RECOGNISING ACHIEVEMENT

Exemplar Candidate Work

Part 2 of 2

GCE in Applied ICT

OCR Advanced Subsidiary GCE in Applied ICT: H515/H715

Unit G049: Numerical Modelling Using Spreadsheets

Unit 10

Task D

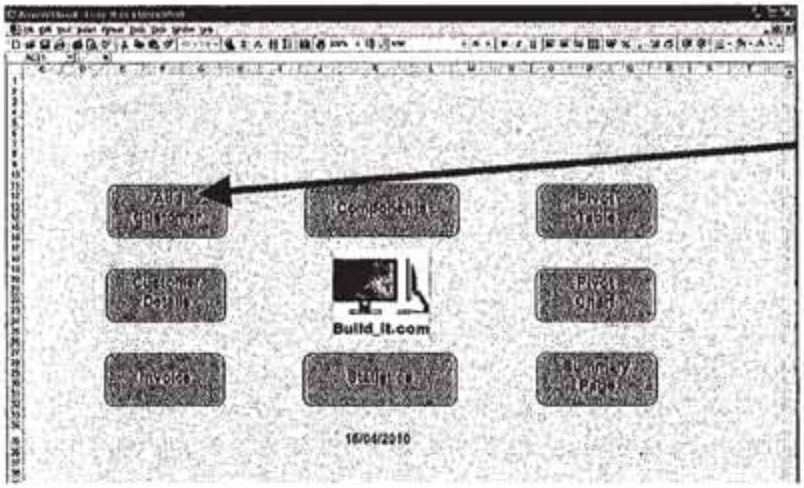
Task D

For this assignment I will test the .com spreadsheet to ensure that all aspects are working correctly and the measures taken to fix areas that may have failed the test. I will test every worksheet in turn to ensure a comprehensive testing has been conducted.

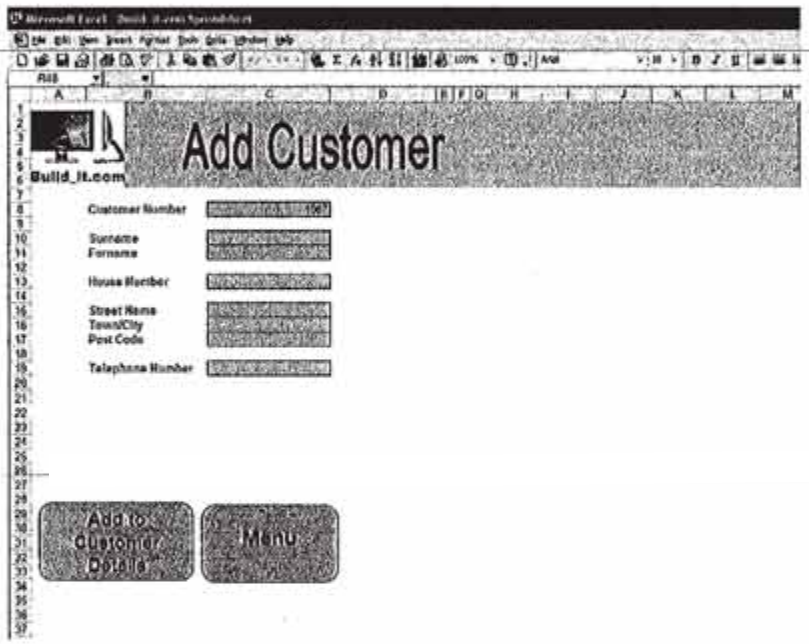
Menu Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
1	Add Customer Macro on Menu Worksheet	Click on Add Customer Macro	Move to Add Customer Worksheet	Pass
2	Customer Details Macro on Menu Worksheet	Click on Customer Details Macro	Move to Customer Details Worksheet	Pass
3	Invoice Macro on Menu Worksheet	Click on Invoice Macro	Move to Invoice Macro	Fail
4	Components Macro on Menu Worksheet	Click on Components Macro	Move to Components Worksheet	Pass
5	Statistics Macro on Menu Worksheet	Click on Statistics Macro	Move to Statistics Worksheet	Pass
6	Pivot Table Macro on Menu Worksheet	Click on Pivot Table Macro	Move to Pivot Table Worksheet	Pass
7	Pivot Chart Macro on Menu Worksheet	Click on Pivot Chart Macro	Move to Pivot Chart Worksheet	Pass
8	Summary Page Macro on Menu Worksheet	Click on Summary Page Macro	Move to Summary Worksheet	Pass
9	Date Function within Menu Worksheet	Check the date using a calendar	Appear as today's date	Pass

Test 1



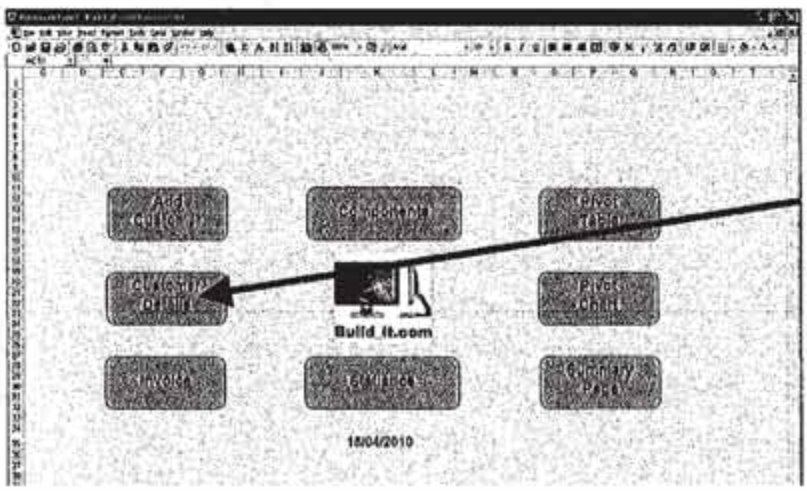
The Add Customer Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Add Customer worksheet within the Excel document in one click.



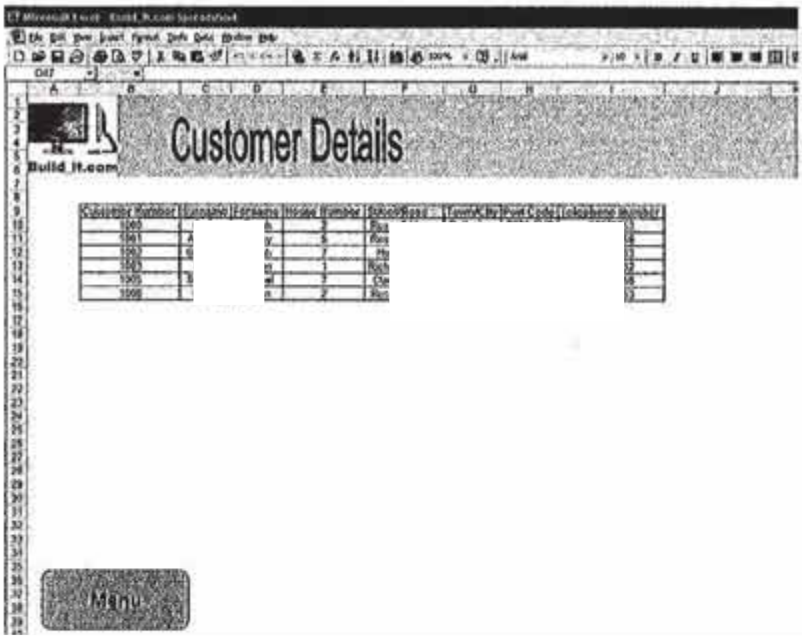
The macro took me to the Add Customer worksheet once clicked upon.

Thus this test passed.

Test 2



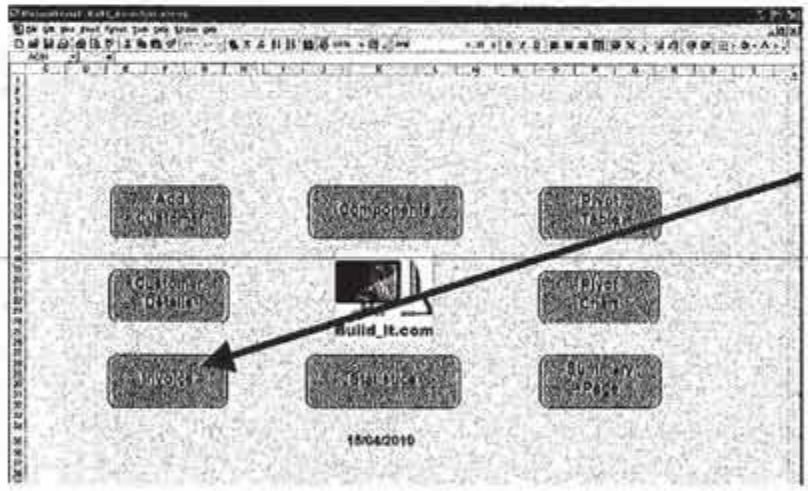
The Customer Details Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Customer Details worksheet within the Excel document in one click.



The macro took me to the Customer Details worksheet once clicked upon.

Thus this test passed.

Test 3



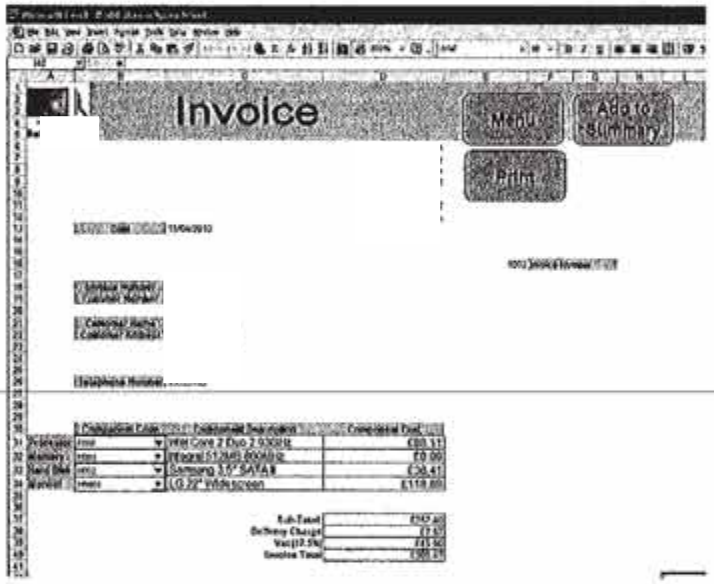
The Invoice Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Invoice worksheet within the Excel document in one click.

problem detected

An error message appeared when I clicked the Invoice, thus it did not pass the test initially.

When I clicked on the 'Debug' tab on the error message the problem was evident. There was a space in the word, thus it would not link to the Invoice worksheet. The space was deleted from the macro code, so the macro should function properly.

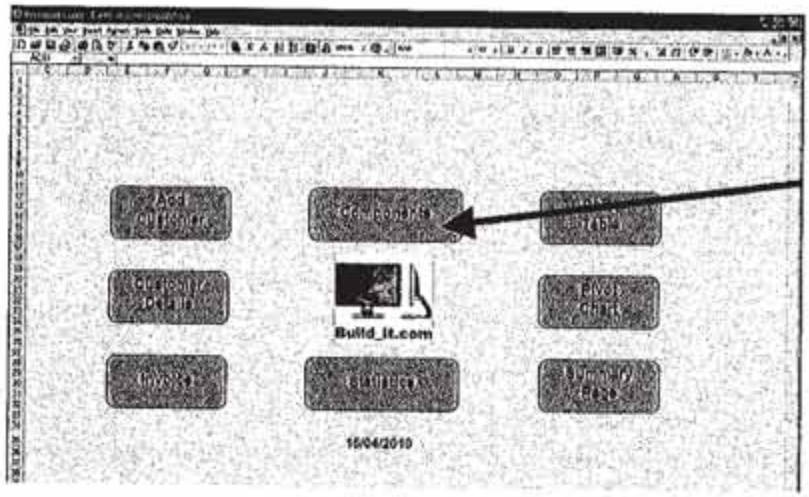
Method of Fix



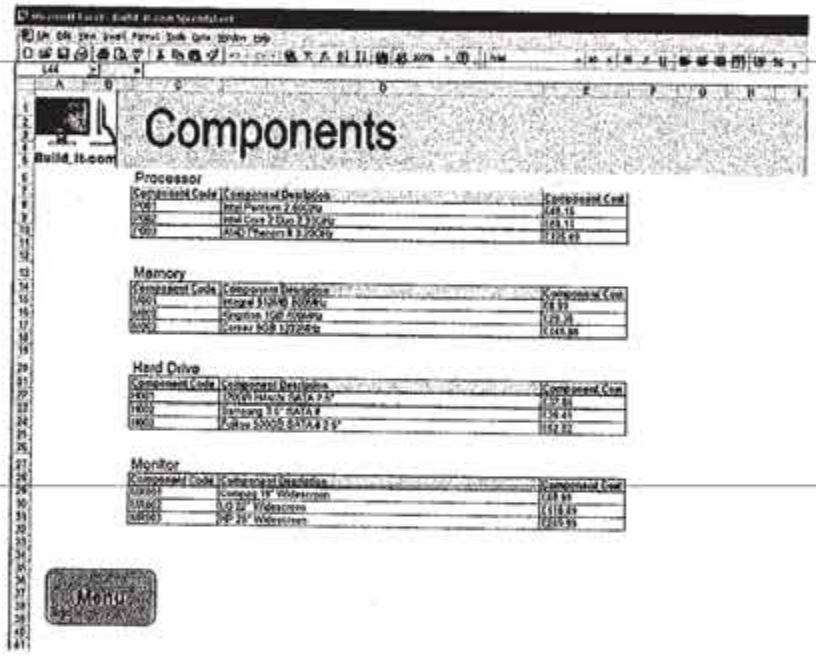
Once the problem was fixed, the Invoice macro was clicked and it took me to the Invoice worksheet.

Thus, this test failed initially but passed once the problem was fixed.

Test 4



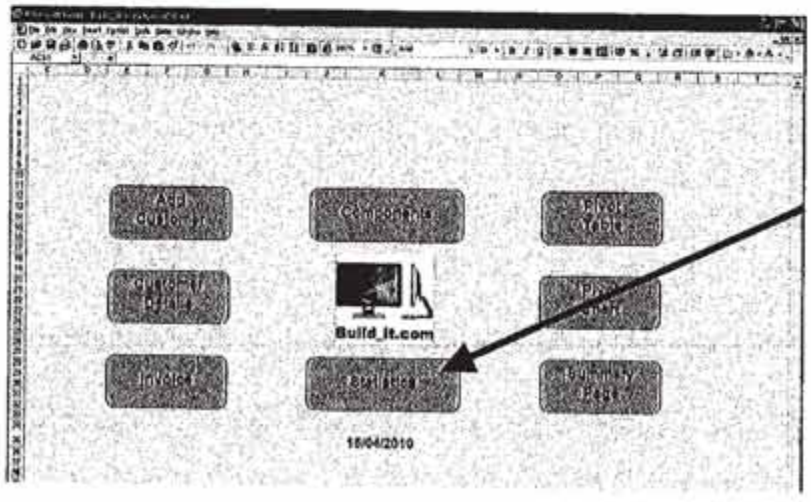
The Components Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Components worksheet within the Excel document in one click.



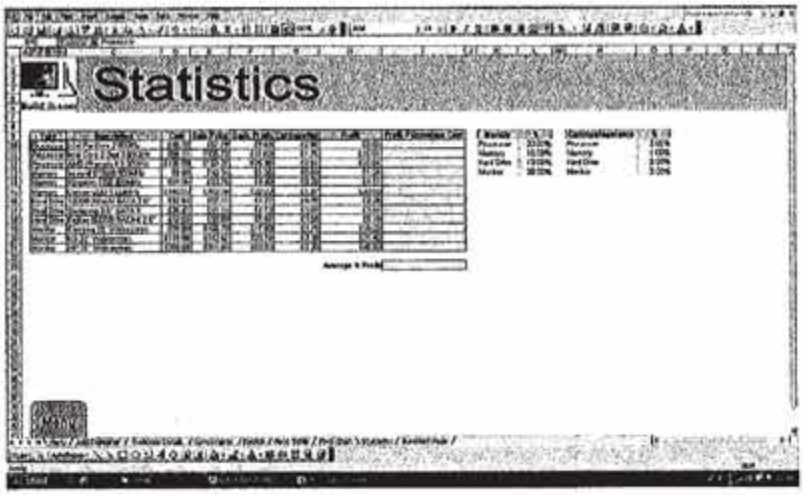
The macro took me to the Components worksheet once clicked upon.

Thus this test passed.

Test 5



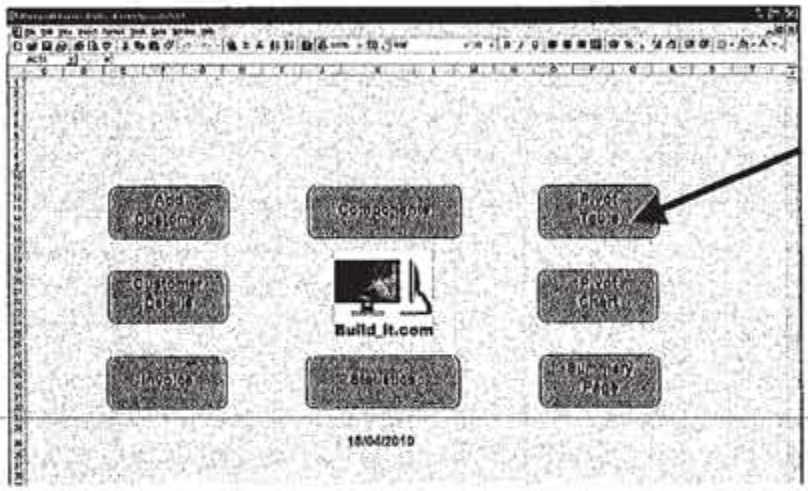
The Statistics Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Statistics worksheet within the Excel document in one click.



