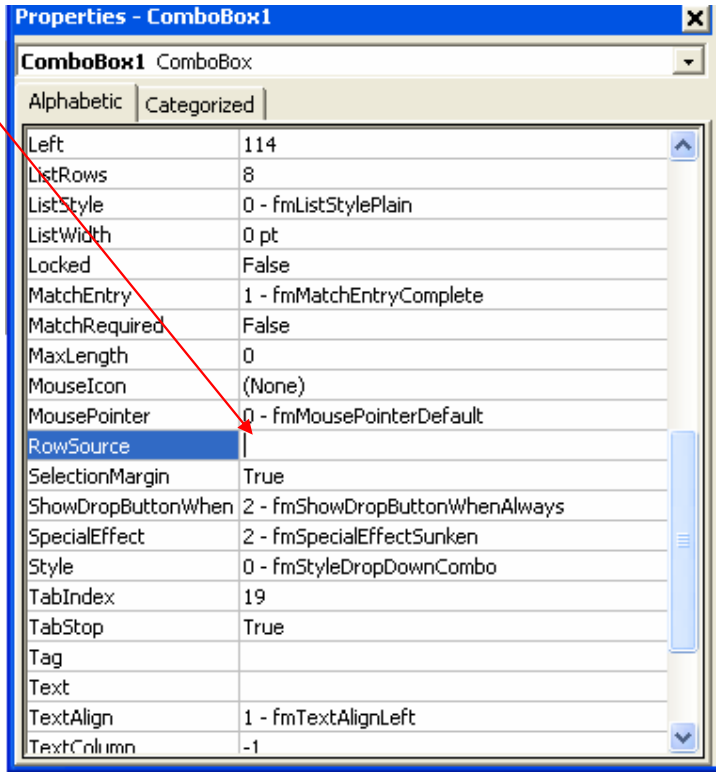
Above is the layout of my user form consisting of all labels, text boxes, combo boxes and command buttons. In order for the 'title' combo box to work I have to link it to the relevant titles I want it to display. I typed the titles that I wanted to use on an excel spreadsheet so that I could link these cells to the combo box.

B34

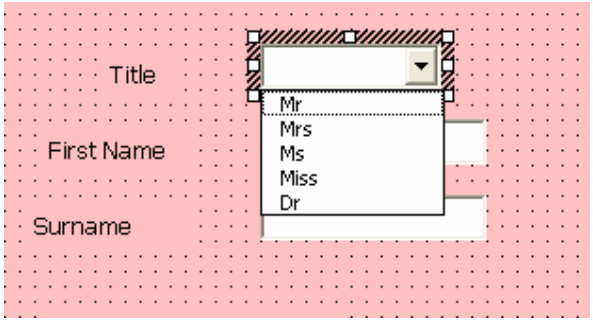
	A	B
1	Mr	
2	Mrs	
3	Ms	
4	Miss	
5	Dr	
6		
7		
8		

These are the options that the user will select. I then click combo box and in the properties section I find the row source category. In order for the correct cells to show up I will have to type in a formula.

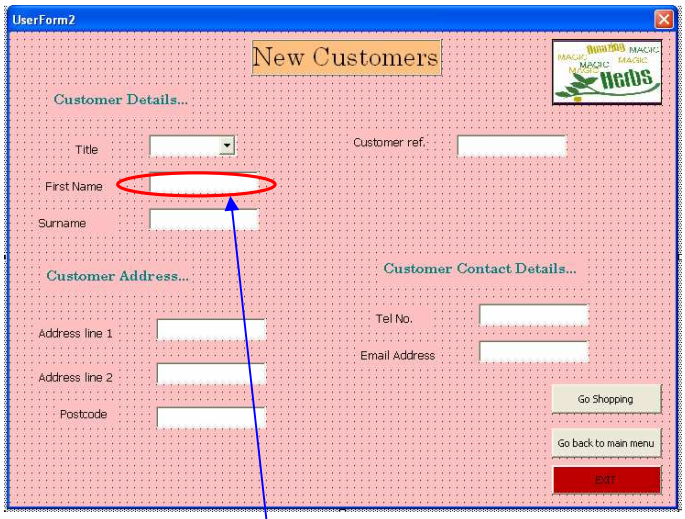
RowSource	Title!a1.a5



Title is the name of that spreadsheet, so the significance of having that in this formula is that the right spreadsheet it allocated. A.1 and A.5 is the cells with the information that has to be displayed, this can be shown in the print screen above. This will then allow the drop down list to show the relevant titles.



In order for this customer details page to work, all the details that are keyed in on the user form must also copy on the spreadsheet with all the customer details on it.



For example if I type in the name of a customer on the user form it will have to automatically to the customer details spreadsheet. I will have to do this by click on each individual text box and going to the control source.

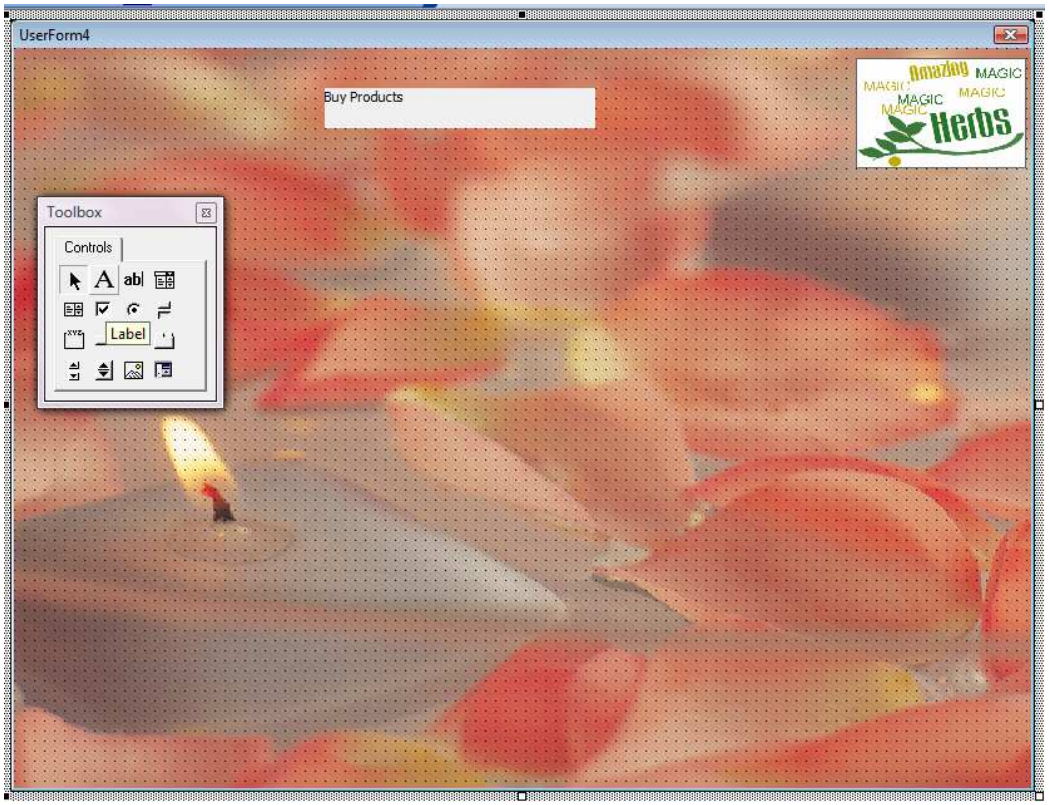
	A	B	C	D	E	F	G	H
1	Customer No.	Title	First Name	Surname	Address line1	Address line2	Postcode	Phone number
2								
3	1	Mrs	Lucy	Jennkins	14 Somerset Ave	Hillington	TW5 0QT	02085715057
4	2	Ms	Sarah	Smith	11 Dorset Road	Hounslow	HE9 7AG	07957345619
5	3	Mrs	Fiona	Jones	100 Leeks Drive	Leeks	LT4 3AF	07955625635
6	4	Mr	Derek	Brown	89 Winchester Ave	Hayes	UB4 9JV	08129296288
7	5	Mr	Stanley	George	11 Hogarth Gardens	Hounslow	TW8 1QB	08003459666
8	6	Miss	Jenna	Goods	1 Mornington Road	Greenford	UB8 9CV	02065773984
9	7	Dr	Frankie	Phillips	179 Ormand Drive	Oshawa	OF8 9PS	03209885745

For the example above I would click on the 'first name' text box, go to control source and type in: customerdetails!c2 this is because customerdetails is the name of the spreadsheet therefore the information should be diverted there as well. C2 is where that information will go on the spreadsheet in this case it is where red ring is on the spreadsheet. ControlSource customerdetails!c2

This user form is extremely important as customer details will be entered on it. This is a better method than the paper based system as there is much more clarity and it does not take long to fill out. It was key to make sure I did not overload the page with unneeded text boxes. This is because I am aware that it is important to make sure the system is user friendly especially as the business is not used to using technology for registering customers. The fact that all the information goes to the customer details spread sheet automatically is extremely convenient for the user as it saves them time from entering the information twice.

User form 3

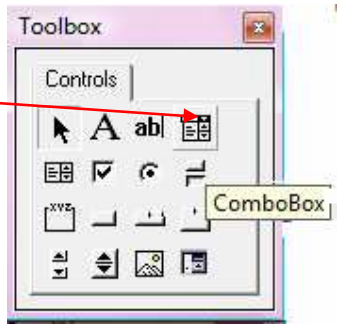
My next user form is one which I will create is the ordering page. This will give the user the information about the product/s that are going to be purchased. It is important foe it to be concise to make sure no errors are made.



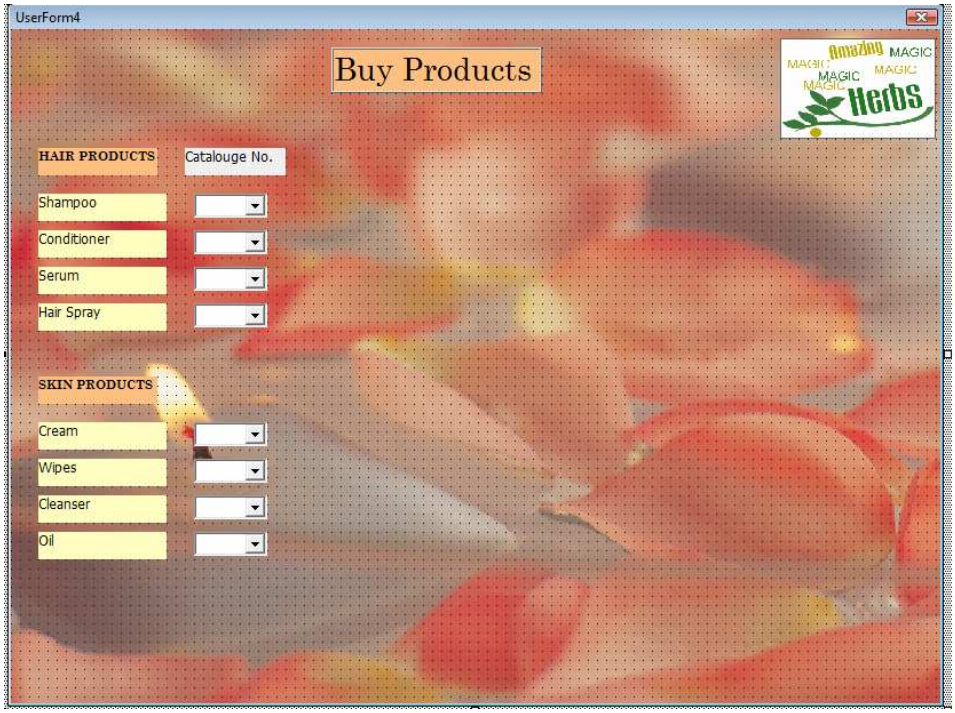
I made my heading by clicking on the toolbox and then the label icon. This caused a text box to appear on the screen (as shown above). I then changed the font to 'Tahoma' size 20. In this user form I was have all the information on the products that will be purchased.