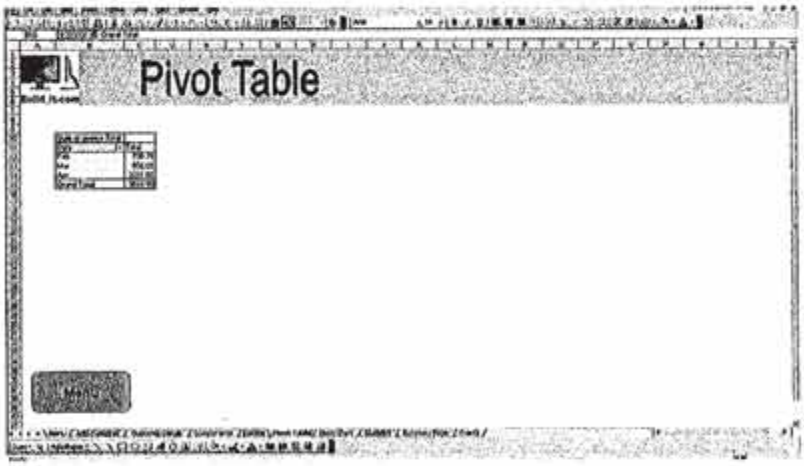
The macro took me to the Statistics worksheet once clicked upon.

Thus this test passed.

Test 6



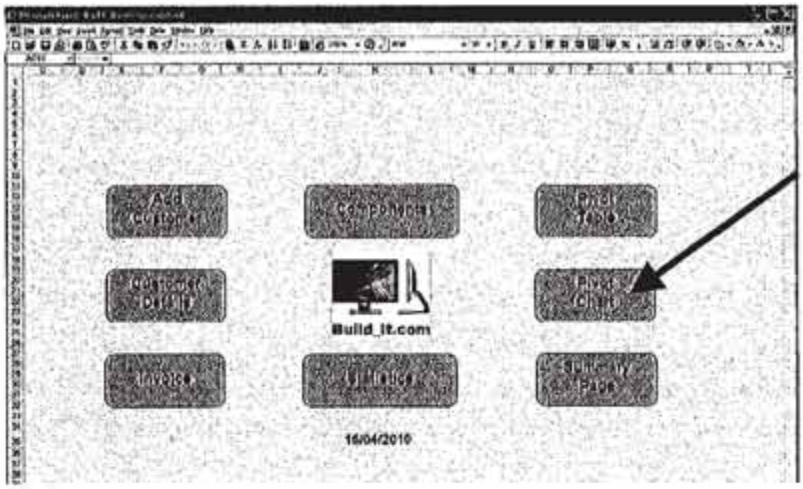
The Pivot Table Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Pivot Table worksheet within the Excel document in one click.



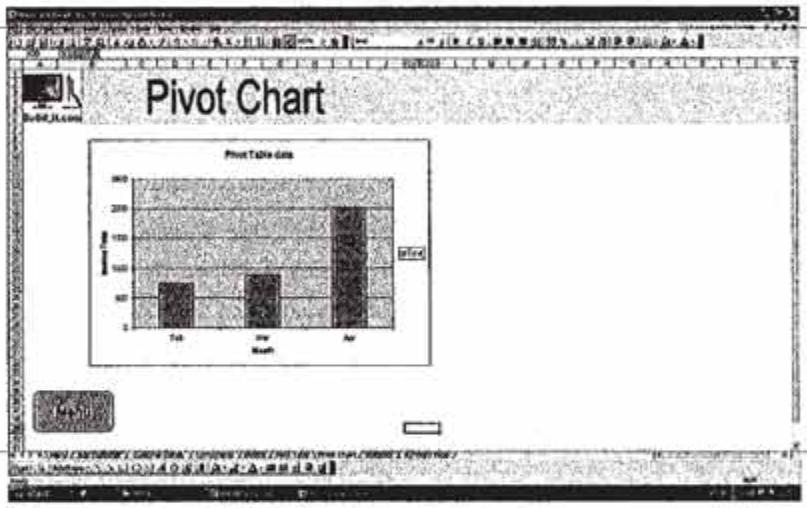
The macro took me to the Pivot Table worksheet once clicked upon.

Thus this test passed.

Test 7



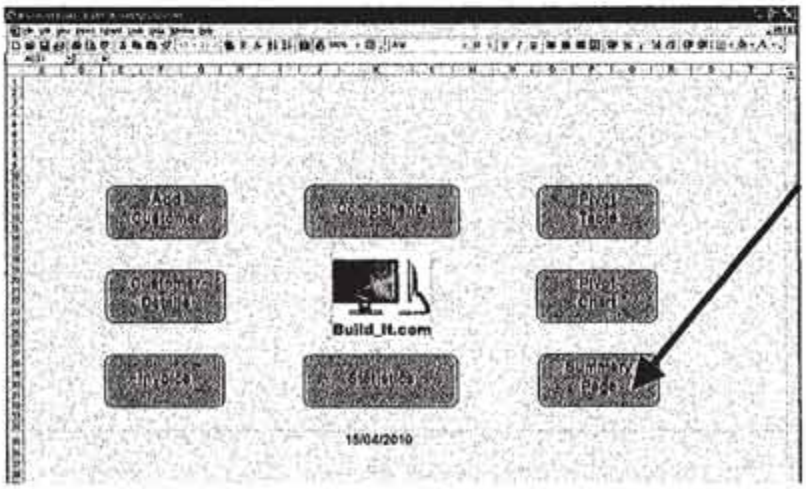
The Pivot Chart Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Pivot Chart worksheet within the Excel document in one click.



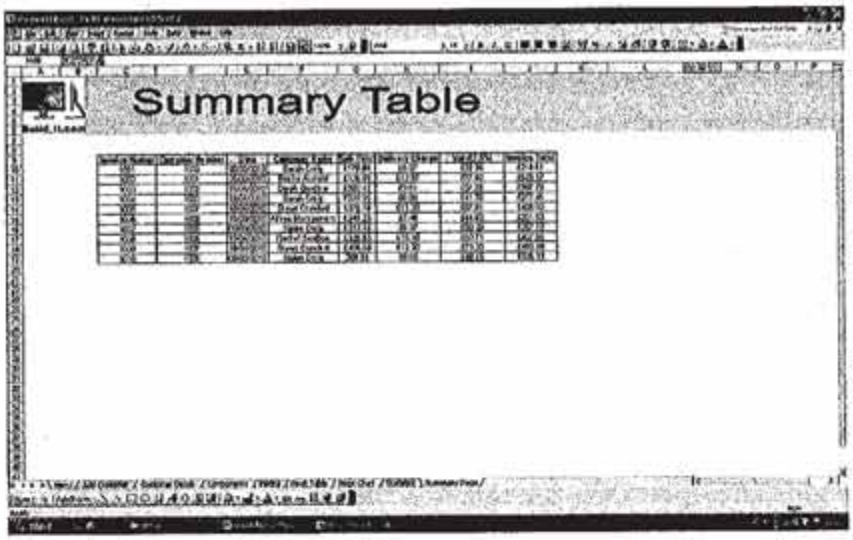
The macro took me to the Pivot Chart worksheet once clicked upon.

Thus this test passed.

Test 8



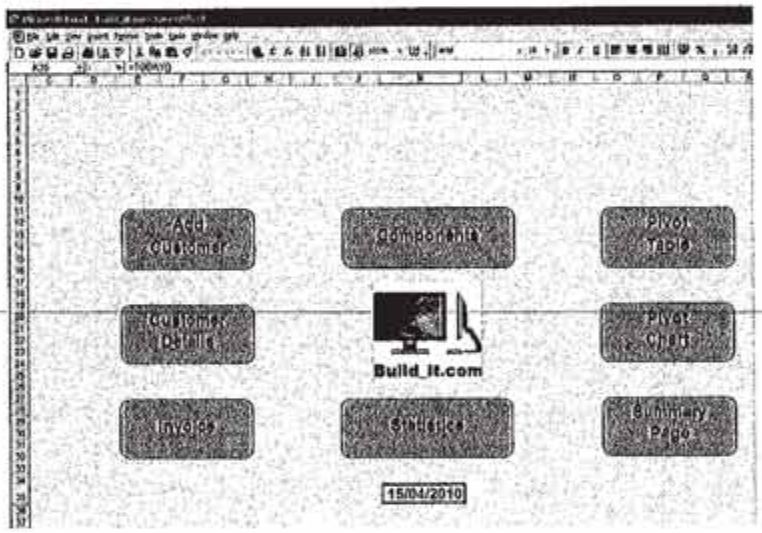
The Summary Page Macro was clicked upon within the Menu worksheet in order to see if it will take me to the Summary Page worksheet within the Excel document in one click.



The macro took me to the Summary Page worksheet once clicked upon.

Thus this test passed.

Test 9



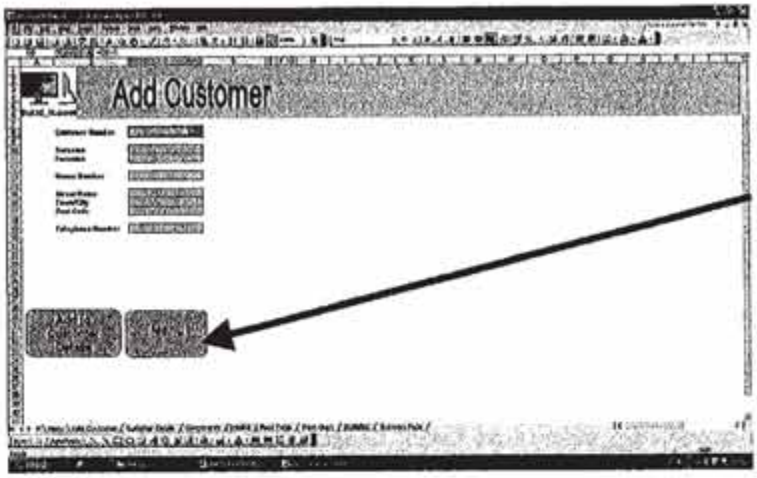
The date that appears within the Menu worksheet was correct when checked against a calendar.

Thus this test passed.

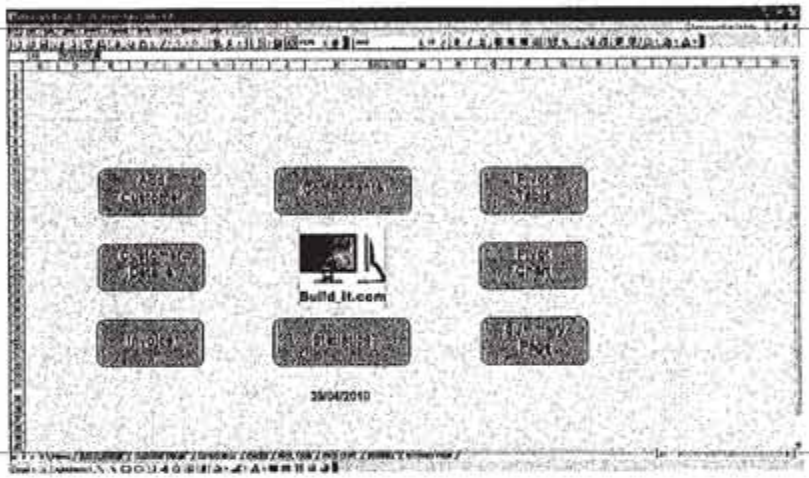
Add Customer Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
10	Menu Macro on Add Customer Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
11	Add to Customer Details Macro	Add data within the form and click the add to customer details macro	Data will be presented within the table in the customer details worksheet	Fail
12	Add to Customer Details Macro	Add data within the form and click the add to customer details macro	The customer number will increment within the add customer worksheet	Pass
13	Add to Customer Details Macro	Add data within the form and click the add to customer details macro	The cells within the add customer form will clear, ready for the next customer	Pass
14	Length Check in Surname Cell	Customer's Surname	No error message appearing	Pass
15	Length in Forename Cell	Customer's Forename	No error message appearing	Pass
16	Whole Number Check in House Number Cell	Customer's House number	No error message appearing	Pass
17	Length Check in Street Name Cell	Customer's Street Name	No error message appearing	Pass
18	Length Check in the Town/City Cell	Customer's Town/City	No error message appearing	Pass
19	Length Check in the Post Code Cell	Customer's Post Code	No error message appearing	Pass
20	Length Check in the Telephone Number cell	Customer's Telephone Number	No error message appearing	Pass

Test 10



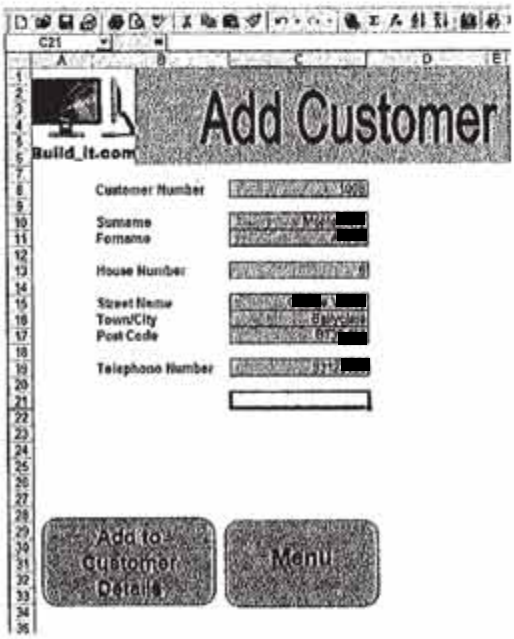
The menu page macro was clicked upon within the Add Customer worksheet in order to see if it will take me to the Menu Worksheet.



The macro took me to the Menu Worksheet once the menu macro was clicked upon.

Thus this test passed.

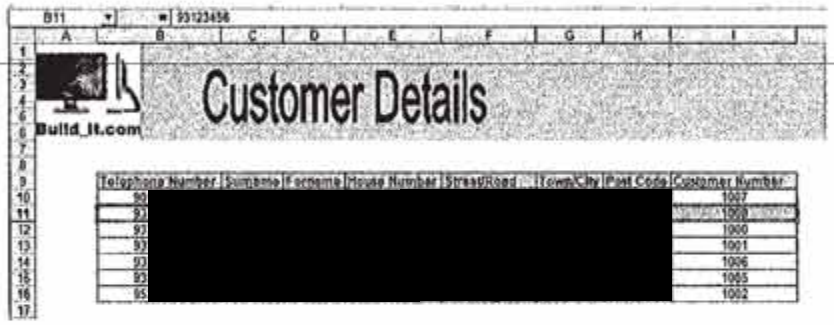
Test 11



I entered a mock customer within the Add Customer form and clicked on the Add to Customer Details macro.

The menu macro when first clicked upon did not work and kept flashing on the screen. Therefore, in order to fix this problem I researched a possible solution and found the formula, Application. ScreenUpdating = False which could be inserted as code into the macro, using the edit macro feature. This will therefore enable the macro to complete the task in one move and not for the macro to flash every time an action is being performed.

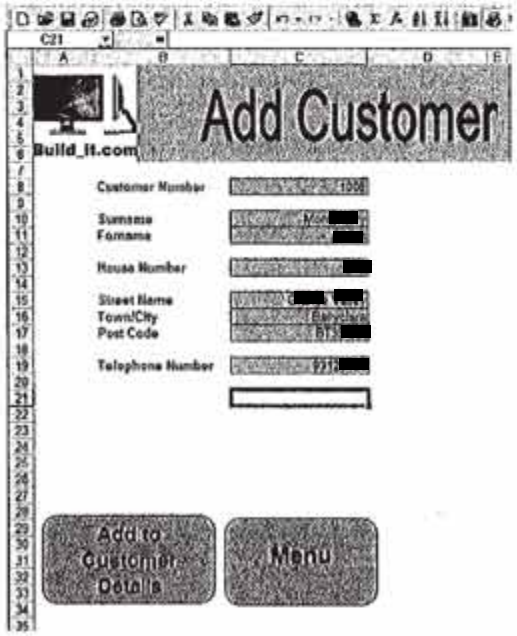
problem detected & fixed



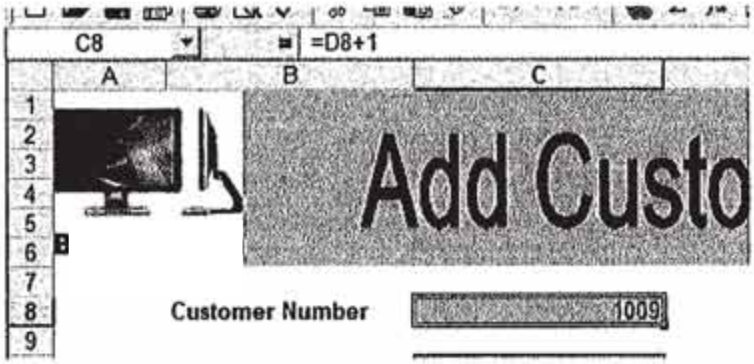
The macro copied all of the data over and also sorted the content from the telephone number, which will later be used in the invoice worksheet.

Thus, this test passed once the problem was fixed.

Test 12



After the customer's details were added to the Add Customer worksheet, I clicked on the add to customer details macro to see if the customer number within this worksheet incremented, to ensure every customer gets a unique customer number.