As the same way that I have created a label above is how I did it to show the product categories, catalogue no, quantity and name (as shown below).

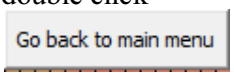
As shown the labels are complete however now I need to add a combo box which is like a drop down menu. There will be a drop down for each specific product e.g. shampoo and conditioner. In order to do this I will need to go the toolbox again and click on this icon



In the same way that the text box appears on the screen the combo box will appear and can be resized and removed.



Before formatting these combo boxes to the appropriate catalogue number it is better to finish the table and then do all formatting procedures at the end.

The print screen above is the final layout of my user form without any links or formulas. I have added the other list boxes and the buttons on the bottom right hand side. As show previously the exit button has already been linked. I will link the following buttons 'proceed', 'back' and 'go back to main menu'. Firstly double click the button we will start with the 'go back to main menu' button. → 

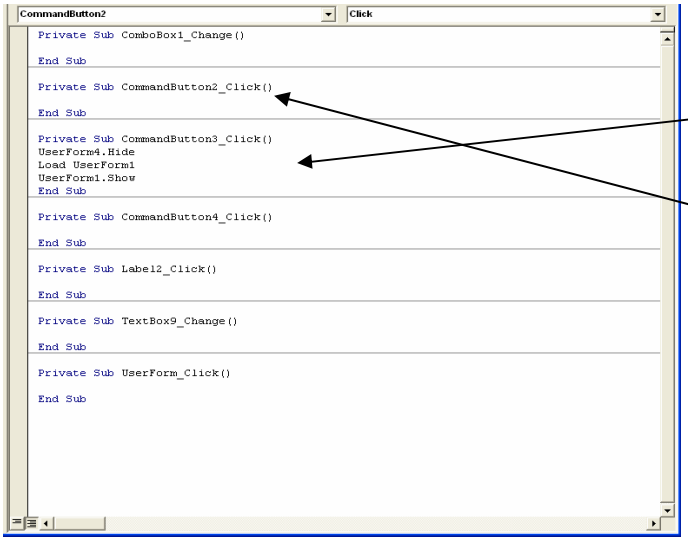
A dialogue will appear on the screen, once you have allocated the section that describes that particular command button (in this case 'command button 3') then I keyed in :

	What does this mean?
UserForm4.Hide	To stop this user form from showing
Load UserForm1	Allocates the relevant user form that has to be loaded (in this case the main menu)
UserForm1.Show	This user form will not display

```
Private Sub CommandButton3_Click()
UserForm4.Hide
Load UserForm1
UserForm1.Show
End Sub
```

This is how it looks on the user form.

The next button that is to be linked is the exit button. This will be linked in the same way on each page. Once the exit button has been linked then once it has been pressed the system will disable. The button should be click on twice, then a dialogue will appear.



Command button 3 already has been linked (the button we previously made)

However the exit button will be command button 2, so that is where I have to fill in the links in order for that command button to work.

All the exit buttons links are the same because they do the same thing regardless of what user form they are on.

```
Private Sub CommandButton2_Click()
End
UserForm4.Hide
End Sub
```

This will then disable the system if selected.

As show in the customer details user form I had a drop down that shows the relevant titles that can be selected, however in this user form I will have to have a drop down of catalogue numbers. This will then identify the products and all the product information such as price and name of product. In order to do this I have to refer to my catalogue spreadsheet where all the product information is, most importantly the catalogue numbers.

A3 Catalouge Number

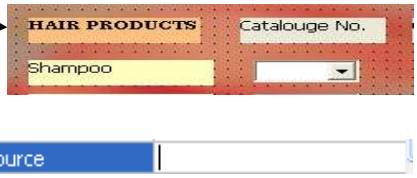
	A	B	C	D	E
3	**Catalouge Number**	**Product Name**	**Type**	**Price**	
4	1	Oganic Shampoo	Shampoo	£5.00	
5	2	Mint shampoo	Shampoo	£7.00	
6	3	Tropical shampoo	Shampoo	£8.20	
7	4	Oganic Conditioner	Conditioner	£5.00	
8	5	Mint Conditioner	Conditioner	£7.00	
9	6	Tropical Conditioner	Conditioner	£8.20	
10	7	Make it Straight Serum	Serum	£6.00	
11	8	Cury Wurly Serum	Serum	£6.00	
12	9	Silk Smooth Serum	Serum	£6.00	
13	10	Strong Hold Spray	Hair Spray	£7.00	
14	11	Easy Styling Spray	Hair Spray	£8.50	
15	12	Control and Remould Spray	Hair Spray	£4.00	
16					
17	Skin Products				
18	**Catalouge Number**	**Product Name**	**Type**	**Price**	
19	13	Herbal Anti Wrinkle Cream	Cream	£9.50	
20	14	Extra Moisture Cream	Cream	£10.00	
21	15	Non greasy mint Cream	Cream	£10.00	
22	16	Fruit Lip Balm	Lip Balm	£3.00	
23	17	Organic Lip Balm	Lip Balm	£2.50	
24	18	Max Moisture Lip Balm	Lip Balm	£4.00	
25	19	Make up removal cleanser	Cleanser	£8.00	
26	20	Dry Skin Cleanser	Cleanser	£9.00	
27	21	Light and non greasy cleanser	Cleanser	£9.00	
28	22	Jasmine Oil	Oil	£10.00	
29	23	Shea butter oil	Oil	£8.00	
30	24	Wheat germ oil	Oil	£7.00	
31					

As show previously each product has been defined.

Defined as conditioner

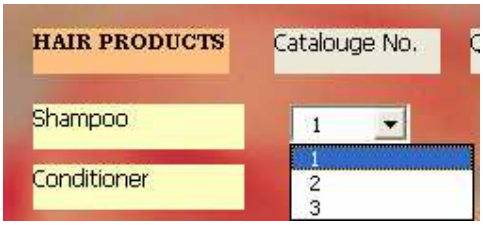
Defined as Serum and so forth.

To do this I need to click each combo box and go to the properties and go to the row source and type in command. Lets start of with shampoo, I have to click on the shampoo combo box,
Go to row source

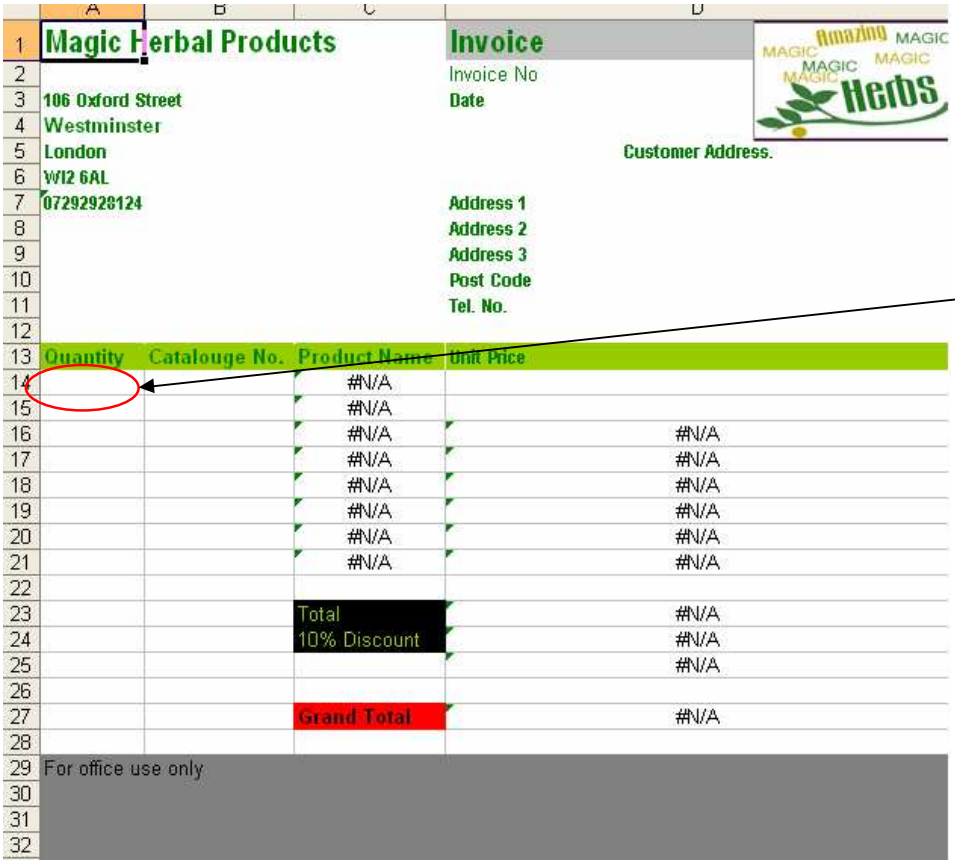


At this point the catalogue should be referred to so you can see what cells are needed. For shampoo it is cell A4 to A6. Therefore I have to type 'catalouge!a4.a6' in control source. Hence

It then allows the drop down list to work.

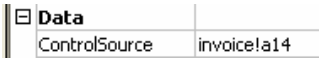


I will do this for every combo box which will show the other 21 catalogue numbers. The quantity of products will be filled in by the user, all the information that is inputted by the user will automatically transfer to the invoice. I will have to go the quantity, control source and enter exactly which cell I want the quantity to go in.



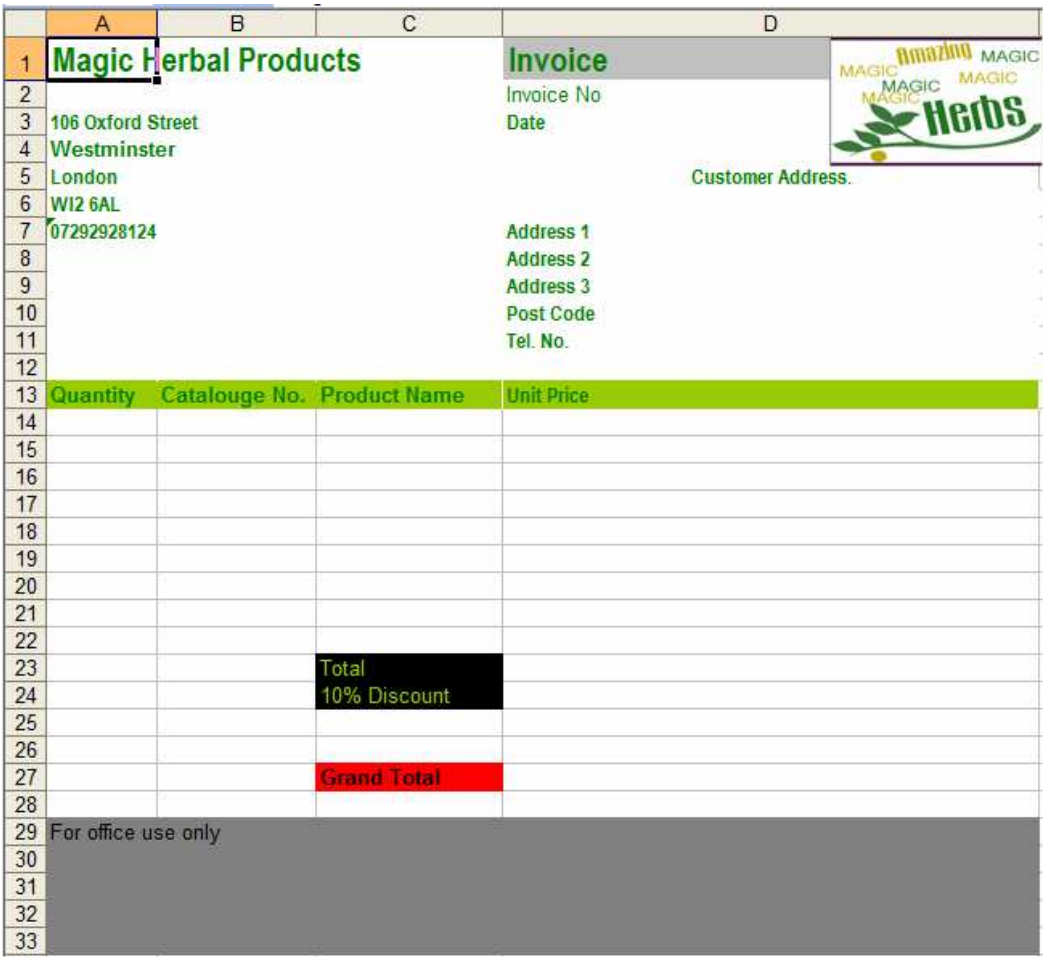
So for my first product I want the quantity to go to A14 on the invoice.