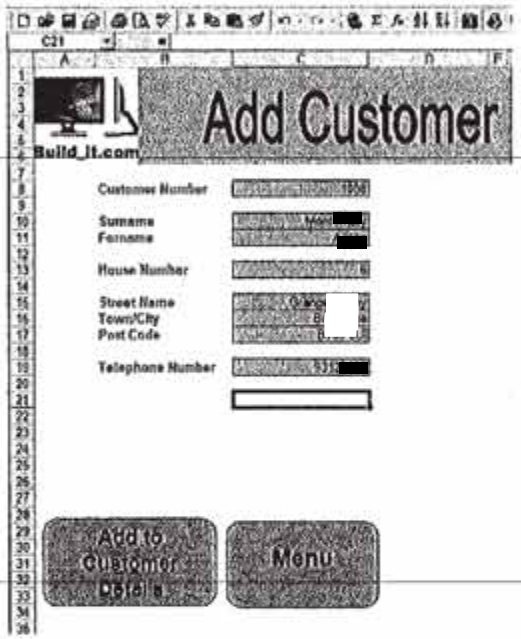


The customer number also incremented for the next customer to ensure that every customer has a unique number.

Thus this test passed.

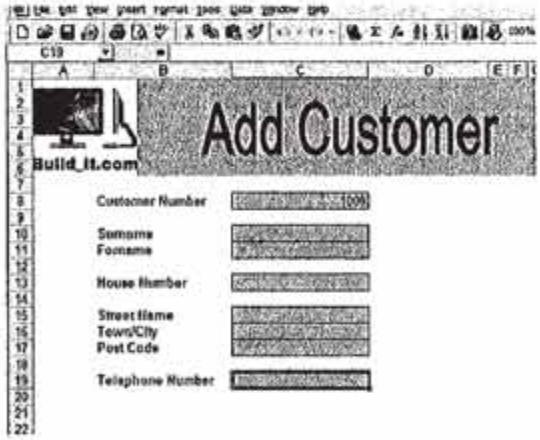
incrementing of cust. no.

Test 13



After the customer's details were added to the Add Customer worksheet, I clicked on the add to customer details macro to see if the cells within the add customer form would clear, ready for the next customer.

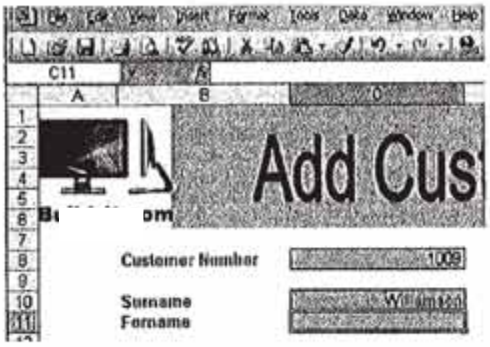
reset



The add customer form was cleared, ready for the next customer apart from the customer number.

Therefore, this test passed.

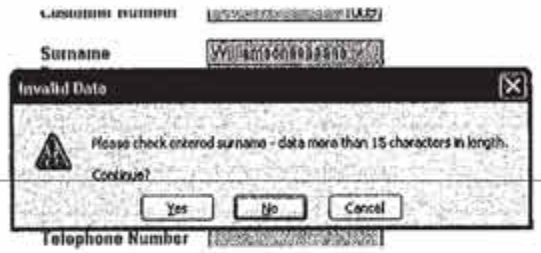
Test 14



I entered the Customer's forename in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.

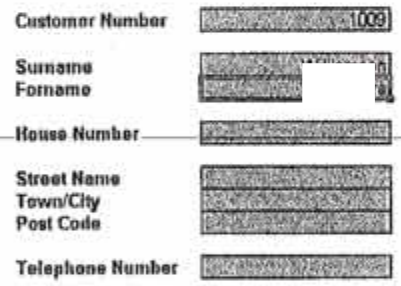
Thus, this test passed.

Validation



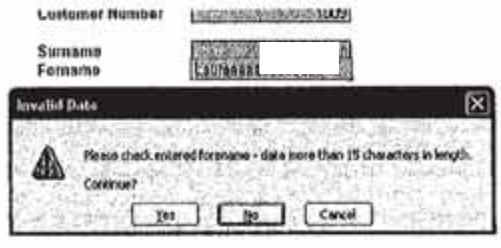
However, when I deliberately entered incorrect data, an error message appeared. This therefore shows that the cell had been validated to account for only having between 1-15 characters.

Test 15



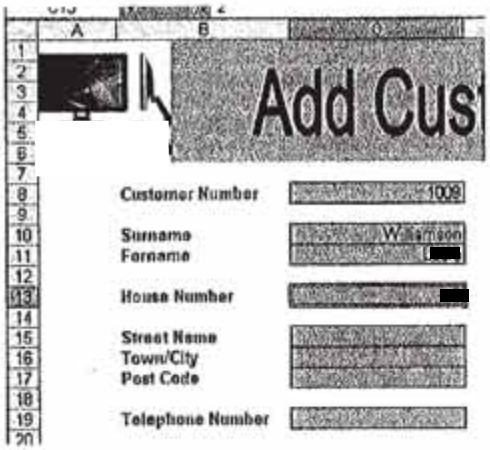
I entered the Customer's surname in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.

Thus, this test passed.



However, when I deliberately entered incorrect data, an error message appeared. This therefore shows that the cell had been validated to account for only having between 1-15 characters.

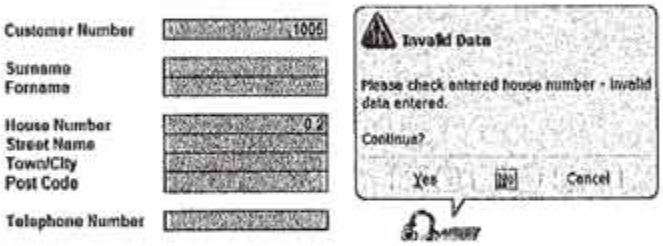
Test 16



I entered the Customer's house number in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.
Thus, this test passed.

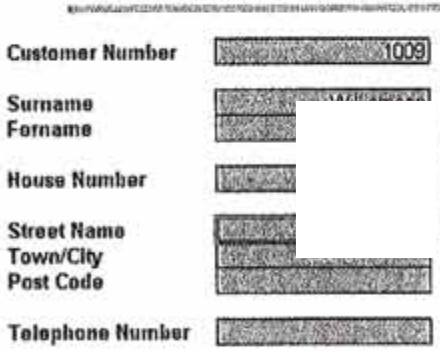
✓ Data type error

When a decimal number was entered, the warning message appeared. Therefore, this validation check shows that the cell had been validated to account only for whole numbers.



✓

Test 17

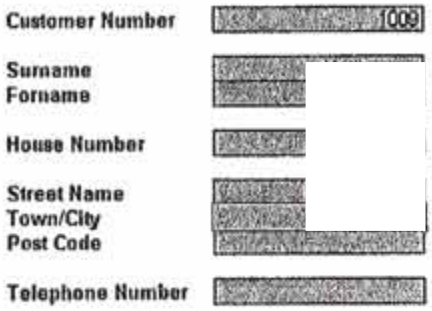


I entered the Customer's street name in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.
Thus, this test passed.

✓

However, when I deliberately entered incorrect data, an error message appeared. This therefore shows that the cell had been validated to account for only having between 1-30 characters.

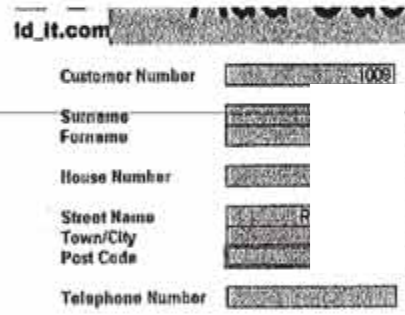
Test 18



I entered the Customer's town where they live in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.
Thus, this test passed.

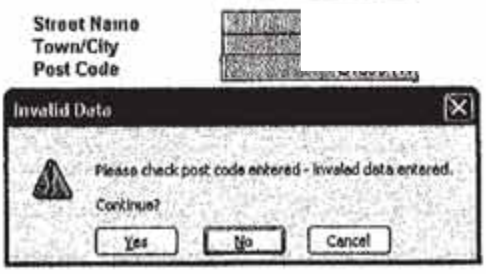
However, when I deliberately entered incorrect data, an error message appeared. This therefore shows that the cell had been validated to account for only having between 1-20 characters.

Test 19

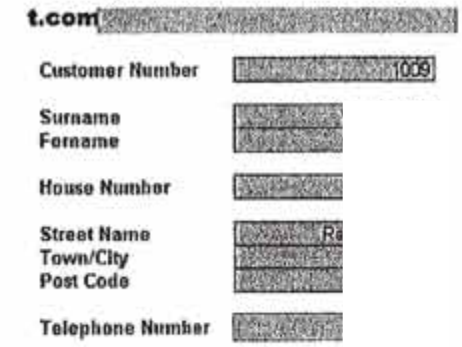


I entered the Customer's post code in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.
Thus, this test passed.

However, when I deliberately entered incorrect data, an error message appeared. This therefore shows that the cell had been validated to account for only having 9 characters, while I did not leave a space and therefore the cell only had 8 characters.

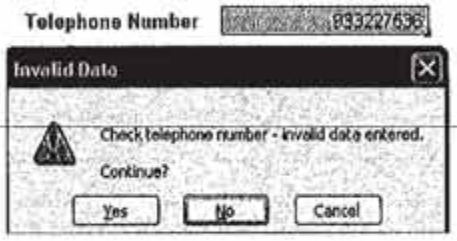


Test 20



I entered the Customer's telephone number in the appropriate cell and then pressed enter. No error message appeared therefore showing that the data entered was not invalid.

Thus, this test passed.

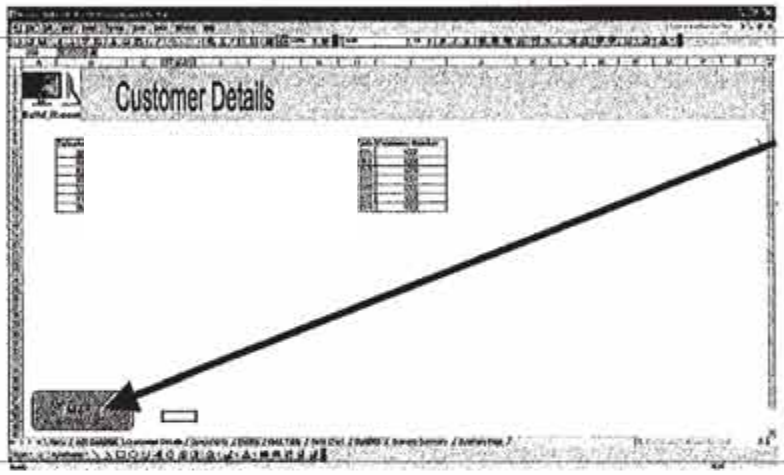


However, when I deliberately entered an extra number, an error message appeared. This therefore shows that the cell had been validated to account for only having 8 numbers.

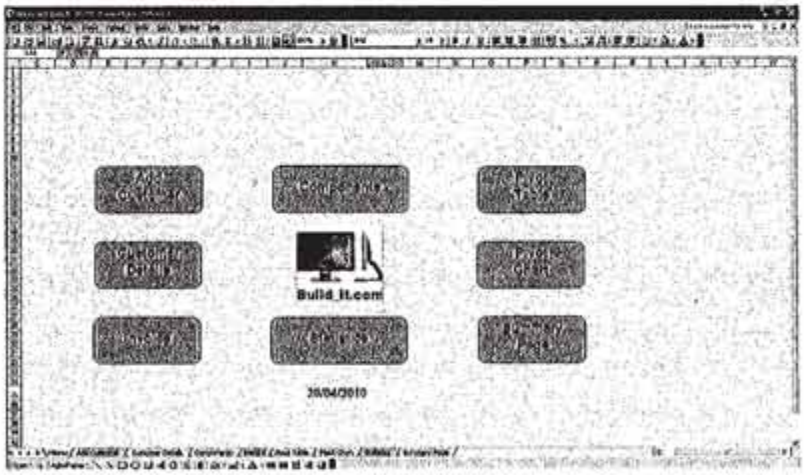
Customer Details Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
21	Menu Macro on Customer Details Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
22	Customer Details Table cell references named	Select the all of the customer details table	The table will be named accordingly	Pass

Test 21



The menu page macro was clicked upon within the Customer Details worksheet in order to see if it will take me to the Menu Worksheet.



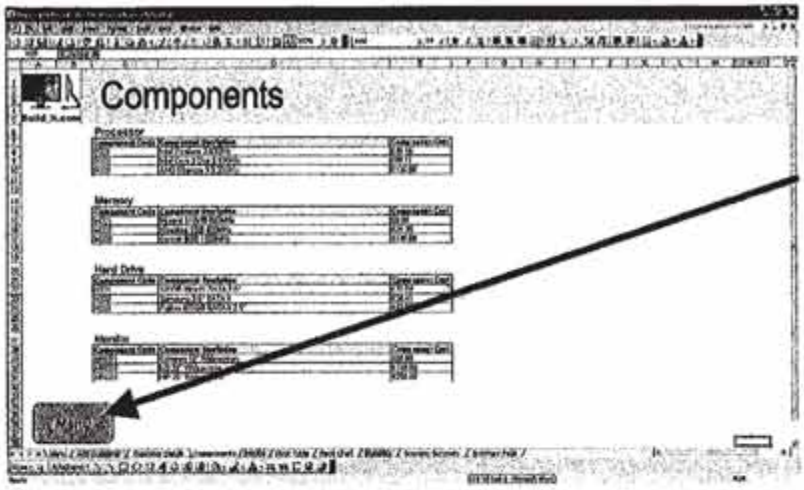
The macro took me to the Menu Worksheet once the menu macro was clicked upon.

Thus this test passed.

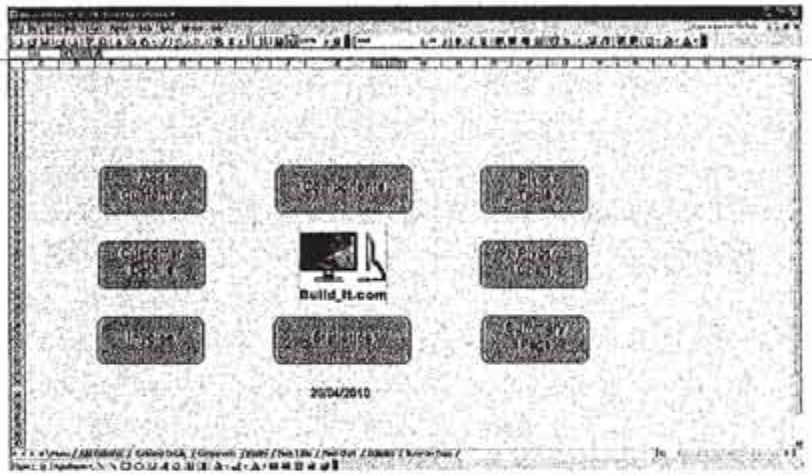
Components Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
23	Menu Macro on Invoice Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
24	Processor Table named in Components Worksheet	Select all the processor table cells	The table will be named accordingly	Pass
25	Memory Table named in Components Worksheet	Select all the memory table cells	The table will be named accordingly	Pass
26	Hard Drive Table named in Components Worksheet	Select all the hard drive table cells	The table will be named accordingly	Pass
27	Monitor Table named in Components Worksheet	Select all the monitor table cells	The table will be named accordingly	Pass
28	Processor Component Code Cells named in Components Worksheet	Select all the processor component code cells	The table will be named accordingly	Pass
29	Memory Component Code Cells named in Components Worksheet	Select all the memory component code cells	The table will be named accordingly	Pass
30	Hard Drive Component Code Cells named in Components Worksheet	Select all the hard drive component code cells	The table will be named accordingly	Pass
31	Monitor Component Code Cells named in Components Worksheet	Select all the monitor component code cells	The table will be named accordingly	Pass

Test 23



The menu page macro was clicked upon within the Customer Details worksheet in order to see if it will take me to the Menu Worksheet.



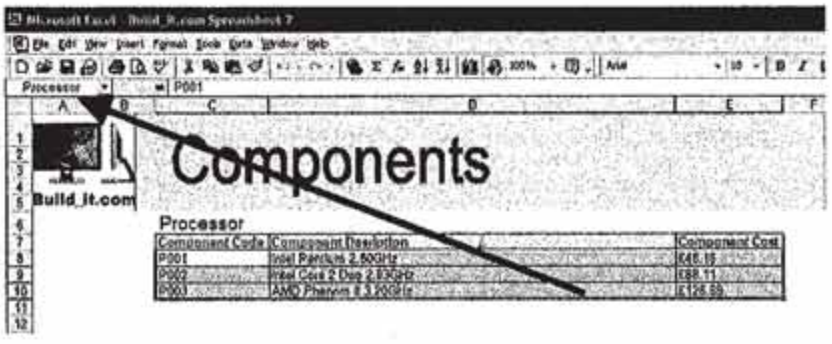
The macro took me to the Menu Worksheet once the menu macro was clicked upon.

Thus this test passed.

Test 24

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively. I highlighted the processor table cells and the cell referenced was named 'Processor'.

Thus this test passed.

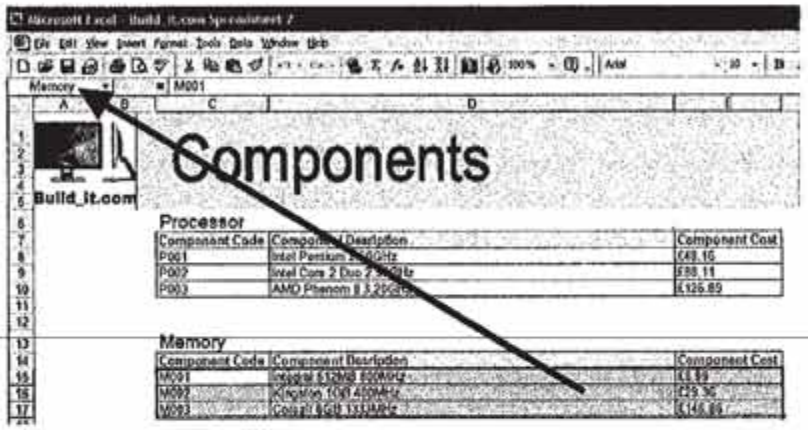


Appropriate cell range selected

Test 25

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively. I highlighted the memory table cells and the cell referenced was named 'Memory'.

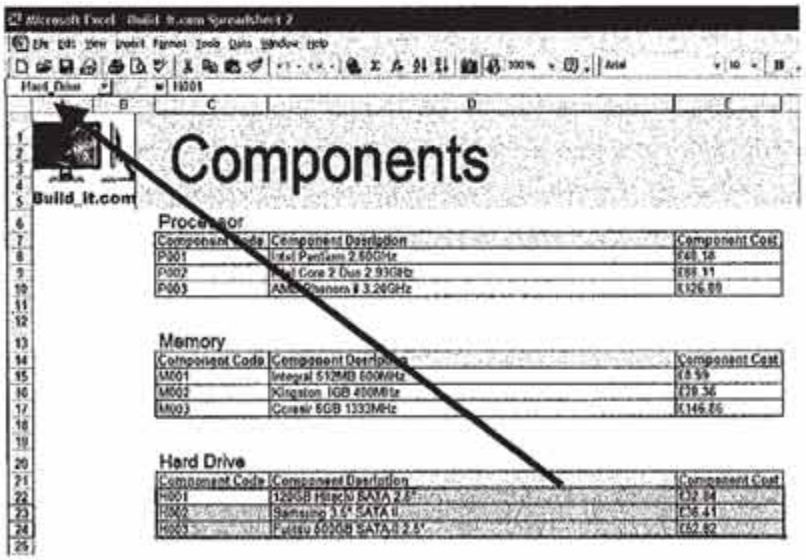
Thus this test passed.



Test 26

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively. I highlighted the hard drive table cells and the cell referenced was named 'Hard_Drive'.

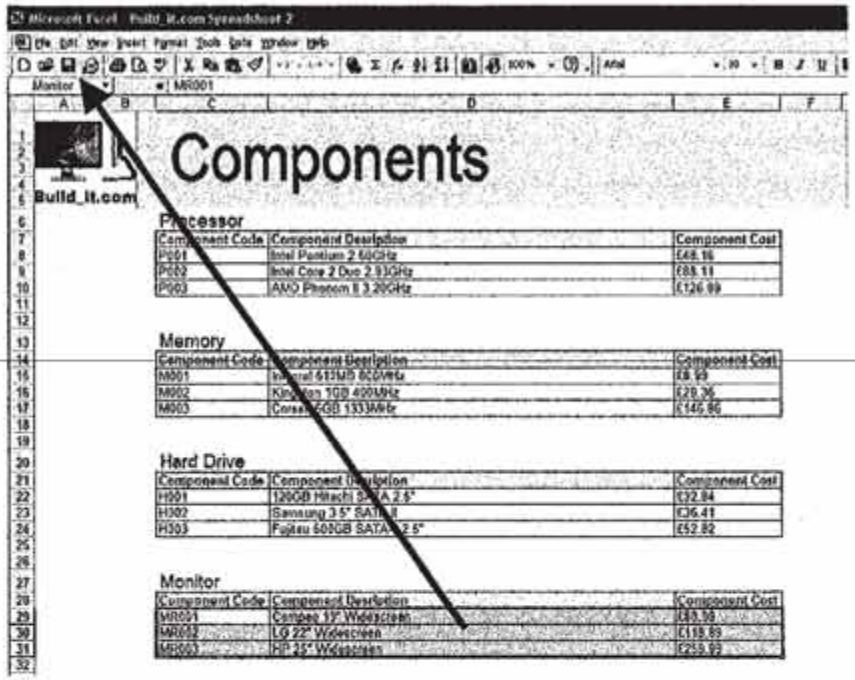
Thus this test passed.



Test 27

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively. I highlighted the monitor table cells and the cell referenced was named 'Monitor'.

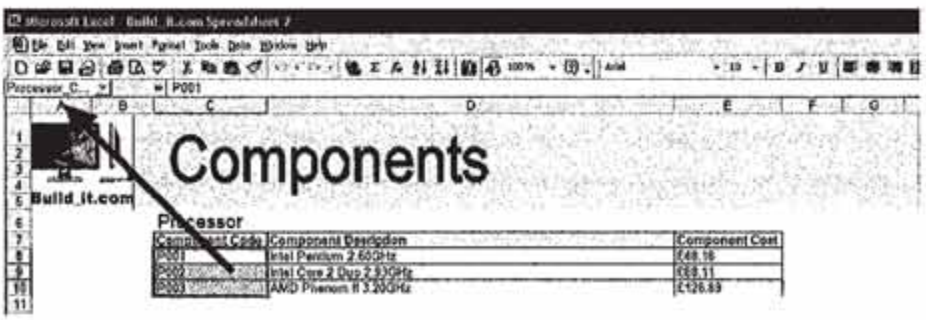
Thus this test passed.



Test 28

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively in order to create the combo boxes. I highlighted the processor component code cells and the cell referenced was named 'Processor_Codes'.

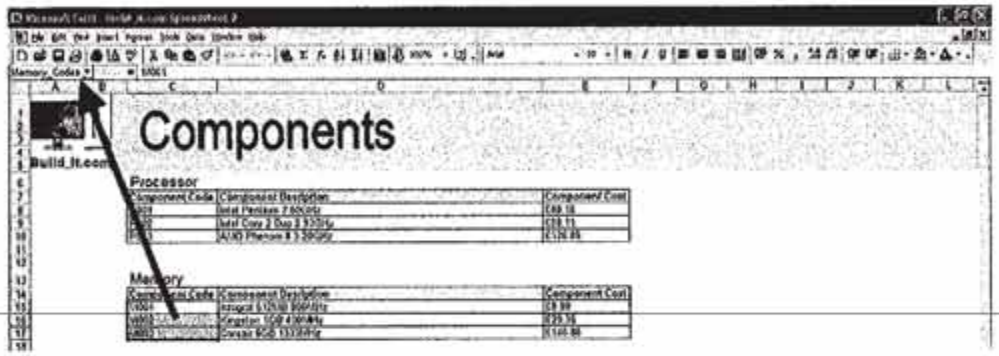
Thus this test passed.



Test 29

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively in order to create the combo boxes. I highlighted the memory component code cells and the cell referenced was named 'Memory_Codes'.

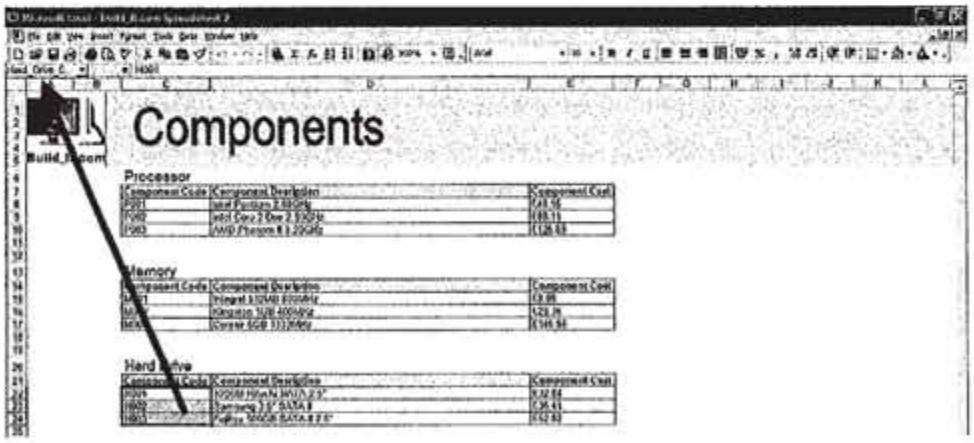
Thus this test passed.



Test 30

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively in order to create the combo boxes. I highlighted the hard drive component code cells and the cell referenced was named 'Hard_Drive_Codes'.

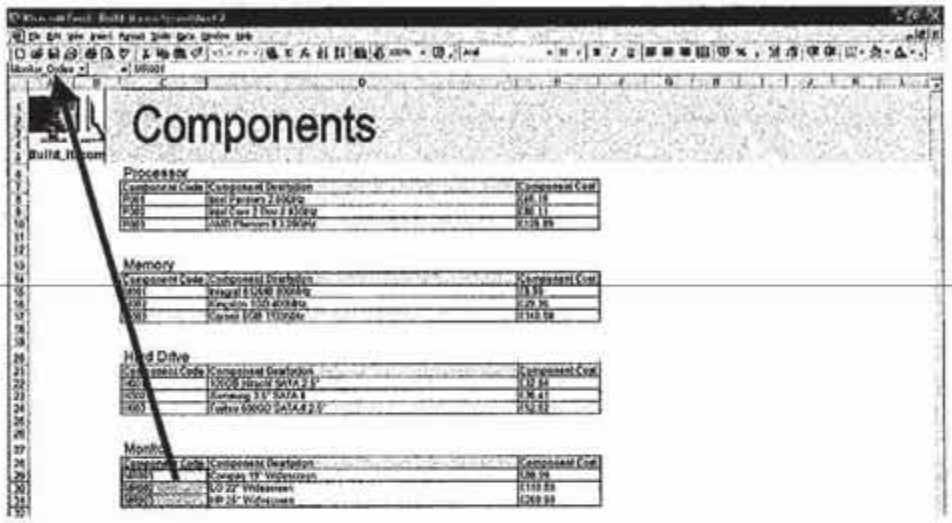
Thus this test passed



Test 31

This test was conducted as it was essential the cell references were named in order to complete the invoice worksheet effectively in order to create the combo boxes. I highlighted the monitor component code cells and the cell referenced was named 'Monitor_Codes'.

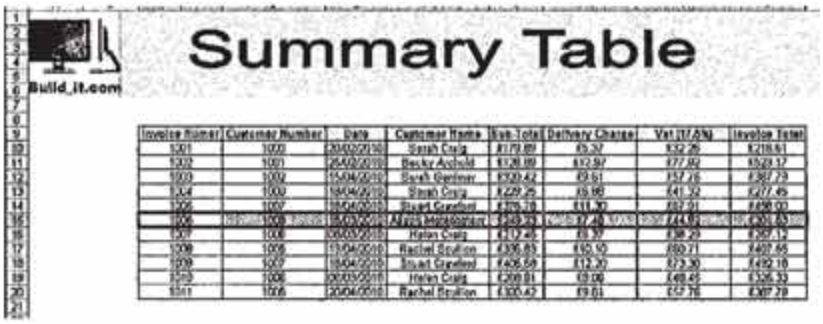
Thus this test passed.



Invoice Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
32	Menu Macro on Invoice Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
33	Invoice on one page in order to be able to print	Click on Print Preview	Invoice will appear on one page	Pass
34	Print Macro on Invoice Macro	Click on Print Macro	Bring up the Print Option, ready to click ok to confirm the print	Pass
35	Add to Summary Table Macro	Click on Add to Summary Macro	Data will be presented within the Summary Table worksheet	Pass
36	Add to Summary Table Macro	Click on Add to Summary Macro	The invoice number will increment within the invoice worksheet	Pass
37	Add to Summary Table Macro	Click on Add to Summary Macro	The customer details cells and component description cells will appear blank and the component cost cells will appear as £0.00	Pass
38	Processor Combo Box highlighting available products to purchase	Click on drop down option to select product	Three processor codes can be selected from the drop down feature	Pass
39	Memory Combo Box highlighting available products to purchase	Click on drop down option to select product	Three memory codes can be selected from the drop down feature	Pass
40	Hard Disk Combo Box highlighting available products to purchase	Click on drop down option to select product	Three hard disk codes can be selected from the drop down feature	Pass

41	Monitor Combo Box highlighting available products to purchase	Click on drop down option to select product	Three monitor codes can be selected from the drop down feature	Pass
42	Formula Correct for Sub Total Cell	Check the calculations using the calculator feature within the computer	Total from adding all of the selected component costs together	Pass
43	Formula Correct for Delivery Charge Cell	Check the calculations using the calculator feature within the computer	Total from working out the delivery charge of the product, depending on the sub total	Pass
44	Formula Correct for Vat (17.5%) Cell	Check the calculations using the calculator feature within the computer	The sub total plus the delivery charge multiplied by 17.5%	Pass
45	Formula Correct for Invoice Total Cell	Check the calculations using the calculator feature within the computer	Total by adding the sub total, the delivery charge and the Vat	Pass
46	Date Function within Invoice Worksheet	Check the date using a calendar	Appear as today's date	Pass ✓

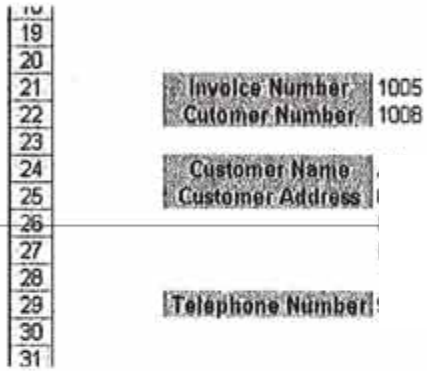


Invoice Number	Customer Number	Date	Customer Name	Sub-Total	Delivery Charge	Vat (17.5%)	Invoice Total
1001	1000	20/02/2010	Sarah Craig	£179.89	£5.32	£32.26	£218.61
1002	1001	26/02/2010	Becky Archbold	£126.89	£12.97	£77.92	£529.17
1003	1002	15/04/2010	Sarah Gardner	£320.42	£9.61	£57.76	£387.79
1004	1003	18/04/2010	Sarah Craig	£229.25	£5.99	£41.32	£277.45
1005	1007	18/04/2010	Stuart Gradford	£376.18	£11.20	£67.91	£456.03
1006	1008	23/04/2010	Alyssa Middleton	£193.78	£7.40	£44.85	£301.15
1007	1006	29/04/2010	Helen Craig	£412.45	£8.97	£68.29	£489.71
1008	1009	13/04/2010	Rachel Bruton	£336.81	£10.10	£60.71	£407.66
1009	1007	18/04/2010	Stuart Gradford	£406.59	£12.20	£73.30	£492.18
1010	1006	29/04/2010	Helen Craig	£299.81	£9.00	£48.45	£356.33
1011	1008	29/04/2010	Rachel Bruton	£320.42	£9.61	£57.76	£387.79

The macro copied all of the data over and also sorted the content by the invoice number.

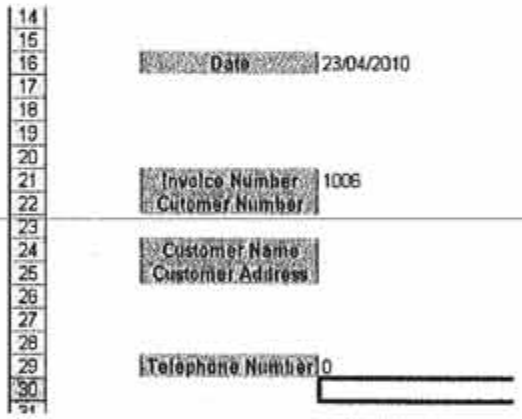
Thus, this test passed.

Test 36



After all of the details were entered, I clicked on the add to summary macro to see if the invoice number within this worksheet incremented, to ensure every customer gets a unique invoice number.

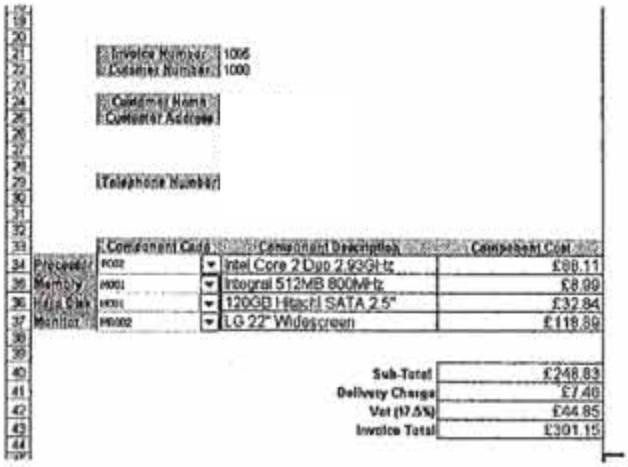
Invoice no incremented



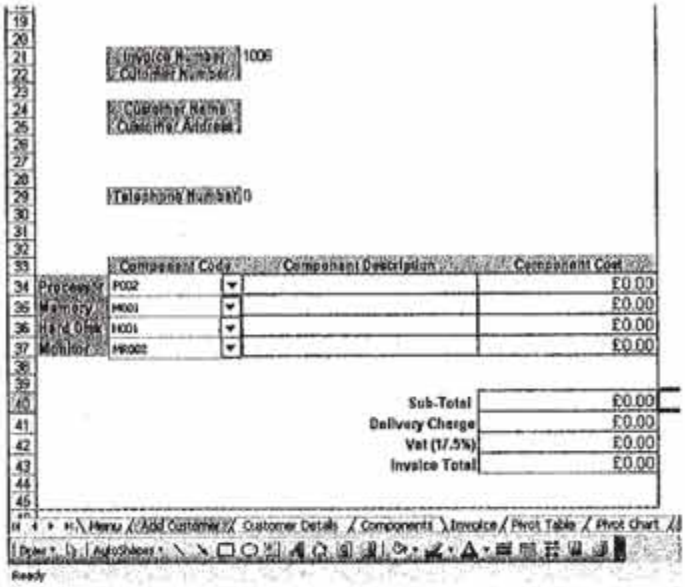
The invoice number increment for the next customer to ensure that every customer has a unique invoice number.

Thus this test passed.