Therefore in the control source it will show:



I must link each combo box to each cell I want it to go on to the invoice this will follow a sequence of A14, A15, A16 etc. In the same way I will link the text boxes and list boxes to the invoices.

Now I must do a vlookup for the product name and product price. The aim is for the system to look up the details from the catalogue number. This will involve switching from the spreadsheets catalogue and invoice.

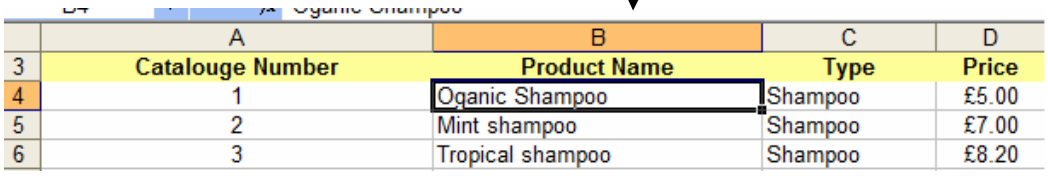


	A	B	C	D
1	Magic Herbal Products			Invoice
2				Invoice No
3	106 Oxford Street			Date
4	Westminster			
5	London			Customer Address.
6	WI2 6AL			
7	07292928124			Address 1
8				Address 2
9				Address 3
10				Post Code
11				Tel. No.
12				
13	Quantity	Catalouge No.	Product Name	Unit Price
14				
15				
16				
17				
18				
19				
20				
21				
22				
23			Total	
24			10% Discount	
25				
26				
27			Grand Total	
28				
29	For office use only			
30				
31				
32				
33				

I will first do a v look up on the product names. The first v look up is

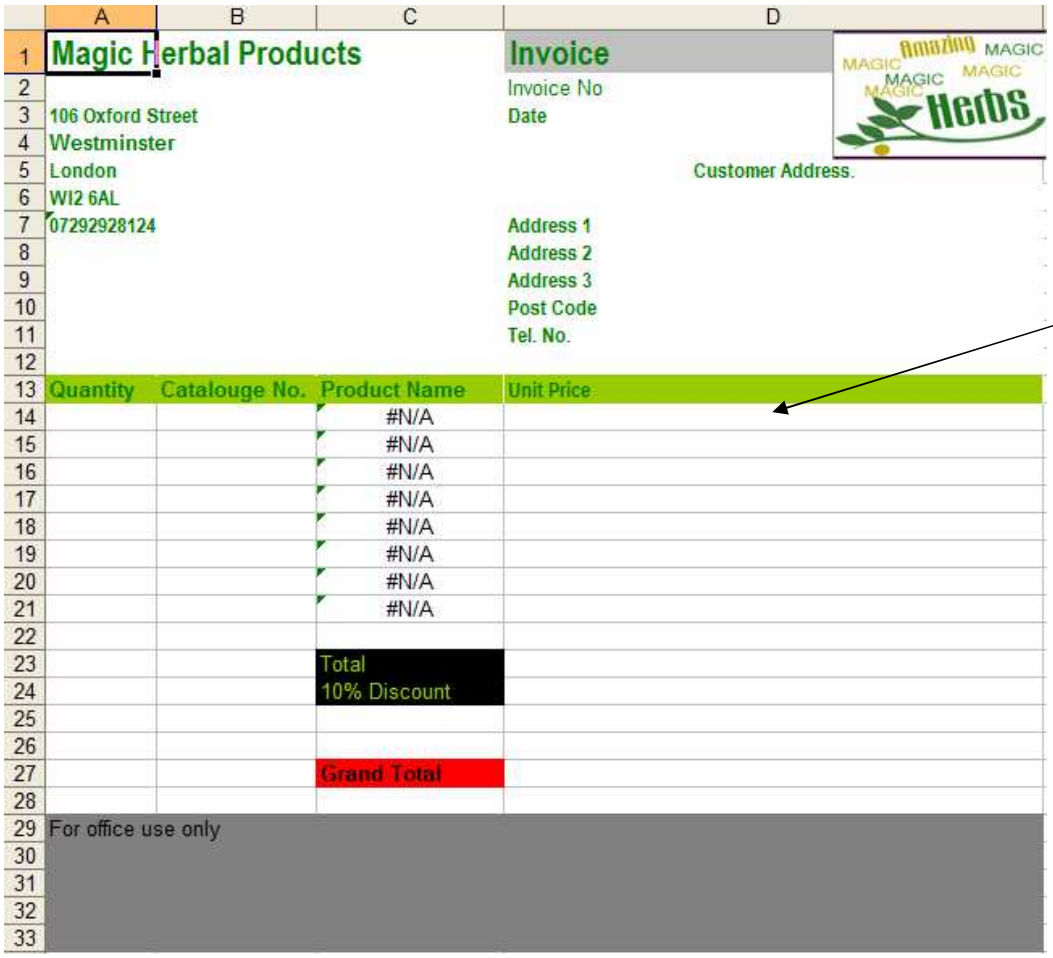
=VLOOKUP(b14,shampoo,2)

I will explain this vlookup. Firstly it looks up the cell in which the catalogue number is present. It then looks up the defined product, in this case shampoo (I defined all of my products earlier) and the 2 stands for the column number in which the product name is present in the catalogue. i.e. product name= column 2



	A	B	C	D
3	Catalouge Number	Product Name	Type	Price
4	1	Oganic Shampoo	Shampoo	£5.00
5	2	Mint shampoo	Shampoo	£7.00
6	3	Tropical shampoo	Shampoo	£8.20

I have repeated all v look ups for product names in this way. However a v look up for product price is done differently.



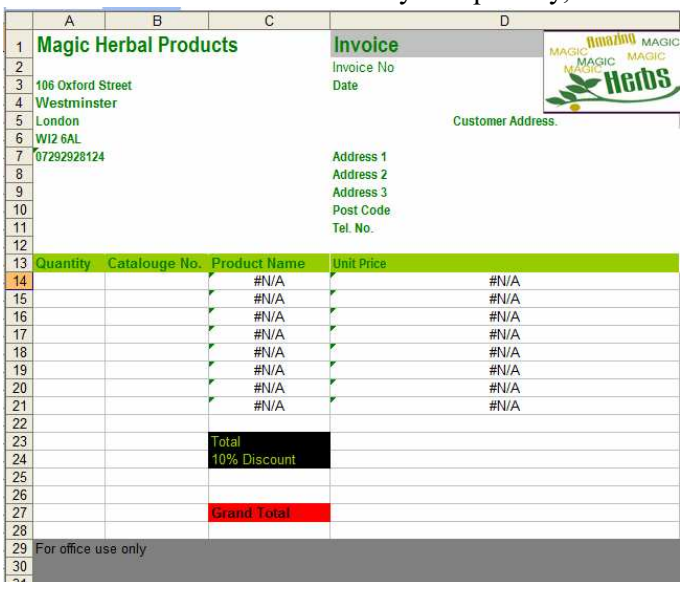
	A	B	C	D
1	Magic Herbal Products			Invoice
2				Invoice No
3	106 Oxford Street			Date
4	Westminster			
5	London			Customer Address.
6	WI2 6AL			
7	07292928124			Address 1
8				Address 2
9				Address 3
10				Post Code
11				Tel. No.
12				
13	Quantity	Catalouge No.	Product Name	Unit Price
14			#N/A	
15			#N/A	
16			#N/A	
17			#N/A	
18			#N/A	
19			#N/A	
20			#N/A	
21			#N/A	
22				
23			Total	
24			10% Discount	
25				
26				
27			Grand Total	
28				
29	For office use only			
30				
31				
32				
33				

The v look up for product name is complete now I will do a v look up for unit price.

The v look up for the first unit price is

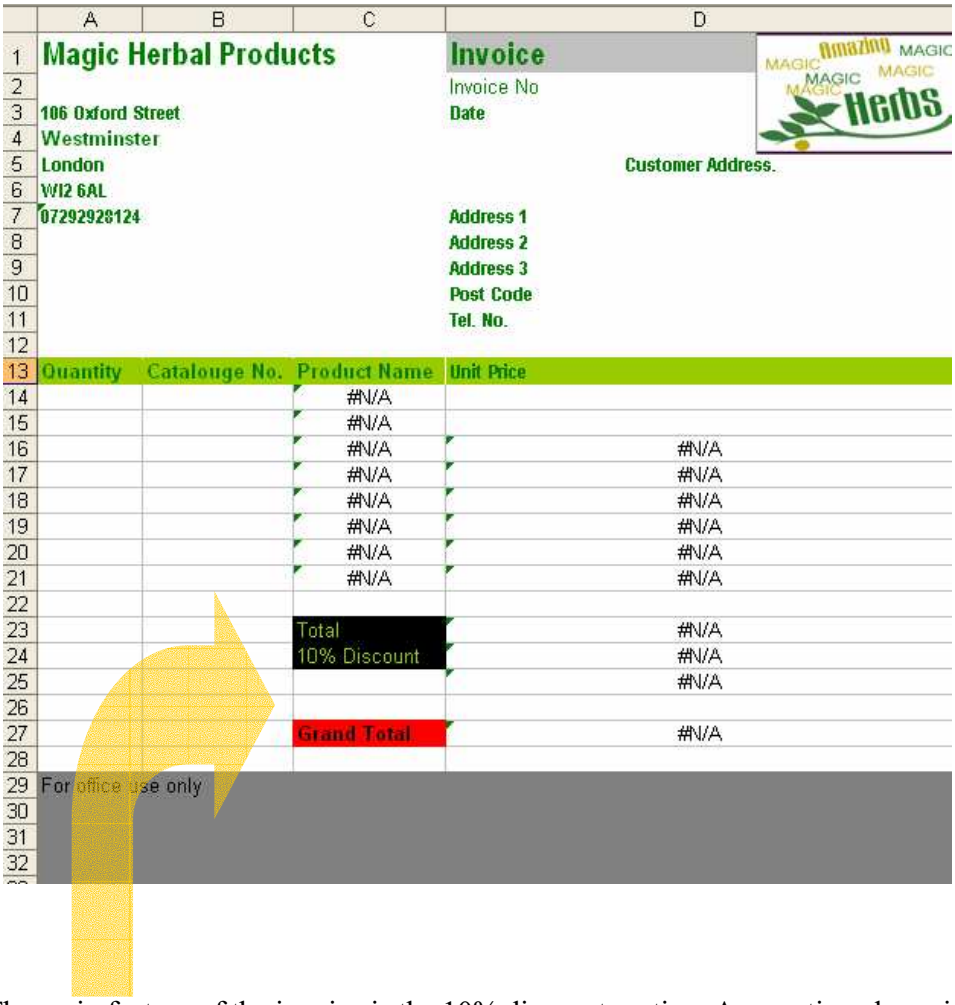
=VLOOKUP(b14, shampoo, 4)*A14

As mentioned previously b14 is the cell in which I want the product details of that particular catalogue number to be located. Shampoo is the defined product. When finding the price of a product it has to be multiplied by the quantity at which it is required. Therefore we time the end value by the quantity, in this case *A14.