Test 37



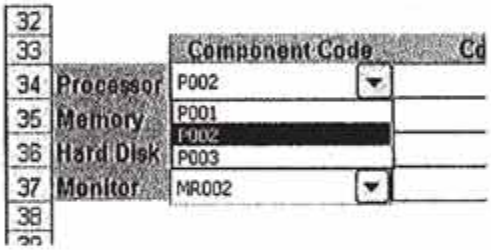
After the customer's details were added to the summary worksheet using the add to summary macro, I checked the invoice worksheet to see if the cells would appear blank or as £0.00, ready for the next customer.



The invoice worksheet appeared blank or had £0.00 for the next customer apart from the invoice number as the telephone number was set to 0.

Thus this test passed.

Test 38



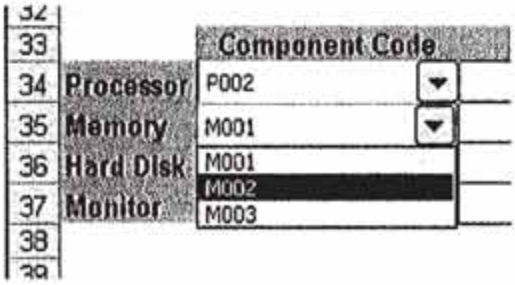
I then tested that the available processor products were the same as those within the processor table in the components worksheet.

Processor

Component Code	Com
P001	Intel
P002	Intel
P003	AMD

The same components were present within the components worksheet. Therefore the combo box was correct and the test passed.

Test 39



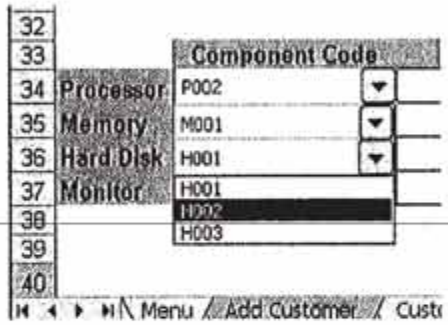
I then tested that the available memory products were the same as those within the processor table in the components worksheet.

Memory

Component Code	Comp
M001	Integra
M002	Kingst
M003	Corsai

The same components were present within the components worksheet. Therefore the combo box was correct and the test passed.

Test 40



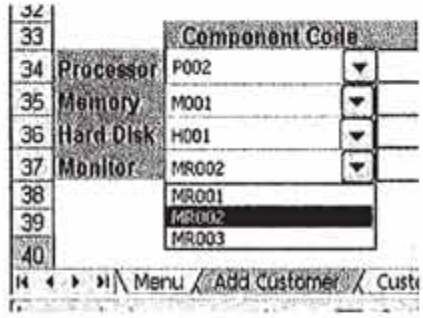
I then tested that the available hard disk products were the same as those within the processor table in the components worksheet.

Hard Drive

Component Code	Compor
H001	120GB H
H002	Samsun
H003	Fujitsu 5

The same components were present within the components worksheet. Therefore the combo box was correct and the test passed.

Test 41



I then tested that the available monitor products were the same as those within the processor table in the components worksheet.

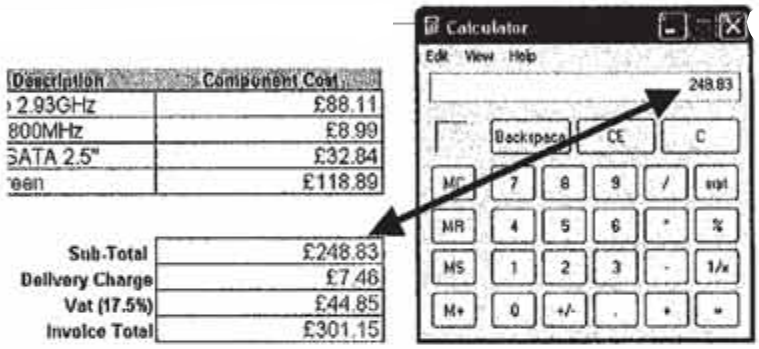
Monitor

Component Code	C
MR001	C
MR002	L
MR003	H

The same components were present within the components worksheet. Therefore the combo box was correct and the test passed.

Test 42

To test the Sub-total formula I used a calculator and compared it with the result in the sub total cell. The sub total was calculated by adding all of the component costs together. Therefore, this test passed.

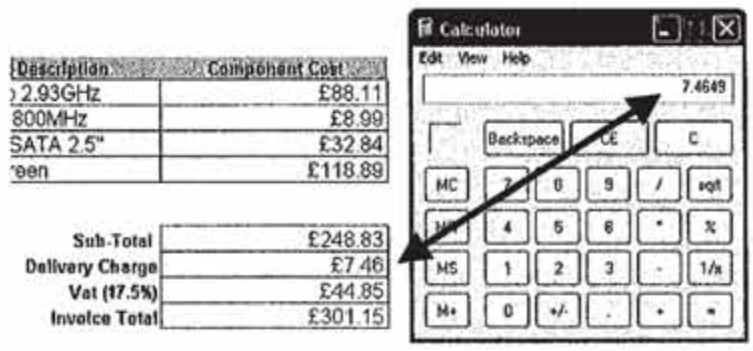


Description	Component Cost
› 2.93GHz	£88.11
800MHz	£8.99
SATA 2.5"	£32.84
'een	£118.89
Sub-Total	£248.83
Delivery Charge	£7.46
Vat (17.5%)	£44.85
Invoice Total	£301.15

Calculation

Test 43

In order to test the delivery charge formula, I used a calculator and compared it with the result in the delivery charge cell. The delivery charge was calculated depending on the sub total. If the sub total was less than £600 then the delivery cost was 3% of the sub total, however if the sub total was more than £600 then the delivery cost was 5% of the sub total.



Description	Component Cost
› 2.93GHz	£88.11
800MHz	£8.99
SATA 2.5"	£32.84
'een	£118.89
Sub-Total	£248.83
Delivery Charge	£7.46
Vat (17.5%)	£44.85
Invoice Total	£301.15

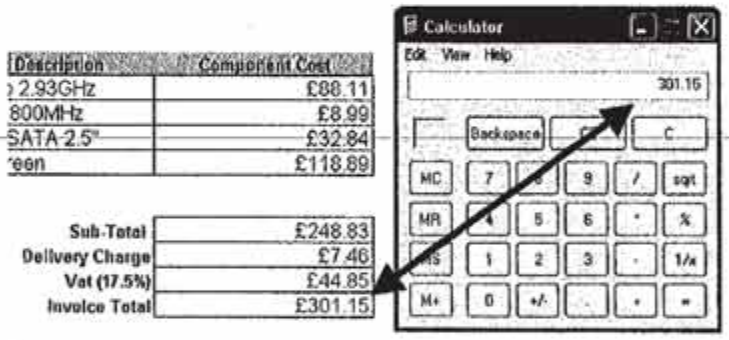
Test 44

In order to test the VAT formula, I used a calculator and compared it with the result in the delivery charge cell. The VAT was calculated by adding the sub total and the delivery charge and multiplying it by 17.5%.

Description	Component Cost
) 2.93GHz	£88.11
800MHz	£8.99
SATA 2.5"	£32.84
'een	£118.89
Sub-Total	£248.83
Delivery Charge	£7.46
Vat (17.5%)	£44.85
Invoice Total	£301.15

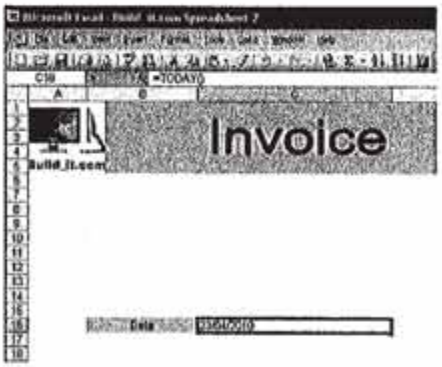
Test 45

In order to test the invoice total formula, I used a calculator and compared it with the result in the delivery charge cell. The invoice total was calculated by adding the sub total, the delivery charge and the VAT together.



Description	Component Cost
) 2.93GHz	£88.11
800MHz	£8.99
SATA 2.5"	£32.84
'een	£118.89
Sub-Total	£248.83
Delivery Charge	£7.46
Vat (17.5%)	£44.85
Invoice Total	£301.15

Test 46



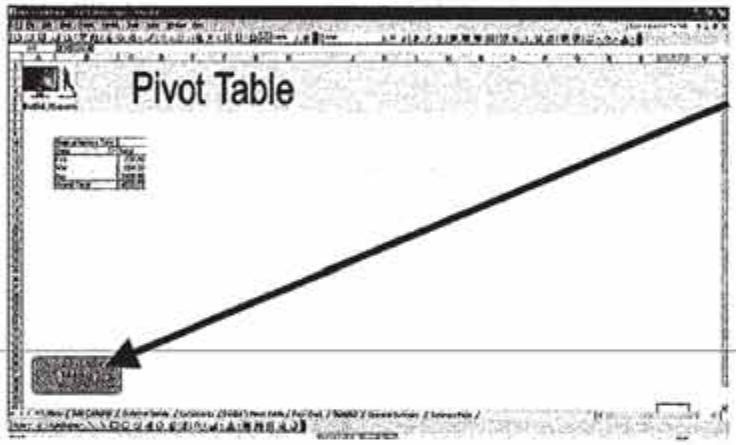
The date that appears within the Menu worksheet was correct when checked against a calendar.

Thus this test passed.

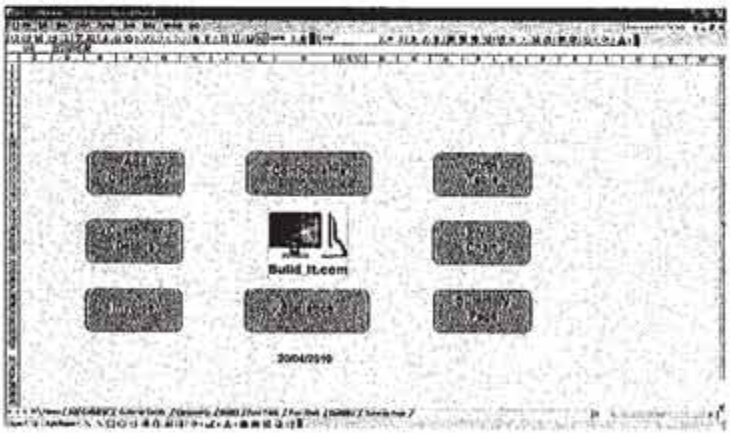
Pivot Table Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
47	Menu Macro on Pivot Table Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
48	Pivot Table accounting for new data	Click on refresh within Pivot Table	The Pivot Table will take into account any new data entered within the summary worksheet	Pass

Test 47



The Menu macro was clicked upon within the Pivot Table Worksheet in order to see if it will take me to the menu worksheet within the Excel document in one click.



The macro took me to the Menu worksheet once clicked upon.

Thus this test passed.

Test 48

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2021.07
Grand Total	3644.93

The Pivot Table shows the total sales figures for each month and how much the company has made in sales so far.

This data changes according to the content within the summary table, therefore taking into account when new sales have been made. When a new record was entered within the summary table, the data for April and consequently the Grand total changes in the Pivot Table once it is refreshed. Therefore showing that it updates any new data entered within the Summary Table and the test passed.

1008	1005	19/04/2010
1009	1007	19/04/2010
1010	1006	08/03/2010
1011	1005	20/04/2010

£336.83	£10.10	£69.71	£407.65
£406.68	£12.20	£73.30	£492.18
£268.81	£8.06	£48.45	£325.33
£320.42	£9.61	£67.76	£387.79

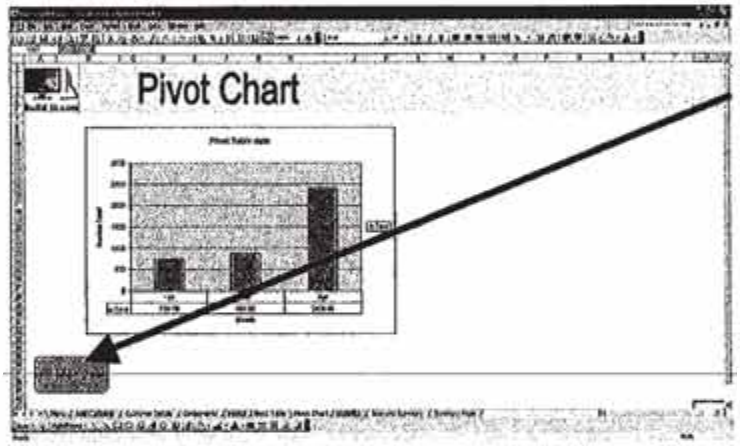
Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	4032.72

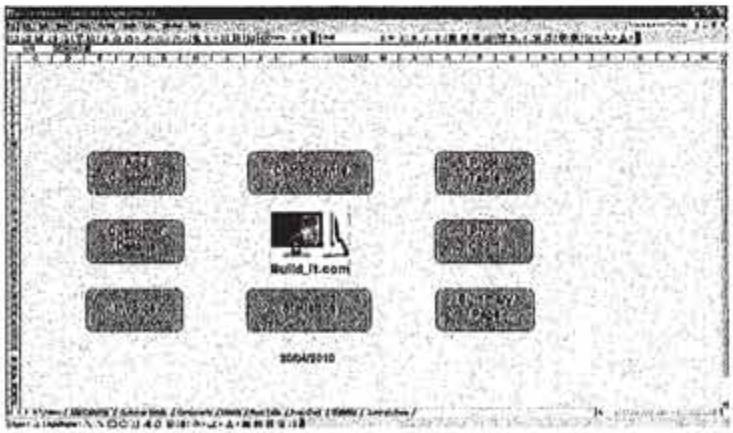
Pivot Chart Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
49	Menu Macro on Pivot Chart Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
50	Pivot Chart accounting for new data	Click on refresh within Pivot Table	The Pivot Chart will take into account any new data entered as it changes according to the pivot table	Pass

Test 49



The Menu macro was clicked upon within the Pivot Chart Worksheet in order to see if it will take me to the menu worksheet within the Excel document in one click.



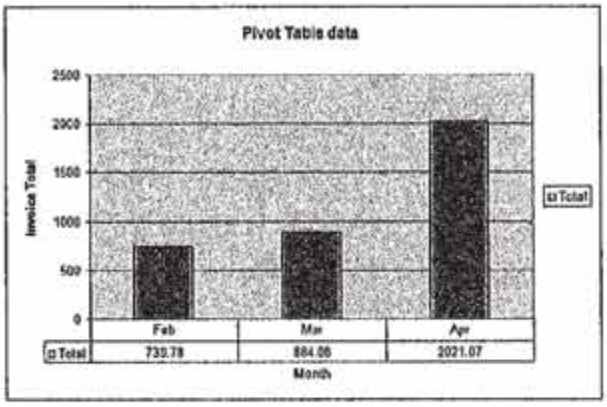
The macro took me to the Menu worksheet once clicked upon.

Thus this test passed.

Test 50

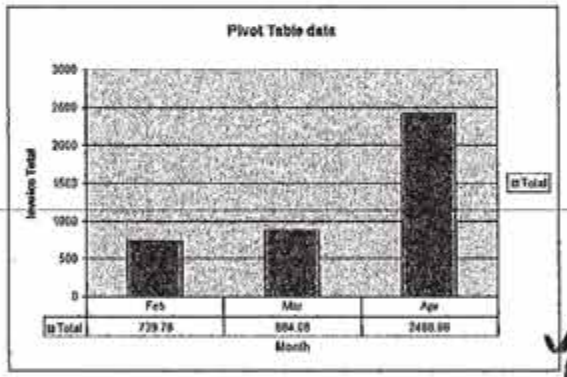
The graph data is the same data within the Pivot Table, therefore only presenting the results in a graph form.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2021.07
Grand Total	3644.93



When new data is updated within the Pivot Table to account for new records in the summary table, the Pivot Chart will refresh and change according to the data within the Pivot Table. It shows that it updates any new data entered within the Summary Table. Therefore this test passed.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	4032.72



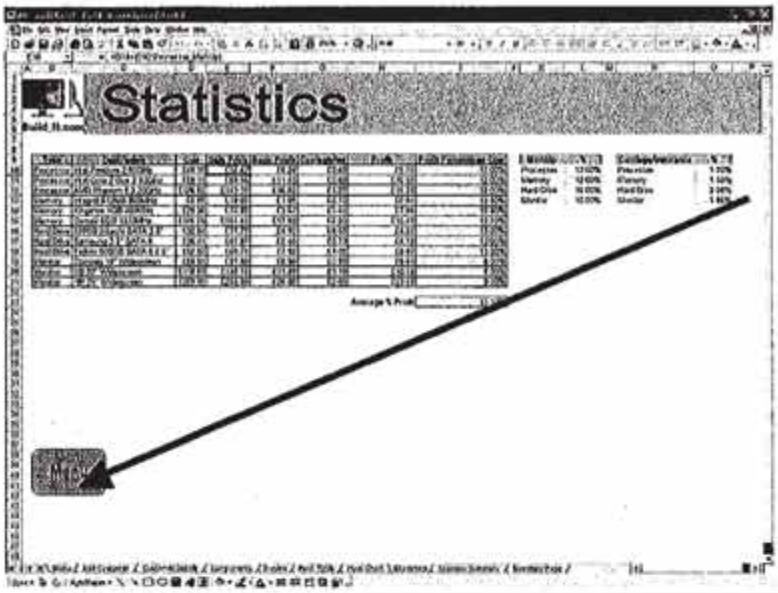
Graphs match PivotTable

Statistics Worksheet

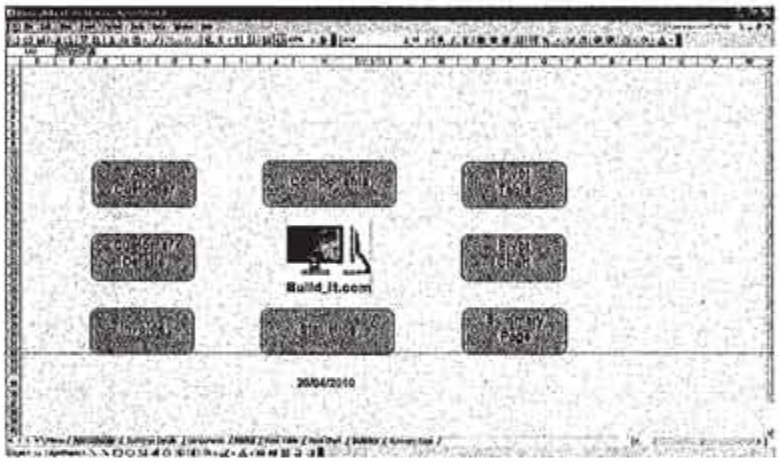
Test No	Description	Input	Expected Result	Result (Pass/Fail)
51	Menu Macro on Statistics Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
52	Each individual profit % cost cells are named	Click on the cell reference and check the top left hand tab which highlights the name of the cell reference	The cell reference is named accordingly	Pass
53	Each mark up cell is named individually	Click on the cell reference and check the top left hand tab which highlights the name of the cell reference	The cell reference is named accordingly	Pass
54	Each carriage / insurance cell is named individually	Click on the cell reference and check the top left hand tab which highlights the name of the cell reference	The cell reference is named accordingly	Pass
55	Sale price formula correct according to the given mark up %	Check the calculations using the calculator feature within the computer	The sale price is the cost price of the product multiplied by the corresponding mark up value according to the type of component	Pass
56	Basic profit formula correct	Check the calculations using the calculator feature within the computer	The basic profit formula is the sale price minus the cost price	Pass

57	Carriage / insurance formula correct according to the data entered to the corresponding cells to the right of the table	Check the calculations using the calculator feature within the computer	The carriage / insurance formula is the cost price multiplied by the carriage / insurance percentage for the corresponding component	Pass
58	Profit formula is correct	Check the calculations using the calculator feature within the computer	The profit is simply the basic profit cell minus the carriage / insurance cell	Pass
59	The profit % cost formula is correct	Check the calculations using the calculator feature within the computer	This is the profit cell divided by the cost cell with the profit cells being formatted to percentages	Pass
60	Average Profit % cell formula is correct	Check the calculations using the calculator feature within the computer	This is simply adding all the profit percentage cells and dividing them by how many there are, in this case being 12	Pass

Test 51



The Menu macro was clicked upon within the Statistics Worksheet in order to see if it will take me to the menu worksheet within the Excel document in one click.



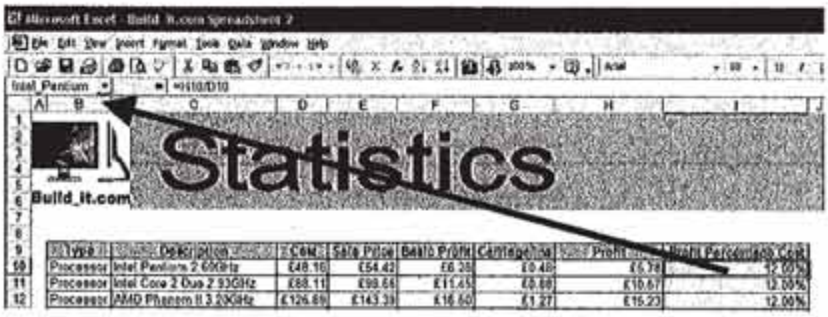
The macro took me to the Menu worksheet once clicked upon.

Thus this test passed.

Test 52

The profit % cell was named as stated in the top left hand box within the Excel document did this and was then done for this whole column.

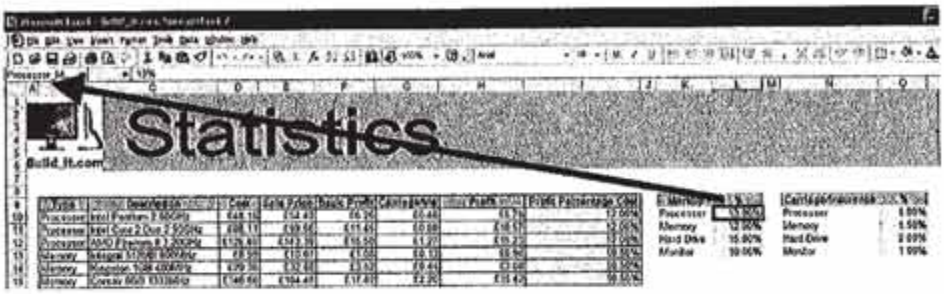
Thus the test passed.



Test 53

The processor mark up % was named as stated in the top left hand box within the Excel document did this and was then done for all of the mark up cell references.

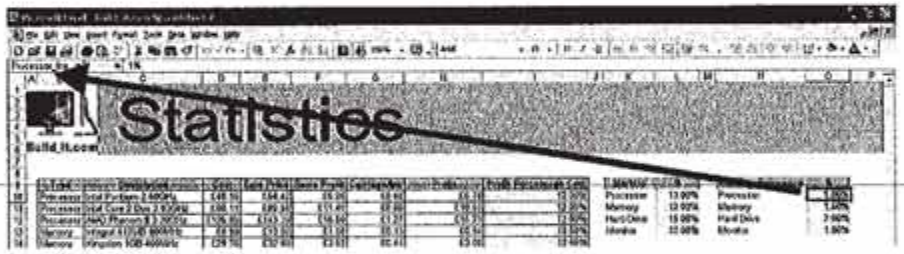
Thus the test passed.



Test 54

The processor carriage / insurance % was named as stated in the top left hand box within the Excel document did this and was then done for all of the carriage / insurance cell references.

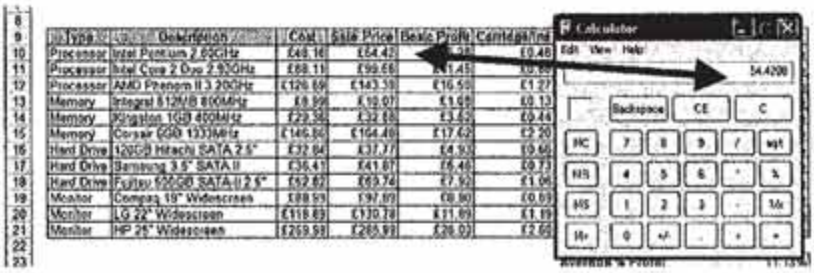
Thus the test passed.



Test 55

To test the sale price formula I used a calculator and compared it with the result in the sale price cell. The sale price was calculated by multiplying the cost price if the product with the corresponding mark up value, according to the type of product. In this case the mark up % for processors is 13%.

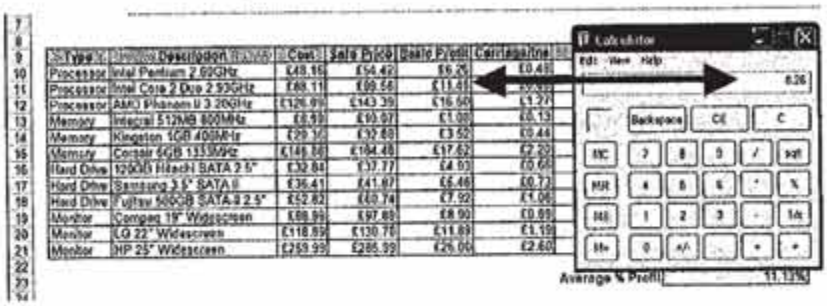
Thus the test passed.



Test 56

To test the basic profit formula I used a calculator and compared it with the result in the basic profit cell. The basic profit was calculated by subtracting the cost price from the sale price.

Thus the test passed.



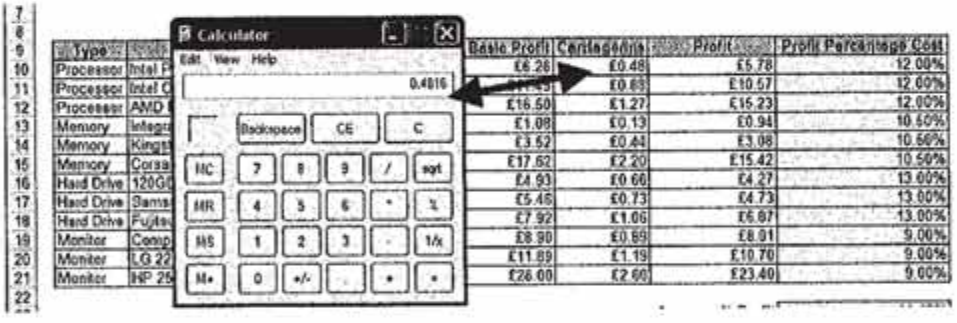
Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins
Processor	Intel Pentium 2.6GHz	£48.19	£54.45	£6.26	£0.48
Processor	Intel Core 2 Duo 2.93GHz	£88.11	£99.56	£11.45	£0.89
Processor	AMD Phenom II 3.2GHz	£126.99	£143.39	£16.50	£1.27
Memory	Integral 512MB 800MHz	£8.99	£10.07	£1.08	£0.13
Memory	Kingston 1GB 400MHz	£29.36	£32.88	£3.52	£0.44
Memory	Corsair 6GB 1333MHz	£146.88	£164.48	£17.62	£2.20
Hard Drive	120GB Hitachi SATA 2.5"	£32.84	£37.77	£4.93	£0.66
Hard Drive	Samsung 3.5" SATA II	£36.41	£41.87	£5.46	£0.73
Hard Drive	Fujitsu 500GB SATA II 2.5"	£52.82	£60.74	£7.92	£1.06
Monitor	Compaq 19" Widescreen	£88.99	£97.89	£8.90	£0.89
Monitor	LG 22" Widescreen	£118.89	£130.78	£11.89	£1.19
Monitor	HP 25" Widescreen	£259.99	£286.99	£26.00	£2.60

Average % Profit: 11.13%

Test 57

To test the carriage / insurance formula I used a calculator and compared it with the result in the basic profit cell. The carriage / insurance is the cost price multiplied by the corresponding carriage / insurance value, according to the type of product. In this case the carriage / insurance % for processors is 1%.

Thus the test passed.

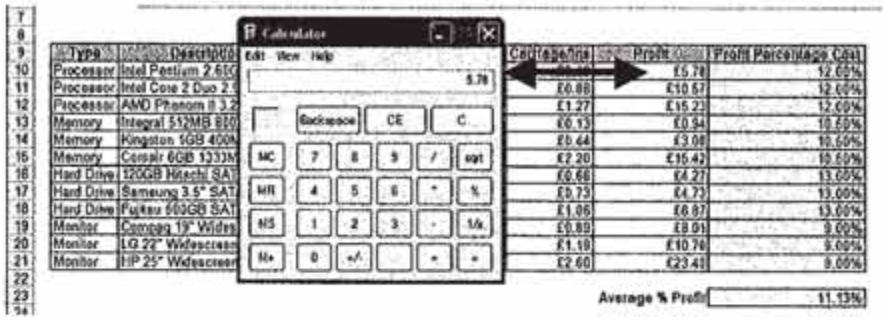


Type	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
Processor	£6.26	£0.48	£5.78	12.00%
Processor	£11.45	£0.89	£10.57	12.00%
Processor	£16.50	£1.27	£15.23	12.00%
Memory	£1.08	£0.13	£0.94	10.50%
Memory	£3.52	£0.44	£3.08	10.56%
Memory	£17.62	£2.20	£15.42	10.50%
Hard Drive	£4.93	£0.66	£4.27	13.00%
Hard Drive	£5.46	£0.73	£4.73	13.00%
Hard Drive	£7.92	£1.06	£6.87	13.00%
Monitor	£8.90	£0.89	£8.01	9.00%
Monitor	£11.89	£1.19	£10.70	9.00%
Monitor	£26.00	£2.60	£23.40	9.00%

Test 58

To test the profit formula I used a calculator and compared it with the result in the basic profit cell. The profit was calculated by subtracting the carriage / insurance value from the basic profit value.

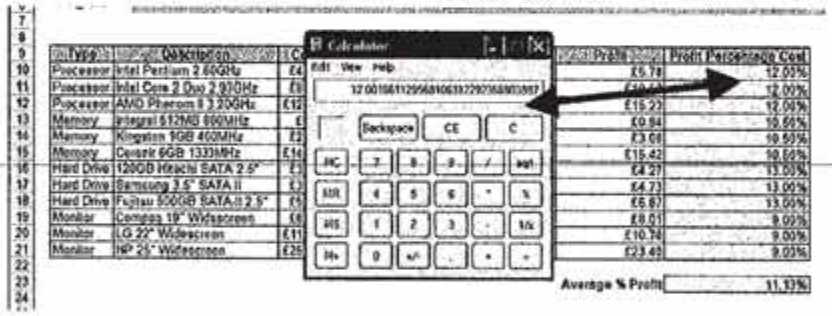
Thus the test passed.



Test 59

To test the profit % cost formula I used a calculator and compared it with the result in the basic profit cell. The profit % cost was calculated by dividing the profit cell by the cost value and converted into a percentage.

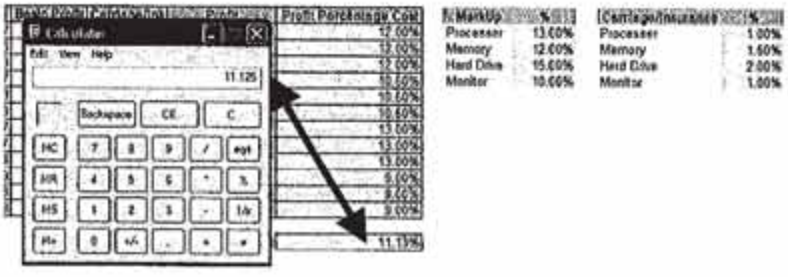
Thus the test passed.



Test 60

To test the average % profit formula I used a calculator and compared it with the result in the basic profit cell. The average % profit was calculated by adding all the profit % cost cells and dividing them by how many cells there were, in this case it was 12.

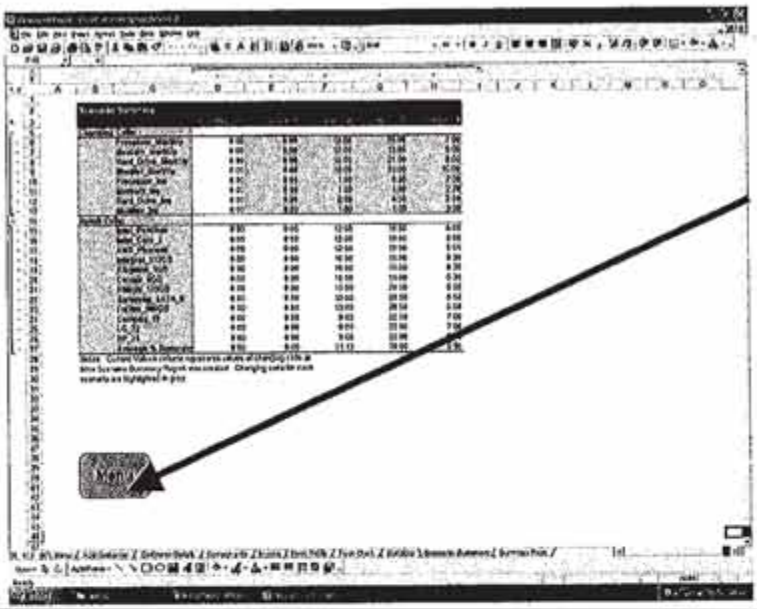
Thus the test passed.



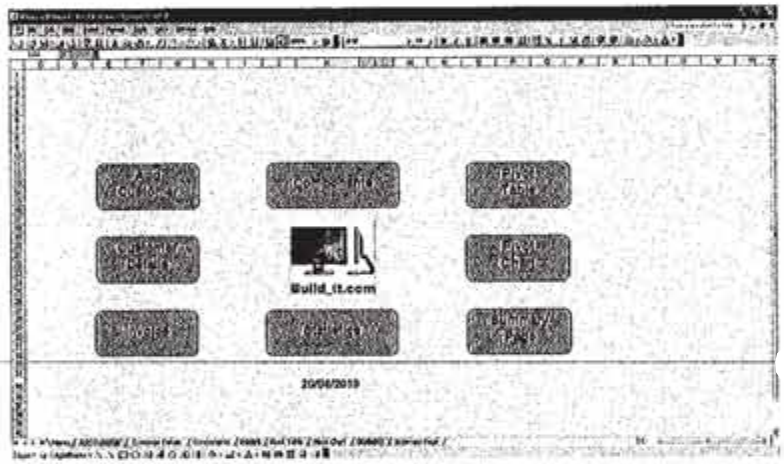
Scenario Summary Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
61	Menu Macro on Scenario Summary Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
62	Scenario 1 calculations are accurate	Check the calculations using the calculator feature within the computer	When I enter the scenarios in the mark up and carriage cells in the statistics worksheet, the same results will appear in the scenario summary table	Pass
63	Scenario 2 calculations are accurate	Check the calculations using the calculator feature within the computer	When I enter the scenarios in the mark up and carriage cells in the statistics worksheet, the same results will appear in the scenario summary table	Pass
64	Scenario 3 calculations are accurate	Check the calculations using the calculator feature within the computer	When I enter the scenarios in the mark up and carriage cells in the statistics worksheet, the same results will appear in the scenario summary table	Pass
65	Scenario 4 calculations are accurate	Check the calculations using the calculator feature within he computer	When I enter the scenarios in the mark up and carriage cells in the statistics worksheet, the same results will appear in the scenario summary table	Pass

Test 61



The Menu macro was clicked upon within the Scenario Summary Worksheet in order to see if it will take me to the menu worksheet within the Excel document in one click.



The macro took me to the Menu worksheet once clicked upon.

Thus this test passed.