	A	B	C	D
1	Magic Herbal Products			Invoice
2				Invoice No
3	106 Oxford Street			Date
4	Westminster			
5	London			Customer Address.
6	WI2 6AL			
7	07292928124			Address 1
8				Address 2
9				Address 3
10				Post Code
11				Tel. No.
12				
13	Quantity	Catalouge No.	Product Name	Unit Price
14			#N/A	#N/A
15			#N/A	#N/A
16			#N/A	#N/A
17			#N/A	#N/A
18			#N/A	#N/A
19			#N/A	#N/A
20			#N/A	#N/A
21			#N/A	#N/A
22				
23			Total	
24			10% Discount	
25				
26				
27			Grand Total	
28				
29	For office use only			
30				

All the information about products purchased will automatically transfer from the user form on to the invoice, this saves time as it does not have to be filled in again. These details such as quantity, catalogue numbers and price will be transferred to the invoice. The invoice displays all items purchased with the price and the grand total. This all is printed automatically. On the invoice I had the companies address, the customers address, the logo, purchased product information and the grand total. The invoice has to be professional as it is a representation of the business therefore I did not use extravagant colours or pictures to portray a negative image of the company.



	A	B	C	D
1	**Magic Herbal Products**			**Invoice**
2				Invoice No
3	**106 Oxford Street**			**Date**
4	**Westminster**			
5	**London**			**Customer Address.**
6	**WI2 6AL**			
7	**07292928124**			**Address 1**
8				**Address 2**
9				**Address 3**
10				**Post Code**
11				**Tel. No.**
12				
13	**Quantity**	**Catalouge No.**	**Product Name**	**Unit Price**
14			#N/A	
15			#N/A	
16			#N/A	#N/A
17			#N/A	#N/A
18			#N/A	#N/A
19			#N/A	#N/A
20			#N/A	#N/A
21			#N/A	#N/A
22				
23			Total	#N/A
24			10% Discount	#N/A
25				#N/A
26				
27			**Grand Total**	#N/A
28				
29	For office use only			
30				
31				
32				

The main feature of the invoice is the 10% discount section. As mentioned previously, calculating discounts counted as a major problem with the old system as many errors were made. However with the use of formulas there is a guarantee that no errors can be made. Firstly all products are added and are multiplied by the quantity this goes in cell D32 with the formula of:

=D14+D15+D16+D17+D18+D19+D20+D21

This total will then have 10% subtracted from it. Firstly I must work out 10% of the total:

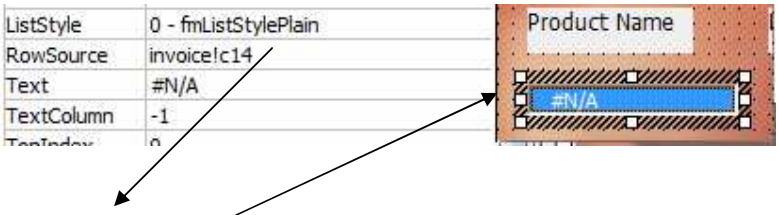
=10/100*D23

This value is how much that needs to be subtracted off the price. Therefore all we have to do from here is plus the total before discount and how much that has to be subtracted.

=D23-D24

This is the grand total of purchases after a 10% discount.

Now the invoice is complete it, all the information should display on the user form a well such as price, product name and quantity. I have to select a list box and go on row source and enter the cell I want it to show from the invoice.



This shows that I want it to go to the invoice spreadsheet to cell c14, which is the product name.
I must do this for each list box, text box and combo box that I want linked to the invoice. Therefore the information on the user form and on the invoice is the same.

Above is the final layout of my 'buy products' user form. This is another important user form as orders are processed on it. 'Magic Herbal Company' has many problems with their old system such as it taking to long to make an order or it being unprofessional. Firstly, the combo boxes make it very easy to purchase a product.

This is because once it has been selected the product name and price will show up automatically due to the V LOOK UPS that were done on the invoice. Therefore this diminishes the ordering process to be long. The presentation has to be careful as there is much more text boxes, combo boxes etc on the user form. However, the layout is clear and concise which means that the user will not get confused and also that it maintains its professionalism.

Invoice

Below is the final copy of my invoice. As you can see it has been printed on an A4 sheet of paper showing that it has fulfilled it user requirement. The invoice is a representation of the business therefore when designing it careful attention to detail was required. This is because it had to be professional, appealing to the eye yet have all the required information on it. Therefore I used the company logo and simple colours such as grey and green to make it more attractive.

Magic Herbal Products

106 Oxford Street

Westminster

London

WI2 6AL

07292928124

Invoice

Invoice No

Date

Customer Address.

Address 1

Address 2

Address 3

Post Code

Tel. No.

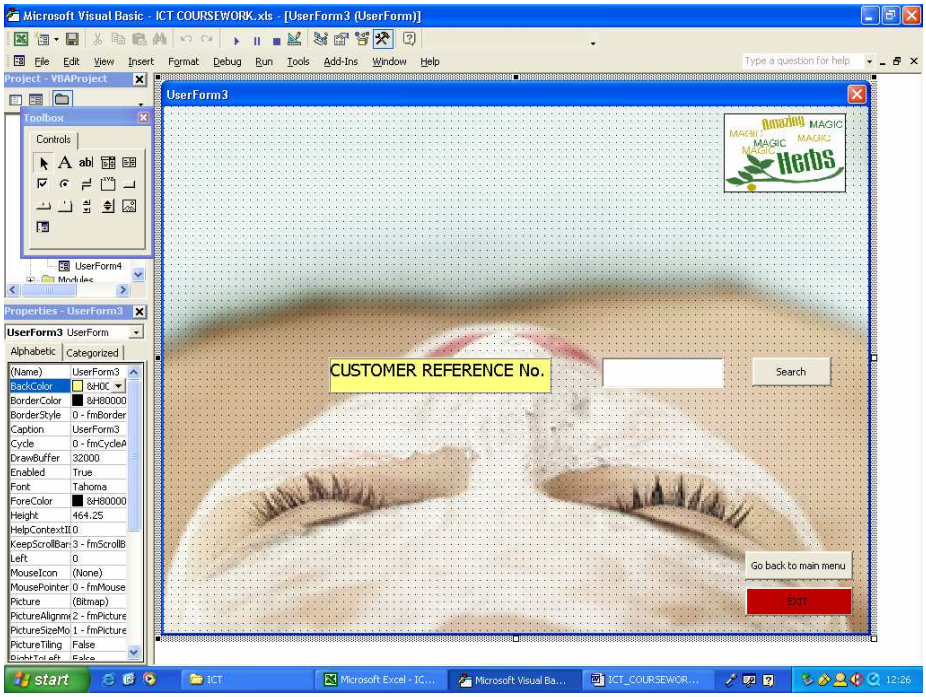
Quantity	Catalouge No.	Product Name	Unit Price	
		#N/A		#N/A
		#N/A		#N/A
		#N/A		#N/A
		#N/A		#N/A
		#N/A		#N/A
		#N/A		#N/A
		#N/A		#N/A
		#N/A		#N/A
		Total		#N/A
		10% Discount		#N/A
				#N/A
		Grand Total		#N/A

For office use only

All customer details and transactions are strictly private and confidential, rest assured we do not hand out any information to other companies and organisations.

User form 4

The beauty of this feature is the fact that the user only has to key in the customer reference number and details of that person will come. If the user needs to find a particular customers detail then they have to type in the customer number and their details should be found on the customer details spreadsheet. As you can see here are only 3 buttons on this user form, this is because I wanted it to be as simple as possible.



User form 5

Stock control is beneficial to the company and if there are any customer inquires about it they can check. This is convenient for customers as they wont order out of stock products and ait a long time until the order actually goes through.

STOCK LIST

Hair Products

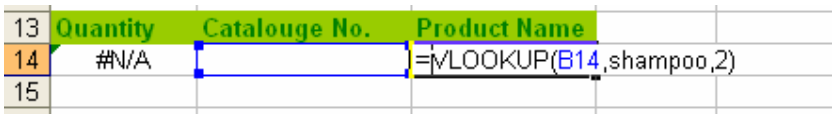
Catalouge Number	Product Name	Type	In Stock
1	Oganic Shampoo	Shampoo	30
2	Mint shampoo	Shampoo	20
3	Tropical shampoo	Shampoo	30
4	Oganic Conditioner	Conditioner	40
5	Mint Conditioner	Conditioner	35
6	Tropical Conditioner	Conditioner	30
7	Make it Straight Serum	Serum	40
8	Cury Wurly Serum	Serum	40
9	Silk Smooth Serum	Serum	40
10	Strong Hold Spray	Hair Spray	30
11	Easy Styling Spray	Hair Spray	35
12	Control and Remould Spray	Hair Spray	25

Skin Products

Catalouge Number	Product Name	Type	
13	Herbal Anti Wrinkle Cream	Cream	20
14	Extra Moisture Cream	Cream	60
15	Non greasy mint Cream	Cream	40
16	Fruit Lip Balm	Lip Balm	35
17	Organic Lip Balm	Lip Balm	70
18	Max Moisture Lip Balm	Lip Balm	100
19	Make up removal cleanser	Cleanser	68
20	Dry Skin Cleanser	Cleanser	95
21	Light and non greasy cleanser	Cleanser	20
22	Jasmine Oil	Oil	30
23	Shea butter oil	Oil	25
24	Wheat germ oil	Oil	40

This is list of all my products and how much of them are in stock. I will have to define these products as I did for the catalogue.

I have now defined all products in the following way.



Like o the invoice I must do a VLOOKUP for product name and how much is in stock. This way the user only has to eneter the product code and all information will show.

	Quantity	Catalouge No.	Product Name
14	#N/A		#N/A
15	#N/A		#N/A
16	#N/A		#N/A
17	#N/A		#N/A
18	#N/A		#N/A
19	#N/A		#N/A
20	#N/A		#N/A
21	#N/A		#N/A
22			

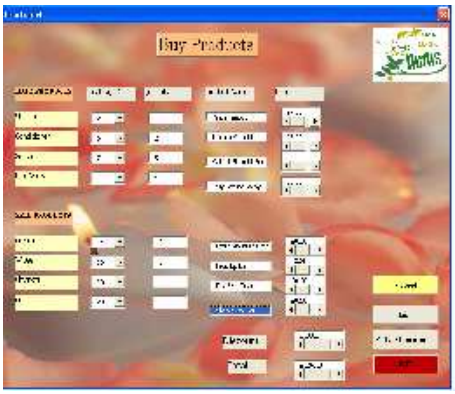
Now I have completed all VLOOKUPS that will shows on the user form.

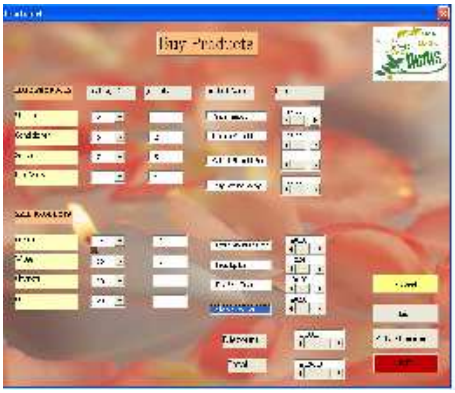
As you can see the information from the spreadsheet has been linked to the user form.