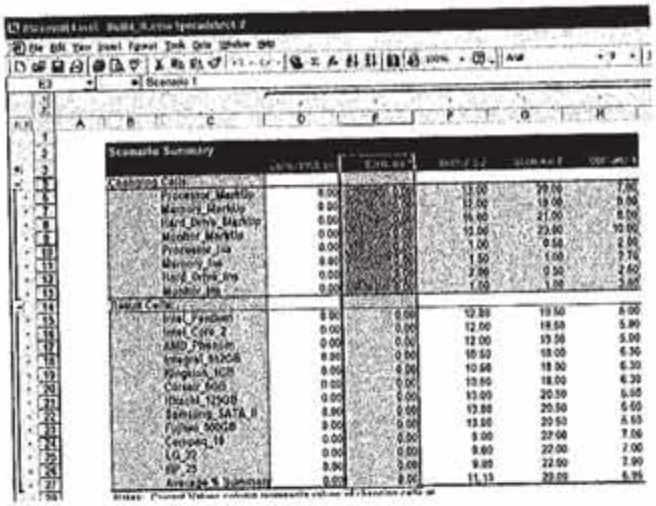
Test 62

Profit Percentage Cost
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%
0.00%

MarkUp	%
Processor	0.00%
Memory	0.00%
Hard Drive	0.00%
Monitor	0.00%

Carriage/Insurance	%
Processor	0.00%
Memory	0.00%
Hard Drive	0.00%
Monitor	0.00%

The values for scenario 1 were entered in the appropriate mark up % and carriage / insurance cells.



The values changed in the profit % cost cells and the average % profit cell, being the same as stated within the scenario summary.

Thus the test passed.

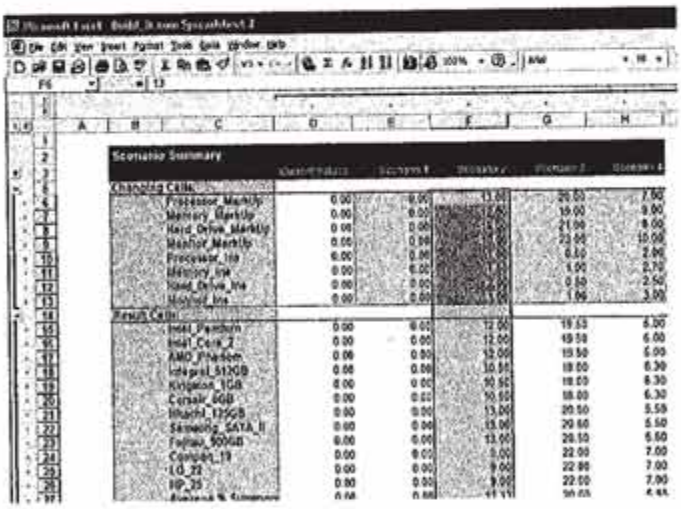
Test 63

Profit Percentage Cost
12.00%
12.00%
12.00%
10.50%
10.50%
10.50%
13.00%
13.00%
13.00%
9.00%
9.00%
9.00%
11.13%

MarkUp	%
Processer	13.00%
Memory	12.00%
Hard Drive	15.00%
Monitor	10.00%

Carriage/Insurance	%
Processer	1.00%
Memory	1.50%
Hard Drive	2.00%
Monitor	1.00%

The values for scenario 2 were entered in the appropriate mark up % and carriage / insurance cells.



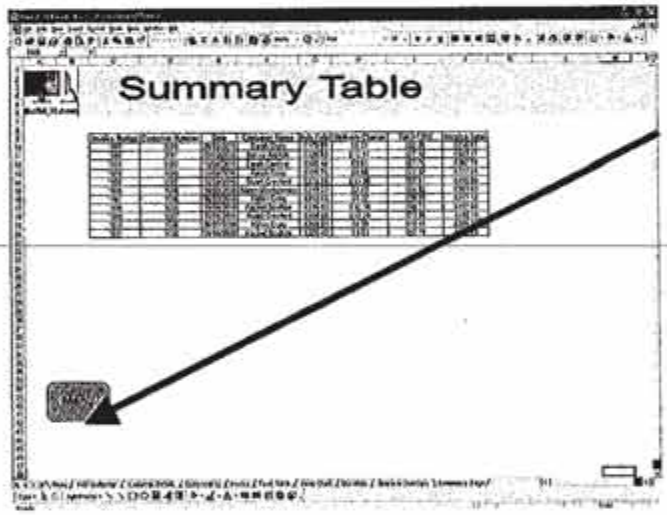
The values changed in the profit % cost cells and the average % profit cell, being the same as stated within the scenario summary.

Thus the test passed.

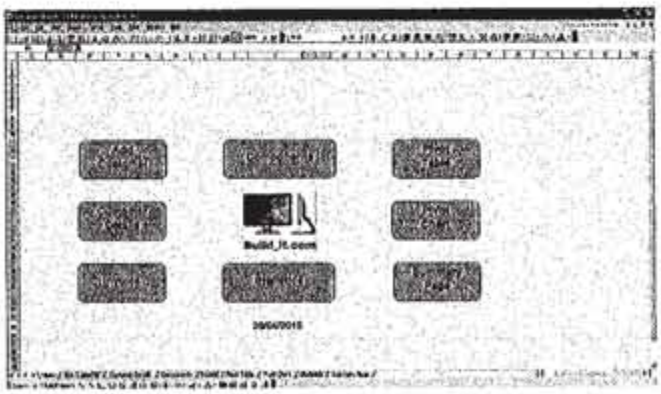
Summary Page Worksheet

Test No	Description	Input	Expected Result	Result (Pass/Fail)
66	Menu Macro on Summary Page Worksheet	Click on Menu Macro	Move to Menu Worksheet	Pass
67	Summary Table cell references named	Select all of the summary table	The table will be named accordingly	Pass
68	Data sorted according to invoice number	Look at the table to see if the invoice number ascends down the table	The summary table will be sorted according to the invoice number	Pass ✓

Test 66



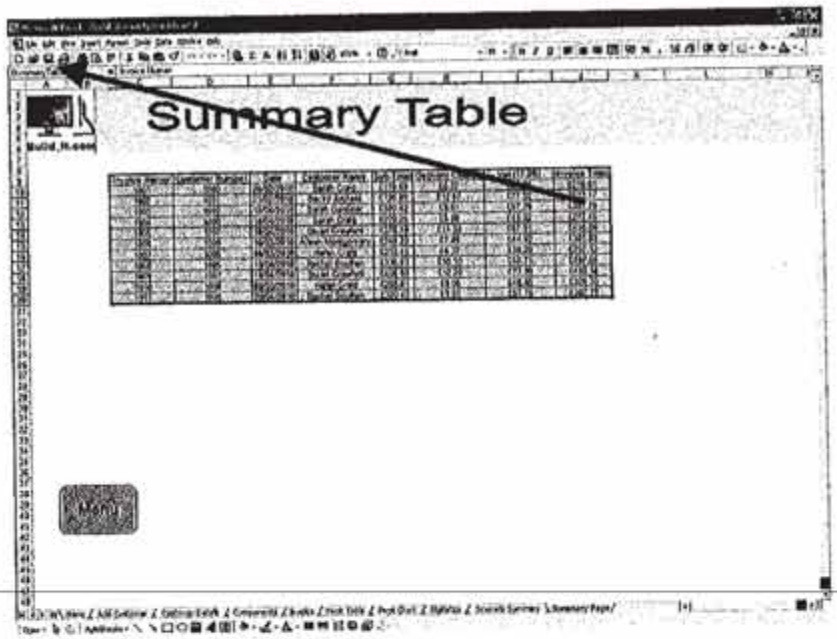
The Menu macro was clicked upon within the Summary Table Worksheet in order to see if it will take me to the menu worksheet within the Excel document in one click.



The macro took me to the ✓ Menu worksheet once clicked upon.

Thus this test passed.

Test 67



I highlighted the summary table and the cell referenced was named 'Summaty_Table'. This was needed for the add to summary table macro in the invoice worksheet in order to sort the data.

Thus this test passed.

Test 68

Invoice Numer	Custon
1001	
1002	
1003	
1004	
1005	
1006	
1007	
1008	
1009	
1010	
1011	

The data was sorted according to the invoice number within the summary table.

Thus this test passed.

Unit 10

Task E

Task E

For this assignment I will develop a user and a technical guide, essentially giving an overview of how to use the completed Excel document to achieve the desired output. Both the user guide and the technical guide will be given to the client when they use this software within their company.

User Guide

For Build_it.com

Excel Spreadsheet

User Guide Contents

- Requirements of Excel software
- How to open a spreadsheet document and overcoming the initial security warning when opening the document
- How to navigate through the use of macros and tabs at the bottom of the spreadsheet
- How to use the add to customer details macro
- How to generate a invoice
- How to use the print macro in the invoice worksheet
- How to use the add to summary macro
- How to use the Pivot Table and how the data updates
- How to use the Pivot Chart and how the data updates
- How to use the created scenarios to change profit margins
- How to respond to error messages

Contents

Requirements of Excel Software

This is the first aspect that will need to be considered when using this Excel document. The document that was created for your company, Build_it.com, used Microsoft Excel 2003 edition. In order to ensure that the document works on your computers within the company, the following requirements will need to be met for optimum results and full use of the software:

Computer and Processor – Computer/laptop with an Intel Pentium 233MHz or faster with a Pentium III recommended

Memory – 128 megabytes (MB) of RAM or greater

Hard Disk – 150 MB of available hard-disk space; optional installation files cache (recommended) requires an additional 200 MB of available hard-disk space

Drive – CD-ROM or DVD drive

Display – Super VGA (800 × 600) or higher-resolution monitor

Operating System – Microsoft Windows 2000 with Service Pack 3 (SP3), Windows XP, or later

Other – Microsoft Exchange Server is required for certain advanced functionality in Microsoft Office Outlook; Microsoft Windows Server 2003 running Microsoft Windows SharePoint Services is required for certain advanced collaboration functionality; certain inking features require running Microsoft Office on the Microsoft Windows XP Tablet PC Edition; speech recognition functionality requires a Pentium II 400-MHz or faster processor, a close-talk

All of this information was taken from the Microsoft Office website, highlighting the specific requirements of this software:

Source - http://office.microsoft.com/en-us/excel/HA102126851033.aspx

How to open the spreadsheet document and overcoming the initial security warning when opening the document

Firstly open up the Microsoft Excel software on the computer.

Then use the File – Open option within the toolbar and select the document named 'Build_it.com Spreadsheet'.

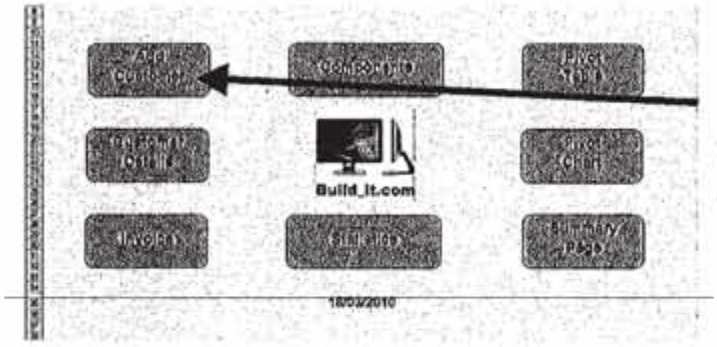
This warning message will appear automatically when opening the document asking you whether you want to disable or enable the use of macros within the document.

It is essential that you click enable macros, so that they can be used and function for tasks such as navigating through the menu macros and also adding the customer to the customer details worksheet.

This then opens up the document, ready to use.

How to Navigate through the use of macros and tabs at the bottom of page

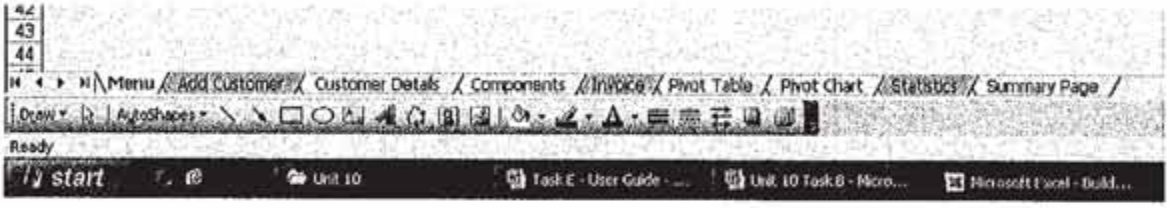
Macros are included within the various worksheets so that when clicked they will take you to the specified worksheet or perform a specific action easily and quickly. The use of macros allows you, the user, to click the selected button and it will do the operations in one single click as the actions have been previously recorded, such as moving from the menu worksheet to the add customer worksheet.



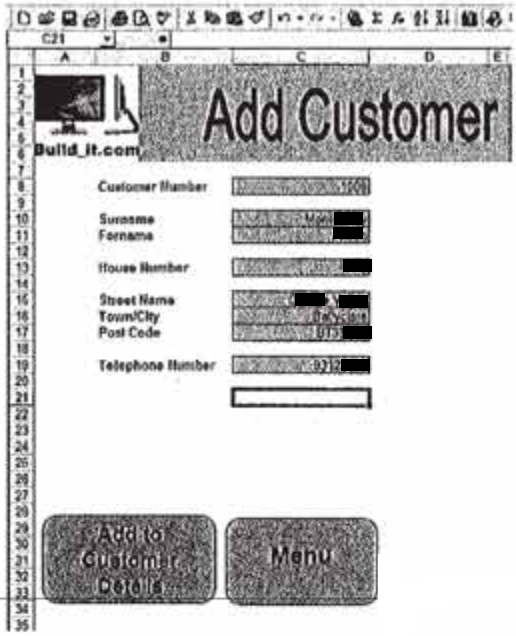
When this macro is clicked, it will take you to the corresponding worksheet.

The macro therefore takes you to the given worksheet.

The same process takes place if the tabs are selected at the bottom of the worksheet.

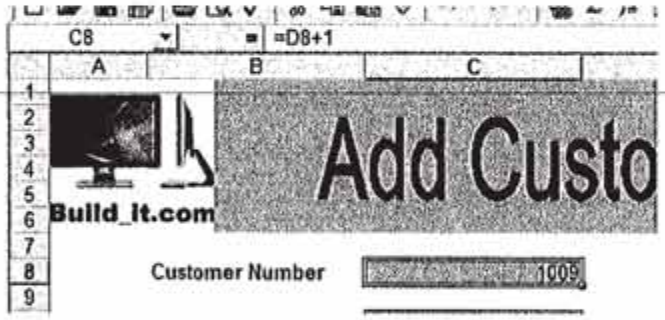


How to use the Add to Customer Macro

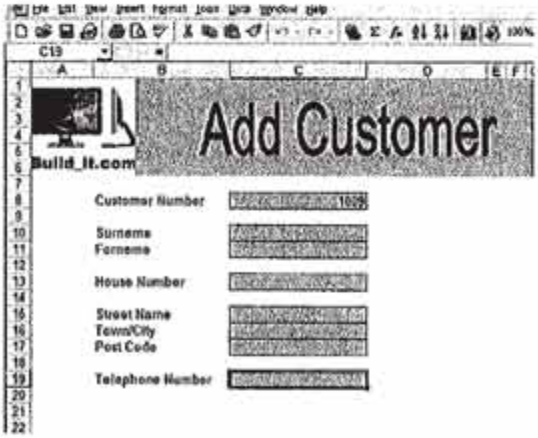


Firstly, enter the customer's details within the Add Customer form. Any error messages will appear if the content is incorrect for this given cell, e.g. a decimal in the telephone number cell.

The next step is to click the add to customer details macro at the bottom of the add customer worksheet. This should then copy all of data over to the customer details worksheet in the table and sort the content by the customer number.



The customer number should then increment within the add customer worksheet. This will ensure that every customer has a unique number.

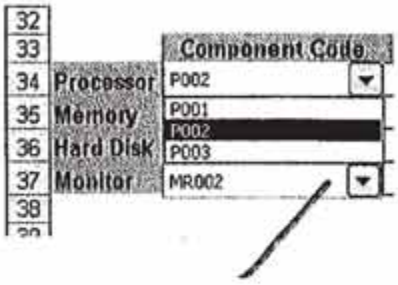


All of the content, bar the customer number, should be cleared, ready for the next customer. This therefore shows that when the add to customer details macro is clicked the above steps will be performed.

How to generate an Invoice

This is simply done by the customer entering their telephone number into the invoice form and this will automatically bring up the rest of their details.

The next task is for the user to select which components they wish to purchase, using the drop down tabs. These are linked to the components worksheet and the corresponding cell range. Once the component code is selected, it should retrieve the component description and cost.



		Component Code	Component Description	Component Cost
33	Processor	P001	Intel Pentium 2.60GHz	£48.16
34	Memory	M001	Integral 512MB 800MHz	£8.99
35	Hard Disk	H001	120GB Hitachi SATA 2.5"	£32.84
36	Monitor	MR001	Compaq 19" Widescreen	£88.99

Component Description	Component Cost
Intel Core 2 Duo 2.93GHz	£88.11
Integral 512MB 800MHz	£8.99
Samsung 3.5" SATA II	£36.41
LG 22" Widescreen	£118.89

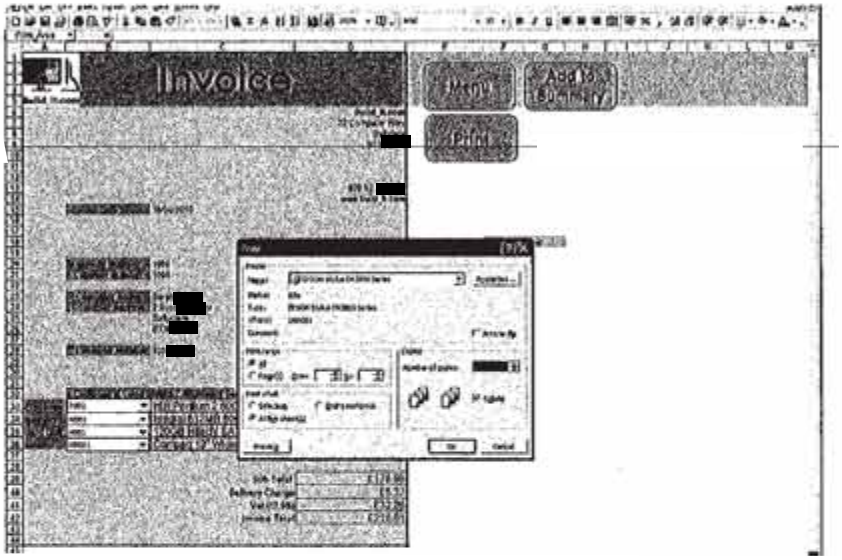
Sub-Total	£252.40
Delivery Charge	£7.67
Vat (17.5%)	£45.50
Invoice Total	£305.41

This will then allow for the sub-total, VAT, delivery charge and invoice total to be generated, which will complete the invoice.