The hardware used whilst making these user forms was a personal computer with general features. Including a mouse, key board and printer. The software used was Microsoft Excel 2003 and user forms were created via Visual Basic Editor. However Microsoft Excel 2000 and onwards is also applicable to use.

The system designed has a main purpose of processing quick transactions of products that have been purchased. Also when a customer is to be registered this should be a quick process as well. This system makes everything a lot easier for the end user, customer inquiries will be dealt with more quickly and it is easier to manage than a paper based system errors were part of the norm. This was due to poor hand writing or calculation problems that caused the downfall of the business as customers did not receive the services they expected. However, now this system portrays professionalism as there is a development in technology.

STOCK


Buy Products


Buy Products

TESTING

Testing

Once the system has been built with all necessary formulas, it will be checked by a user that has no knowledge about the system and what it should or should not do. This will help determine any anomalies or invalid data that may be within the system. It will also show whether the system is user friendly and easy to use as it should be. If there are any unsuccessful results with regards to the testing then I will have to make sure that these have been diminished and dealt with accordingly. If there are outlining problems with the system then it is not fit for its purpose as one of the user requirements state that it should be easy to use and understand.

Testing Strategy

Now I will go over my user requirements and explain how I will test them. It is important that they are tested because the user requirements determine whether the system is suitable for its purpose.

10% discount on products are automatically calculated once the total is made.
This will be checked by placing an order of various products and then checking what the cost is before and after the discount. This is a fundamental test because the old paper based method caused several errors as it was worked out manually also it is essential that this test works and is accurate.

All calculations need to be accurate and correct
This will be tested by placing another order and checking if the total is as it should be. The prices of each product have to be correct, the quantity of items purchased has to be correct and also 10% discount.

Needs to store all transactions
This will be checked via the customer details spreadsheet. An order will be placed and all the information from it such as customer details to items purchased will be checked after to see if these details saved.

Should be able to edit information
It will be tested whether the prices of some products can be changed. This will be done by attempting to change prices of products on the catalogue spreadsheet. This will be tested as information such as prices will not remain the same all the time therefore it will be tested whether this system can cater to a busy company.

Should be able to add information
This will be tested by filling in the registration form. If customer details can be added then it has fulfilled the requirement.

Should be able to delete information
This will be tested by deleting a customer in the customer details spreadsheet.

Data should be able to be accessed again once saved by user
The system will be closed down and then opened to see whether the data can be retrieved again.

The system should be able to provide the user with accurate stock levels.
Make and order and check if the amount purchased has been deduced from the amount in stock originally.

Invoice should be printed on a sheet of A4 paper after details have been submitted.
This will require making an order and then printing the invoice to check if has the correct details and if it fits on a page of A4.

This solution must look professional and organised
After someone with no knowledge of the system has used the system, I will take their feedback on appearance and attributes as a test.

The solution needs to be able to store customers details in order of customer number
Add a new customer via registration form and check customer details spreadsheet if they have been assigned a customer number furthermore to check if it is in the correct numeric order.

To be easy to user and user friendly
After someone with no knowledge of the system has used the system, I will take their feedback on appearance, attributes and professionalism as a test.

New customer details should automatically be transferred to the customer details spread sheet.
This will be tested by registering a new customer and then checking the spreadsheet to see if the details have also transferred there.

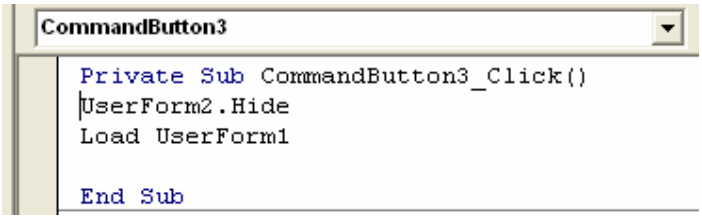
Test number	Purpose	Test data used	Expected outcome	Actual outcome & comment	Corrective action taken
1	Check if 'products-stock button works'	Click on the button 'Products-stock'	Once this is clicked it should be taken to the stock user form where they can search quantities available of for a product	After it was pressed the 'stock' user form showed up as expected.	None required
2	Check if 'back to main menu' button	Click on the 'back to main menu'	Should be re-directed back to the home page.	Current user from closes and nothing	In the command button of 'back to main menu' I must add "UserForm1.Show".

	works.	button.		else happens.	
3	Check if 'Go shopping button' works	Press the 'Go shopping' button	The user form should go to the 'buy products' section.	Goes to the correct user from showing what is available to purchase	None required
4	Check if combo buttons work-title	Press on the drop down list asking for a title.	Option of titles should be displayed i.e. user chooses 'Miss, Mr, Mrs, Dr'	Error message	Click on the combo box and go to row source type in 'title!a1.a5' as opposed to what I did mistakenly 'title!a.1.a5'.
5	Check if combo button works-catalogue number	Press on the drop down list for catalogue number.	Various catalogue numbers should appear. 3 catalouge number per group of product. E.g. 3 different shampoos, 3 different conditioners. All should have unique catalogue number.	Displayed the catalogue numbers for each product.	None required
6	Check if 'exit' buttons work.	Click on exit button	User forms should disable.	The user form should close.	None required
7	Make sure that all necessary information transfers on to the invoice	Make an order purchasing products.	All product details should transfer on to the invoice. Printed invoice should display correct details	All details are transferred however there is a wrong total as the unit price has not been multiplied by quantity.	Go to the total and correct the formula to '=D14*A14+D15 *A15+ D16*A16+D17*A17 +D18*A18+D19*A19 +D20*A20+D21*A21' This shows all the fields added and then multiplied by the correct quantity.
8	When a new customer is registered	Add a new customer and check	All details filled out should	Checked the spread sheet and	None required

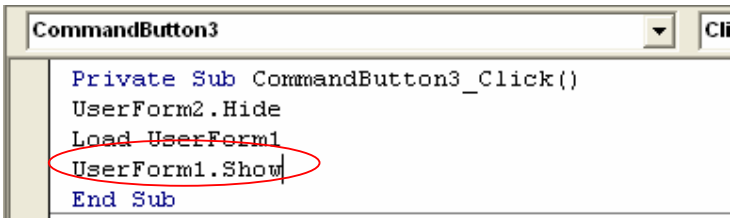
	check if they are automatically transferred to customer details spreadsheet.	the 'customer details' spread sheet to see if it has been copied there.	automatically transfer to this customer details spread sheet.	all information was there and was accurate.	
9	When a new customer is registered ensure that they have a unique customer number.	Create a new customer	The customer will have a unique customer number.	The macro ran as is should and created a new row and a reference number.	None required
10	Ensure that 10% discount is deduced from end total.	Buy products.	10% deduced from the total of purchased items	Total worked out correct. The correct amount was deducted.	None required
11	Ensure VLOOKUP works correctly for product name on 'buy products' user form and invoice.	Make an order by selecting a catalogue number.	The name of product from the selected catalogue number should appear.	The type of product showed up not the name of the product. i.e. instead of saying that the name was 'mint shampoo' it just said 'shampoo'	Go to the invoice and change the formula of the cell looking up row 3 instead or row 2.
12	Ensure VLOOKUP works correctly for stock.	Go to stock and using the combo box select a product number.	The name of the product and the and the quantity available should show up	The name of the product showed up as well as how much was in stock.	None required

Corrective Action
As shown by the table of results not all tests went accordingly as to what is what expected. In this section I will be demonstrating how I overcame these problems.

Test 2
(Invalid 'back to main menu' button)



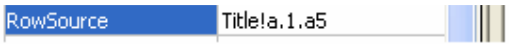
As you can see when I double click the command button 'back to main menu', the correct user form will load, but will not show as I have forgotten to right the last fundamental command.



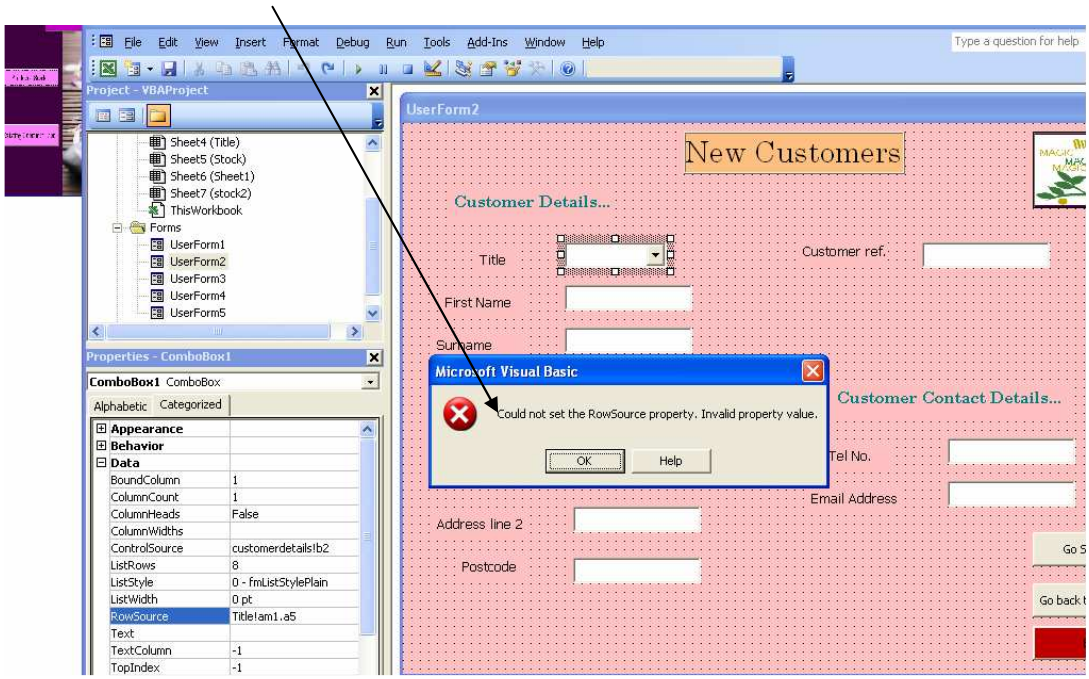
I forgot the final command of 'showing' that user form. If this was not solved then the user would find them self not being able to go back to the main menu and what's more the whole user form shuts down. This process would keep repeating if this problem was not solved. This now allows me to click the button and return back to the main menu.

Test 4
(invalid combo box)

The error made is that there the row source description I made was incorrect.

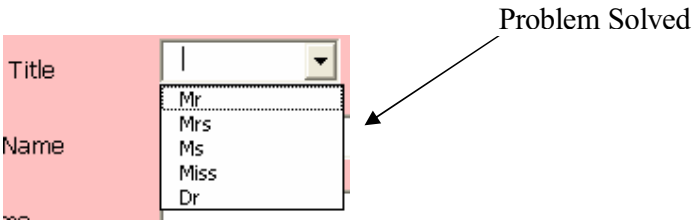


This brings about an error box.



The correct way it should have been done →

This now enables me to view the drop down with the correct titles to be displayed. If this problem was not recognised then the user would not be a able to view the titles, which means there would be an incomplete invoice, as well missing information about the customer.



Test 7
(Wrong price because not multiplied by quantity)

Below is an example of my wrong invoice.

As you can see I have not multiplied the price with the quantity. This gives me inaccurate price.

D15 =VLOOKUP(B15,conditioner,4)

	A	B	C	D
1	**Magic Herbal Products**			**Invoice**
2				Invoice No
3	106 Oxford Street			Date
4	Westminster			
5	London			Customer Address.
6	WI2 6AL			
7	07292928124			Address 1
8				Address 2
9				Address 3
10				Post Code
11				Tel. No.
12				
13	Quantity	Catalouge No.	Product Name	Unit Price
14	1	1	Oganic Shampoo	£5.00
15	2	5	Mint Conditioner	£7.00
16	3	7	Make it Straight Se	£6.00
17	0	12	Control and Remoul	£0.00
18	0	14	Extra Moisture Crea	£0.00
19	1	17	Organic Lip Balm	£2.50
20	0	19	Make up removal cl	£0.00
21	0	23	Shea butter oil	£0.00
22				
23			Total	£20.50
24			10% Discount	£2.05
25				£18.45
26				
27			Grand Total	£18.45
28				
29	For office use only			
30				
31				
32				

D14 =VLOOKUP(B14,shampoo,4)*A14

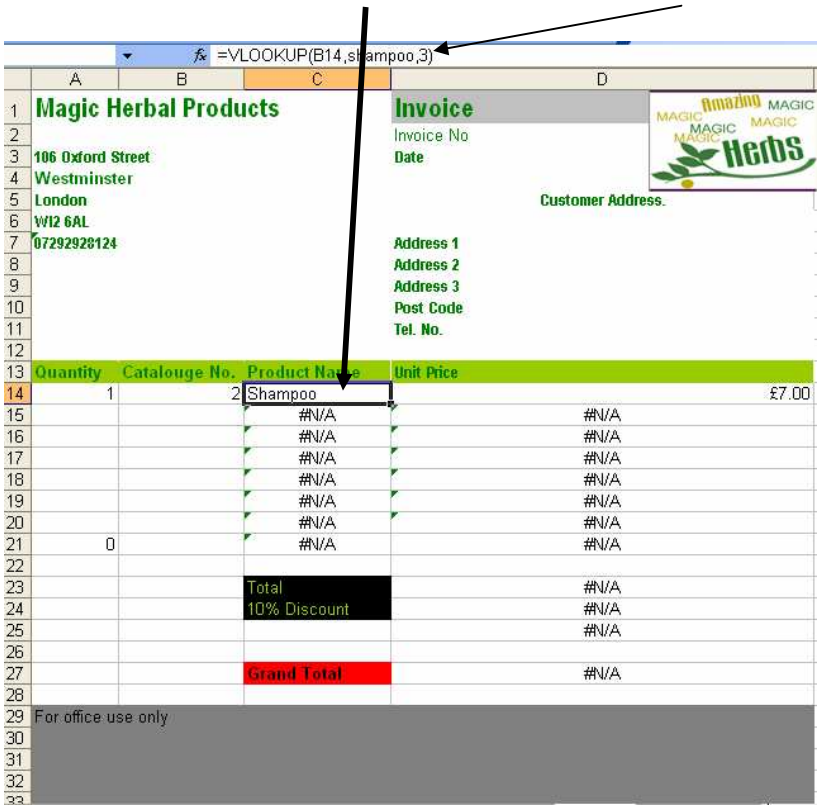
	A	B	C	D
1	**Magic Herbal Products**			**Invoice**
2				Invoice No
3	106 Oxford Street			Date
4	Westminster			
5	London			Customer Address.
6	WI2 6AL			
7	07292928124			Address 1
8				Address 2
9				Address 3
10				Post Code
11				Tel. No.
12				
13	Quantity	Catalouge No.	Product Name	Unit Price
14	1	1	Oganic Shampoo	£5.00
15	2	5	Mint Conditioner	£14.00
16	3	7	Make it Straight Se	£18.00
17	0	12	Control and Remoul	£0.00
18	0	14	Extra Moisture Crea	£0.00
19	1	17	Organic Lip Balm	£2.50
20	0	19	Make up removal cl	£0.00
21	0	23	Shea butter oil	£0.00
22				
23			Total	£39.50
24			10% Discount	£3.95
25				£35.55
26				
27			Grand Total	£35.55
28				
29	For office use only			
30				
31				
32				

This is how the real invoice should be. As you can see I have no multiplied each price by the quantity.

If this was not done then as you can see in the difference of price from the correct invoice
and the wrong invoice, the business would only be charging the customer for one product. This means that there would be a huge margin in profits from what the are supposed to be getting. The wrong invoice comes to a total of £18. 45 when really the customer should be paying £35.55. Ultimately they would be making a very big loss.

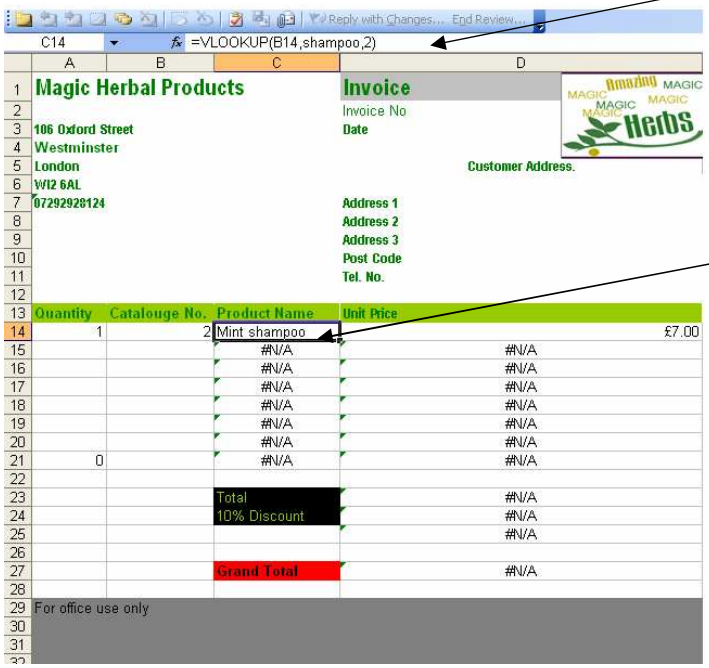
Test 11

The error that occurred over here was the fact that the name does not show up and instead the product type comes up. This should read 'Mint Shampoo' but it just reads shampoo. This is because the product type is in row 3 and the product names are in row 2. However, I wrote row 3 which has caused this error.



To overcome this I must change the row details from row 3 to row 2.

I have corrected the row so now it is row 2 as opposed to row 3 like it was.



Correct name now displayed.

If this was still a problem then the user would have difficulties understanding which products have been purchased as they would have to keep referring back to the product code instead of the product name which is easier.

USER DOCUMENTATION

User Documentation

Introduction

In this section you will learn about how to use the system that has been created for 'Magic Herbal Company'. This included all the hard and soft ware requirements as well as a step by step guide on how to use and function each user form in the correct way.

System Requirements

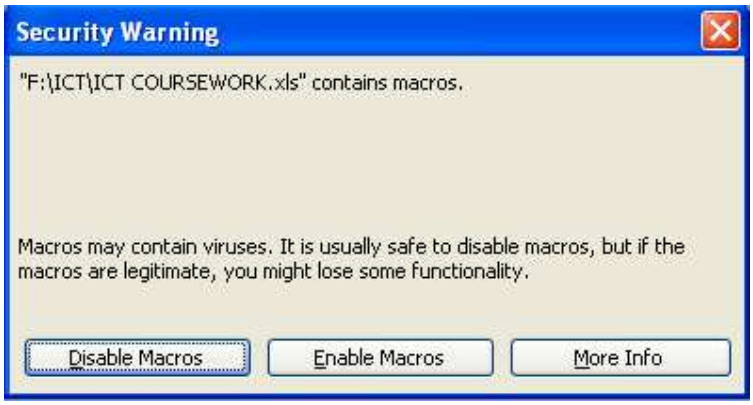
This will explain the features required for this system to work. It will require
-Windows 89/XP/Vista
-574KB available on a hard disk
-personal computer with relevant processors
-Mouse and keyboard that are compatible with p.c.
-Microsoft excel 98 or later editions
-Inkjet/laser printer for invoice.

Instillation instructions

Hardware- cd rom load icon. And save it on to the computer.
The hardware required for this system is a CD rom. To install the system on to the computer you must insert the CD into the computer. Once is done then you must copy the contents of the CD onto the computer preferably onto the desktop. Automatically a short cut to they system will be created which can be deleted at any stage if unwanted. After all of this has been completed then the system is ready for use.

Before completing any orders, make sure that the system is updated with any changes in prices or stock. It is crucial that if any changes have been during the time the system was being made then it is updated otherwise the information will be inaccurate. It is important to be aware of the fact that before the system is used, ensure that it is currently up to date. It is in the businesses best interest to ensure that some kind of routine is put in place to ensure that there is a consistency in correct and up to date information.

When loading the system a security message will come to your attention.



When security messages like the one above display click on 'enable macros' to go to the system.

The system will load itself and to get exit the user form press the ‘cancel’ button which will then disable the user forms and you will then have access to the different spread sheets.

If you need to edit information then you can switch between the spread sheets and allocate things that have to be altered.

Simply click on a tab to show the spread sheet you require. In this case the spreadsheet that would be open is the ‘catalogue’.

D4 5

	A	B	C	D
1	Magic Herbal Products Catalogue			
2	Hair Products			
3	Catalouge Number	Product Name	Type	Price
4	1	Oganic Shampoo	Shampoo	£5.00
5	2	Mint shampoo	Shampoo	£7.00
6	3	Tropical shampoo	Shampoo	£8.20
7	4	Oganic Conditioner	Conditioner	£5.00
8	5	Mint Conditioner	Conditioner	£7.00
9	6	Tropical Conditioner	Conditioner	£8.20
10	7	Make it Straight Serum	Serum	£6.00
11	8	Cury Wurly Serum	Serum	£6.00
12	9	Silk Smooth Serum	Serum	£6.00
13	10	Strong Hold Spray	Hair Spray	£7.00
14	11	Easy Styling Spray	Hair Spray	£8.50
15	12	Control and Remould Spray	Hair Spray	£4.00
16				
17	Skin Products			
18	Catalouge Number	Product Name	Type	Price
19	13	Herbal Anti Wrinkle Cream	Cream	£9.50
20	14	Extra Moisture Cream	Cream	£10.00
21	15	Non greasy mint Cream	Cream	£10.00
22	16	Fruit Lip Balm	Lip Balm	£3.00
23	17	Organic Lip Balm	Lip Balm	£2.50
24	18	Max Moisture Lip Balm	Lip Balm	£4.00
25	19	Make up removal cleanser	Cleanser	£8.00
26	20	Dry Skin Cleanser	Cleanser	£9.00
27	21	Light and non greasy cleanser	Cleanser	£9.00
28	22	Jasmine Oil	Oil	£10.00
29	23	Shea butter oil	Oil	£8.00
30	24	Wheat germ oil	Oil	£7.00
31				

If the prices of products have to be changed, allocate the correct spreadsheet and then under the heading ‘price’ change the old prices to the new prices. Even if you need to change other things like the amount of product in stock, you to it in the same method as above.

Operating the system

User form 1

As you can see there are options available for the user on the menu page. They layout it pretty simple and only requires you to pick the relevant button. To register new customers you should click the 'registration-new customers' button. This will then direct you to the next user form accordingly.

If a customer wants to purchase products straight away then go straight to 'buy products'

In order to view stock levels and see the range of product click on the 'products-stock' button.

Or if you need to go and view previous customer details then click on the 'existing customer list' button.

So the first user form does not require information to be inputted into the system, it is simply a navigation centre where you choose what you need or want to do next.

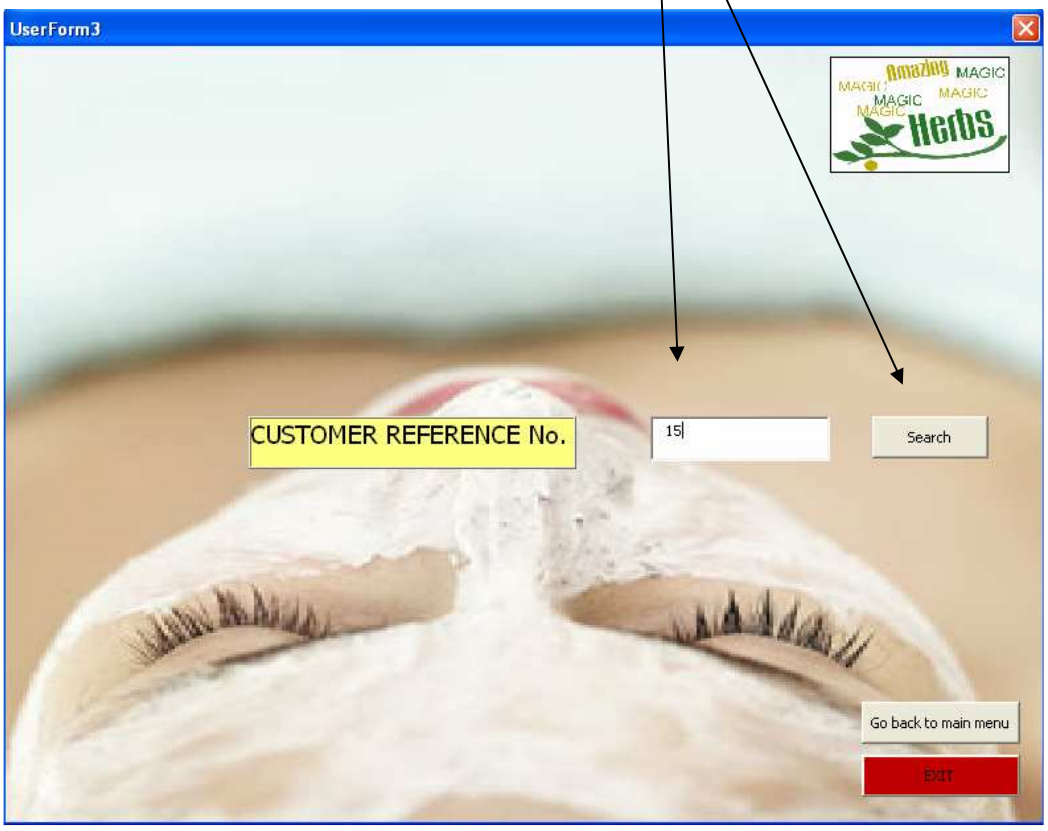
User form 2

When entering customer details it couldn't be simpler. Firstly press the drop down option (combo box) which will give a list of titles to choose from e.g. Miss, Mr, Mrs etc. Then simply type in the information that is required such as contact address and number. All of the information that is filled in automatically transfers to the 'customer details' spreadsheet which means that all this information does not have to be keyed in twice.

Once all of this information is complete and you want to go to the next page click the 'go shopping button'. If you change your mind and want to do something else click the 'go back to main menu' button. Or if you want to completely stop the system at any point click the 'exit' button. This will disable the system completely. When using this form bare in mind that all fields must be entered for security details, it is usually essential for any company to have a full record of customer details whether the are old or new.

User form 3

When you would like to search for a customers to view their previous transactions or to edit their details then simply type in their customer number and then click the 'search' command button.

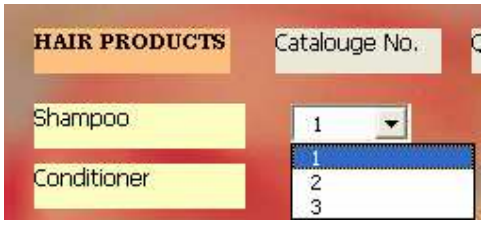


This will then relocate the user to the customer details spreadsheet showing the contact with that customer reference number.

15	Mr	Mike	Jackson	82 Ringway	Norwood Green NG9 1HC	07950321898

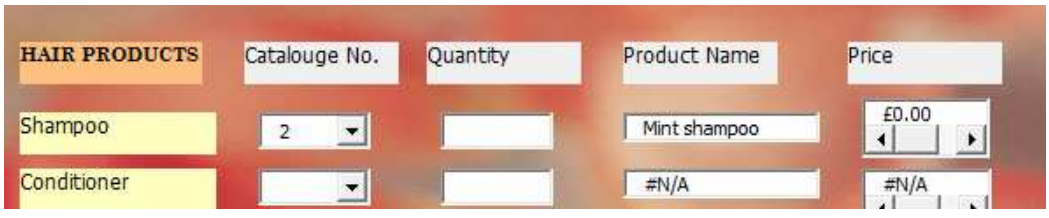
User form4

This user form is basically the way in which you order a product. As you can see, hair products and skin products have been separated for convenience. In order for a product to be purchased a catalogue number must be selected from a range of products.



For example this shows the catalogue number of the indivifual products and also that there are 3 products in the shampoo range,

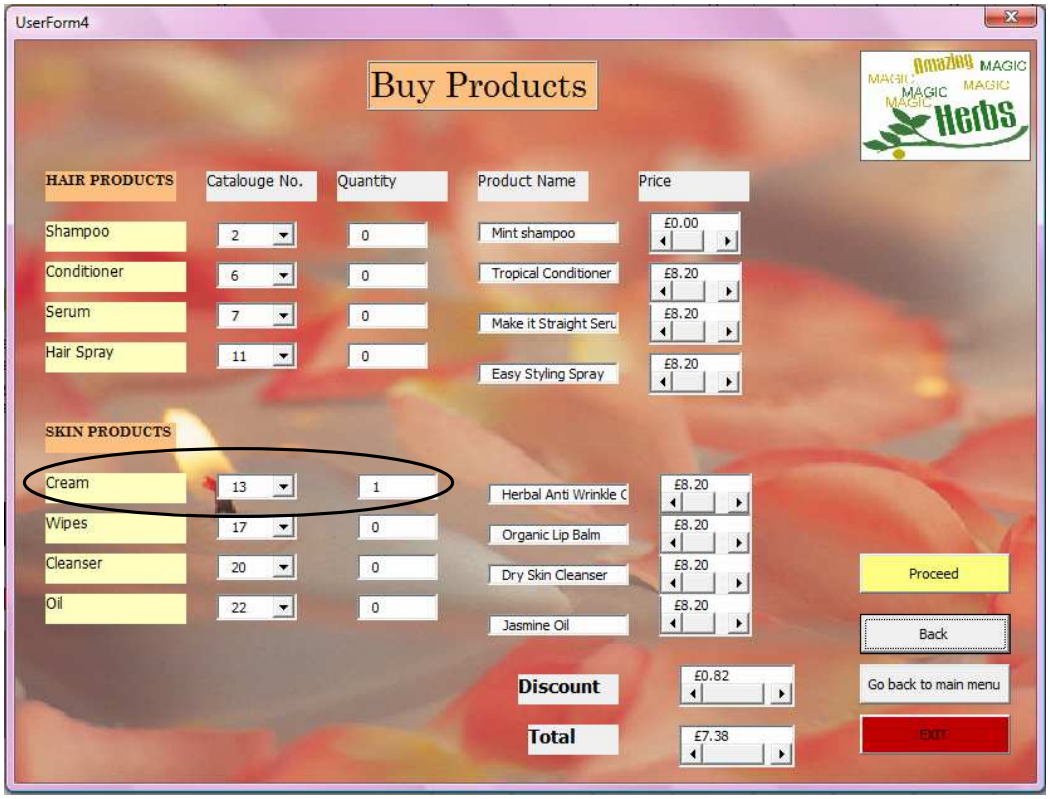
The first step when placing an order is typing in the catalogue numbers of products that are to be purchased. There are 3 products per product range for example there are 3 shampoos in the shampoo range.



Simply click the catalogue number that is desired and the product name and price display automatically. All that you have to do in this process is manually type the

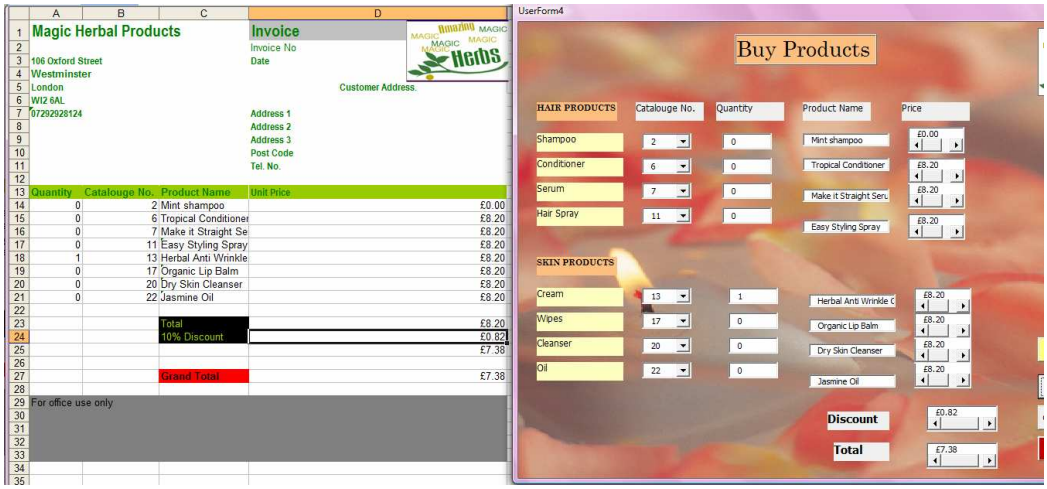
quantity that is required. Once the quantity is filled in the price should display accurately.

If there is an order that only requires 1 product then you will still have to enter any catalogue number and fill in the quantity as 0 so it does not count.



Only a cream has to be ordered however all the combo boxes must have a catalogue number selected with the quantity of 0 as shown above. This is because the system is not advanced enough to ignore the fact that there is no catalogue number present.

As This is being filled in, all the information is being transferred to the invoice so it does not have to be filled in again. Below is an example of this. This invoice is then ready to print.



User form 5

This user form shows stock levels, therefore it shows how much of a certain product is in stock. Simply click on the combo box to select the product code and automatically the name of the product will show up as well as the quantity available.

Here we can see that there are 30 Organic Shampoos in stock as well as 35 mint conditioners in stock.

Backup

Once you have finished using the system then it is good to save any modifications or updates made this enables you to keep track of only relevant records in the future. It is beneficial to have the system backed up every evening. Also any data that is saved on the hard drive should be backed up via a reliable medium like re-writable CDs. Data that has been backed up should be on the premises in a safe and another copy at another location. However, take into consideration who will be responsible for the backing up of this data. Therefore if something unpredictable occurs such as a natural disaster, the business still have information of purchases, stock etc.

User Support Guide

Are you confused about any of the information discussed above and would prefer to speak personally? Well, our aim is for your complete satisfaction therefore we are more than happy to discuss further the system.

Email: systemsRus@info.com

Details of office address and time:

106 Oxford Street
Westminster
London
WI2 6AL

Monday-Friday 9am-5pm

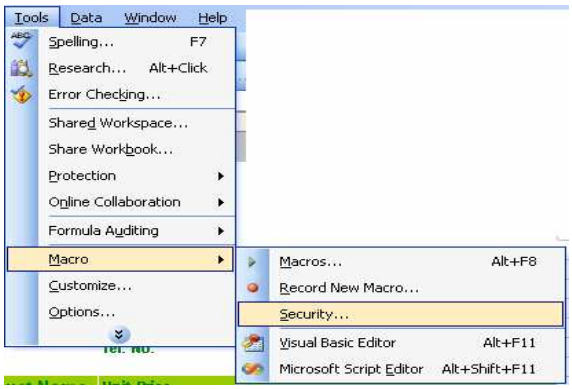
Or you can always give us a call and arrange a meeting with one of our specialist.

If you are experiencing any difficulties the best thing to do is make a note of the problem and contact us a soon as possible so we can come up with a solution.

Troubleshooting FQA's

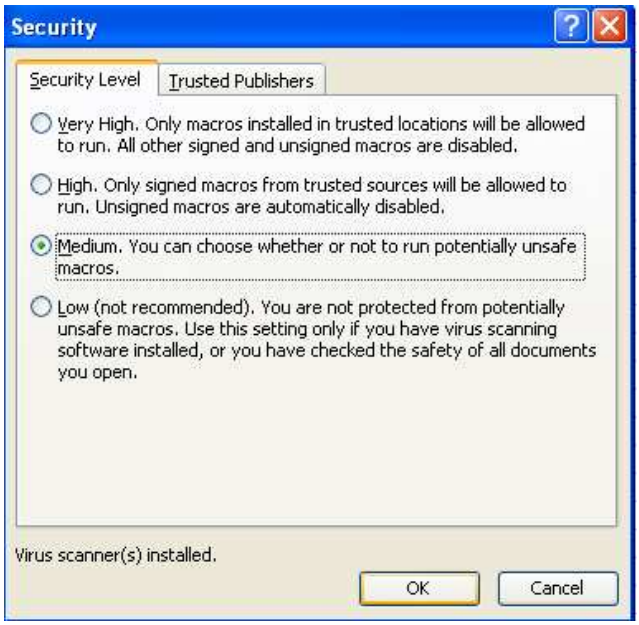
Why doesn't the user form load up when I open the system?

This usually happens when there is a high level of security on Microsoft Excel. In order to overcome this you must alter the security setting.



Go on to the tools option, Macro and then double click the option 'Security'

This will open up a dialogue like the one below:



The security level is usually high which is why you are having problems opening it. Therefore a more appropriate security level is medium however low level can be enabled as well. Every time the programme opens the software will ask whether I want to enable or disable macros.

This should solve the problem however if there is an occasion where it does not then it is best to delete the system off your computer and then reinstall it via CD. If this doesn't seem to work as well then call us and we will try to deal with the problem as quick as we can.

When I click print on the invoice, it does not work.

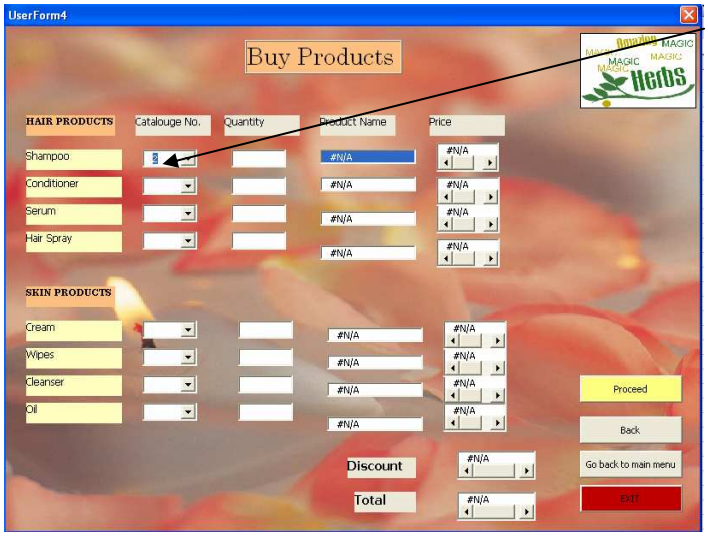
Ensure that the printer and computer are connected properly. If wires are missing or have not been connected then this will cause connection problems. Try to print again after checking the wires and if there are still problems restart the system.

How do I add more products to my catalogue?

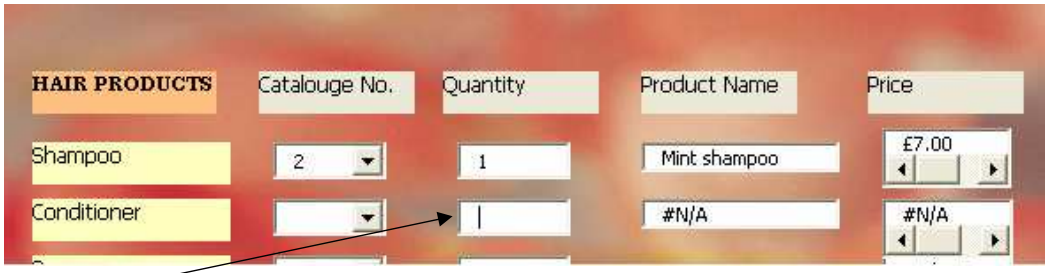
This is a process that we do not recommend our clients to undertake themselves. Therefore if you would like more products you can send us the system back with details of the new products you wish to include and this can be completed and ready between 1-2 weeks. Please contact us for further information.

Why is it when I change the catalogue number in my order, the details do not come up?

This happens because you need to click somewhere else on the user form. This is because is so it can load the correct details.



.I have selected the a product of catalogue number 2. As I have not clicked anywhere after selecting this number, as you can see its details such as product name and price are missing.



Click in any other box for the details above to come up.
Now that I have clicked elsewhere I can see the correct product information such as name and price.

EVALUATION

Evaluation

10% Discount on products are automatically calculated once the total is made.
Once all products have been added up a total will appear, after that total there will be a discount section where 10% is deduced from the total price automatically. This feature is extremely beneficial to the company as of it main concerns was how it took too long to work out the actual price of products because the previous method was simply worked out by the employee via paper and calculator which is prone to error. All the calculations are correct and the user cannot see how the total is made. This means that this feature exceeds the above user requirement.

All calculations need to be accurate and correct
In order to have correct calculations it was essential that the V LOOK UPS worked and were in the right place. Correct prices also depend on the formulas made on the invoice and whether the right cells were linked from the user form to the invoice. From the testing results it can be proved that the calculations were accurate and correct.

Invoices need to be produced quickly
The beauty of this system is that all information that is being entered on the 'buy products' user form are automatically transferred on the invoice so information does not have to be entered twice which saves time. Therefore once finished entering the products the user can press print straight away. This means that this user requirement was met,

Needs to store all transactions
The previous track information is accessed via the customer details spreadsheet. This is a list of customers and their contact details as well as their previous purchase details. Therefore this user requirement has also been fulfilled.

All validation checks must work
Unfortunately I was unable to put in any validation checks in my system at all. This is a problem for my system as errors can occur by the user especially when entering postcodes and telephone numbers. The user will have to ensure that the fields are correct and double check with the client on the phone.

Should be able to edit information
The user is able to edit customer details via customer details spread sheet. Therefore phone numbers, addresses and orders are all up to date.

Should be able to add information
The user is able to add information via the registration user form which automatically goes on to the spreadsheet.

Should be able to delete information
The user is able to delete information via customer details spread sheet.

Data should be able to be accessed again once saved by user
The user simply has to open the system again and all information present when saved should still be there.

The system should be able to provide the user with accurate stock levels.
There was a problem that I was faced with, with regard to stock levels. The stock levels would show up, however they are not accurate. For example if a product has been purchased it would not deduce from the original stock level, hence stock levels are inaccurate.

Invoice should be printed on a sheet of A4 paper after details have been submitted.
Once all information such as product details, price and quantity are display it will print out on an A4 sheet, I have attached a copy of this in the implementation section.

This solution must look professional and organised
I believe the system is very professional and certainly goes with the theme of the business 'Magic Herbal Products'. I have not used bright colours to distract the user also the user forms are not cluttered with too many command buttons, text boxes, list boxes and combo boxes.

The solution needs to be able to store customer details in order of customer number.
Each time a new customer registers, the user allocates a customer number for them and on the system it will save in order. Therefore this user requirement was met.

To be easy to user and user friendly
When testing the system I got someone with no knowledge of the system to use it and got feedback from them. She said that it was easy to use and understood exactly what each user form required of her. Another comment made was that the layout was appealing to her. From this I can say that I believe my system is very user friendly with minimal complexity which is crucial for this business as they are used to paper based file. At the moment they are computer illiterate therefore it is fundamental that the system is simplistic.

New customer details should automatically be transferred to the customer details spread sheet.
When filling in customer details all the information as stated above transfers to the customer details spread sheet. This saves the user from filling out the details twice, saving time which portrays professionalism.

Limitations of the system

As stated above two of my user requirements did not satisfy completely what they were supposed to do. Now I will comment about problems I was faced with whilst creating the user interface and also problems that occurred during the testing of the user interface. Furthermore I will state how I overcame these problems and how it has improved the system. I will be discussing whether the system is reliable and fulfils the user requirements. There are a few faults in my system . The major flaws in my system is the fact that only one product out of a certain group of products can be purchased at one time. For example in my shampoo range I have 3 shampoos and only 1 of these shampoos can be bought. This is because only 1 item can be selected via the combo box. This disadvantage of my system means that if the user wants to by 2 different shampoos or conditioners, they will have to order 1 and do the second one straight after. In practice this wastes both the users time and the customers time.

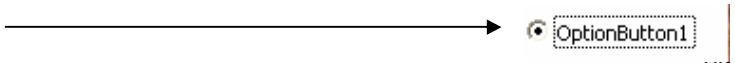
Another issue that was experienced with my system is that the stock control was not accurate. This meant that my user requirement of 'The system should be able to provide the user with accurate stock levels' was not met completely. My stock control allows the user to see how much of a certain product is in stock. However once an order has been placed, the products that have been purchased are not subtracted from the stock levels. This ultimately means that the stock levels are never updated. This can cause the company problems as they have no indication of what products are in and out of stock therefore they don't know when to contact suppliers and buy more products. Furthermore this can cause problems as the company could be selling products that they simply do not have. When customers find out that their orders have not been delivered it will lower their satisfaction causing the company to face complaints and also destruction in their reputation.

A significant problem in this system was the fact that when the user wants to add products to the 'buy products' page all fields must be entered even if they don't want to purchase a particular product. So if a customer wants to order one bottle of serum, the user must still fill in the other combo boxes and then to cancel the unwanted order, all the quantites must be filled in with 0, because that a unwanted products × 0 which amounts to just the desired product that will be purchased. This factor also wastes time as the user has to ensure all combo boxes have a catalogue number in them and that they are multiplied by 0.

Improvements for the future

From these cons with my system I have come up with improvements that would make my system better if I were to do this again. At the moment anyone can access the system and make orders. However it would be more beneficial to the company if there was more security. This can consist of entering a password and username before the system opens. This way only authorised people can access the system which means customer details are secure, hence improving customer service.

The 'buy products' user form uses a combo box that give the options of what catalogue numbers are available to purchase. However as mentioned previously this meant that only one product of each category can be purchased. This is a problem because a customer may want more than one type of shampoo or conditioner and so forth. Therefore a better method of showing which products are available to purchase is using a option button. This will enable the user to click on any of the products that



they desire to purchase.
This way even products of the same type can be purchased e.g. two different shampoos can be selected which couldn't be done with the combo boxes.

On a whole the system is a success as it is dramatically more enhanced, professional and easier than the paper based system. Additionally most of my user requirements were met, those that weren't can be resolved in time where the whole system will work efficiently.