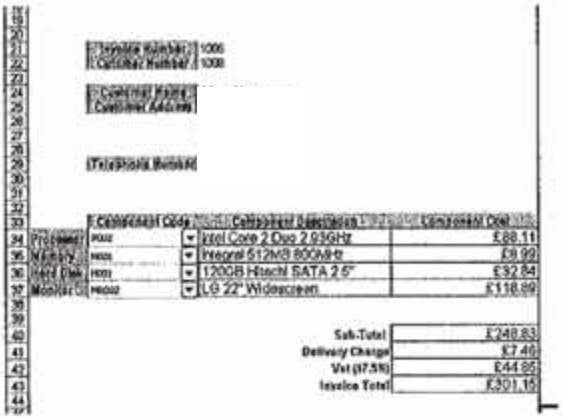
How to use the Print Macro in the Invoice Worksheet

Once the invoice has been generated, the next step is to print the invoice. This is done through the print macro which saves time for you, the user. Therefore, when ready, click the print macro.

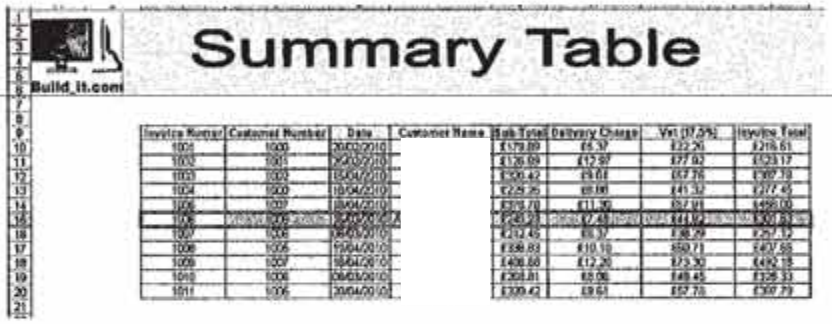
A dialogue box will then appear, highlighting the print area and that two copies will be printed. One for the customer and one for the company. Then you just have to select the 'OK' option for the invoice to print.



How to use the Add to Summary Macro

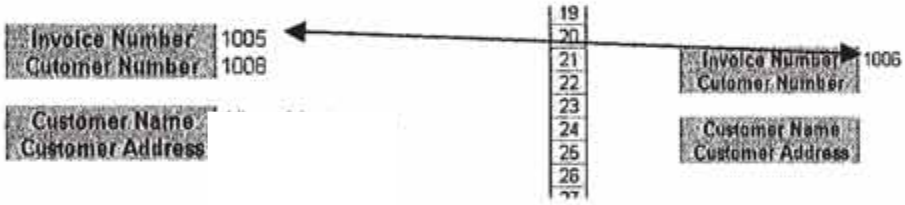


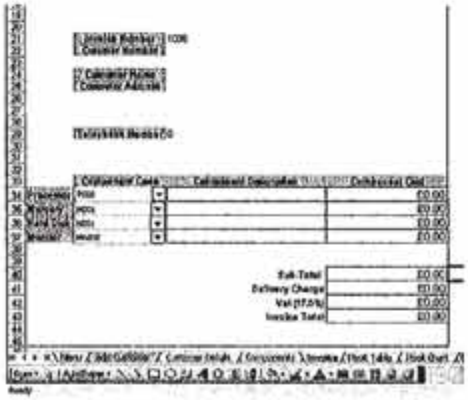
Firstly, an invoice is generated including the customer's details and the items they had selected to purchase. The next step is to click on the add to summary macro at the top, left hand side of the worksheet.



This should then copy all of the data over to the summary worksheet table and sort the content by the invoice number.

The invoice number should then increment within the invoice worksheet. This will ensure that every customer has a unique number.



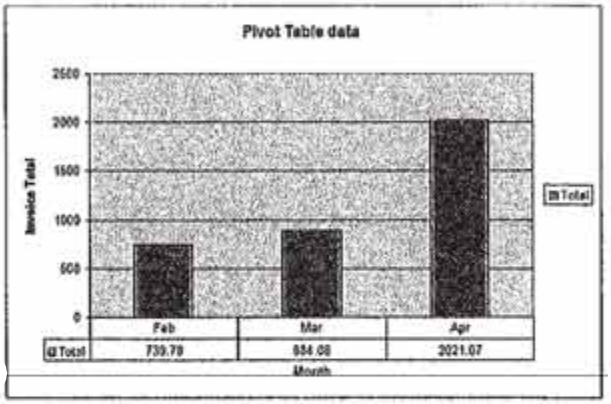


All of the content, bar the invoice number should appear blank or set to £0.00, ready for the next customer.

How to use the Pivot Chart and how the data updates

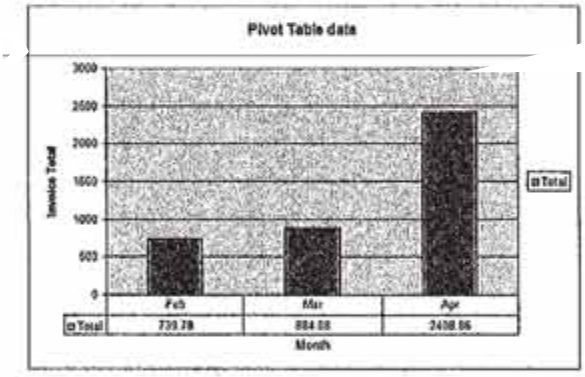
Once the pivot chart has been created, it will highlight the data within the pivot chart in the form of a graph. Therefore, this will also highlight the sales figures for each month.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2021.07
Grand Total	3644.93



When new data is updated within the Pivot Table to account for new records in the summary table, the Pivot Chart will refresh and change according to the data within the Pivot Table. Therefore showing that it updates any new data entered within the Summary Table.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	4032.72



How to use the Pivot Table and how the data Updates

Once the pivot table has been created, it will highlight the total sales figures for each month and how much the company has made in sales so far. The drop down date option will allow you to only show the sales figures for a selected month, or they can be highlighted as below.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2021.07
Grand Total	3644.93

This data changes according to the content within the summary table, therefore taking into account when new sales have been made. When a new record is entered within the summary table, the data for the given month and consequently the Grand total changes in the Pivot Table once it is refreshed. Therefore showing that it updates any new data entered within the Summary Table. The pivot table will need to be refreshed at the end of every day to account for the new sales figures.

1008	1005	19/04/2010	Rachel Scullion	£336.83	£10.10	£60.71	£407.65
1009	1007	19/04/2010	Stuart Crawford	£406.68	£12.20	£73.30	£492.18
1010	1006	08/03/2010	Helen Craig	£268.81	£8.06	£48.45	£325.33
1011	1005	20/04/2010	Rachel Scullion	£320.42	£9.61	£57.78	£387.79

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	4032.72

How to use the created scenarios to change profit margins

In order for a consistent approach to using the mark up and carriage cells, scenarios were created, resulting in a scenario summary table being produced which highlighted to the client that if they set the mark up values and the insurance values to any of the stated amounts, this will be the company's expected profits. This will enable you to maximise the company profits according to the rate certain products are selling at.

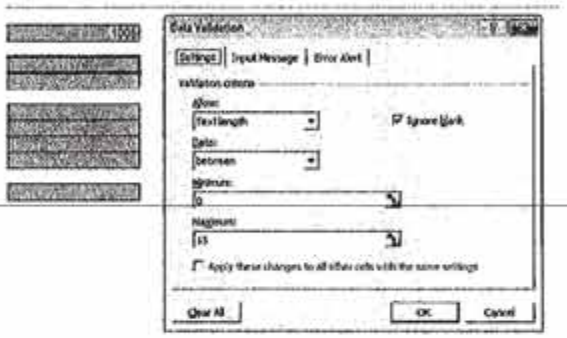
The scenario summary will then appear within a new worksheet. It will highlight the scenarios available that the you can use, each having a different range or profit and also the current values entered within the statistics worksheet.

You can then change the mark up values and the insurance value cells in the statistics worksheet accordingly to get you desired profit margins.

How to respond to error messages

Within the add customer worksheet, error messages may appear due to the validation checks that have been implemented. These various validation checks will ensure that only sensible data can be entered within the add customer form. This does not necessarily mean that the data is correct but that it fits within the specified parameters.

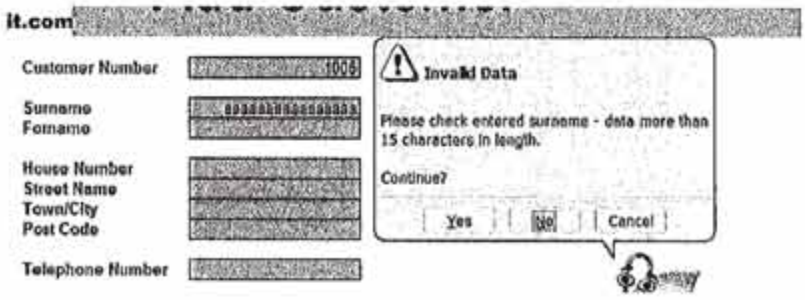
An example being the surname cell in the add customer worksheet;



For this cell, I used a text length check so that only text between 1 and 15 characters can be entered into this cell reference. This therefore will highlight if incorrect information may have been entered or if no data has been entered.

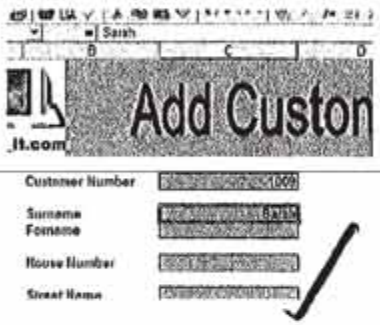
I then entered an error alert. If more than 15 characters are entered within this cell, the error/warning alert will appear. The staff can then decline this if the customer's name is in fact longer than 15 characters in unusual circumstances or can see if incorrect information has been added accidentally.

This highlights the warning message that would appear when more than 15 characters are entered in this given cell.



Another error message may appear if a user tries to delete cells where there has been formula put in place. For example, in the add customer cell, I only want the user to be able to insert data within the cells such as forename, surname etc.

Therefore, when I tried to enter data within one of the cells outside of the form, a warning message appeared saying that the cells had been protected. However, I was still able to enter data within the form cells, such as customer surname, forename, house number etc.



Technical Guide

For Build_it.com

Excel Spreadsheet

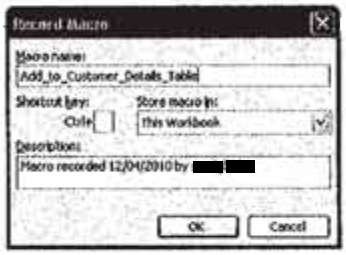
Technical Guide Contents

- How to add a customer to the customer details worksheet through the use of a macro
- How to create an invoice
- Create a print macro
- Insert invoice information into the summary table through the use of a macro
- Update pivot table and charts accounting for new data
- How to use statistics within the statistics worksheet
- How to use the scenarios resulting in a scenario summary
- How to use conditional formatting

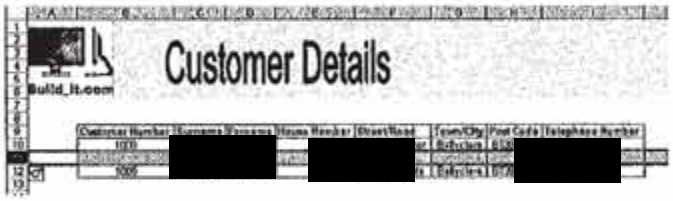
How to add a customer to the customer details worksheet through use of a macro

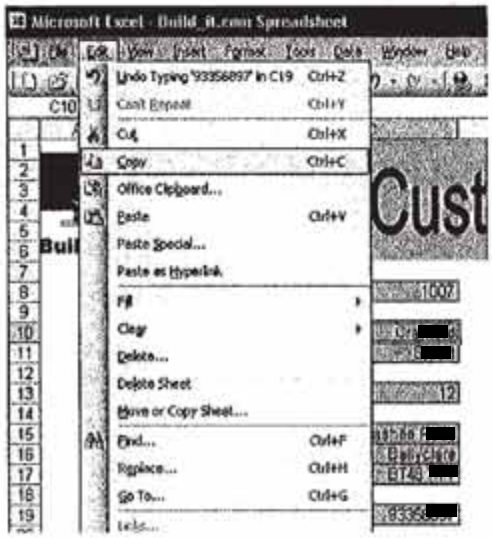
By creating this macro, it will enable the user to enter the customer details, click the add to customer details macro which will transfer the information into the customer details table, clear all of the content in the add customer worksheet and increment the customer number in one step, ready for the next customer.

First record the macro using (Tools->Macro-> Record New Macro) and start recording when you are on the customer details worksheet. Then rename the macro e.g. Add_to_Customer_Details_Table.



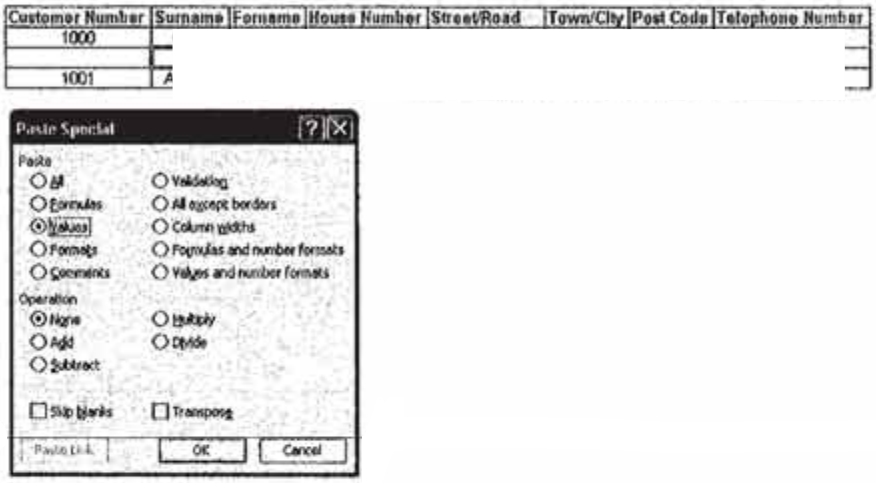
Once the macro has started recording, click on the customer details worksheet and inserted a column between the cells where you will already manually enter two rows of data.



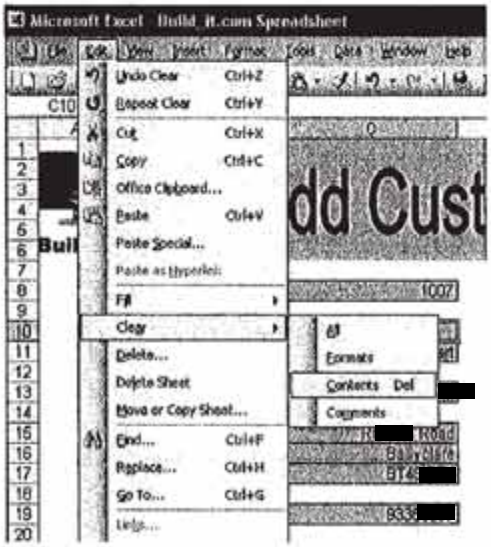


Once the row has been inserted, click on the add customer worksheet. Then copy the data which was inserted within the cell over to the customer details table under the corresponding columns.

Then paste the data into the customer details table using the paste special option. The values option will then be selected so only the value is copied across and not any formula that may have been included within the cell reference.



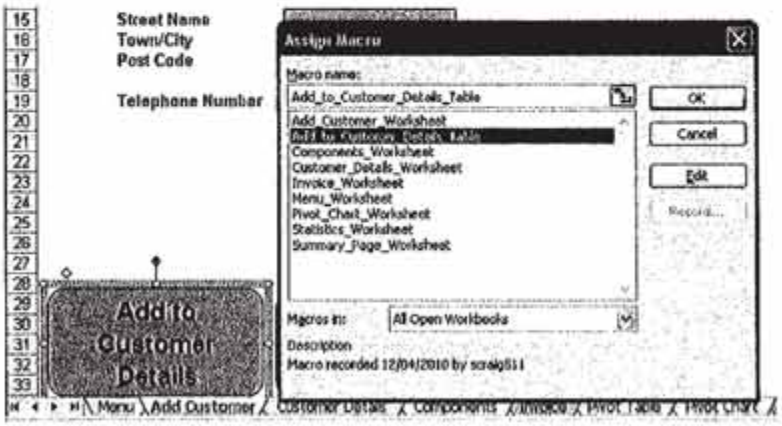
The same process should be continued for all of the other data within the add to customer worksheet, including the customer number. All of the content within the customer details table then should be sorted in ascending order according to the customer number. This will be done by selecting the cell range, which was named Customer in the created Excel document, and select the option within the data menu toolbar.



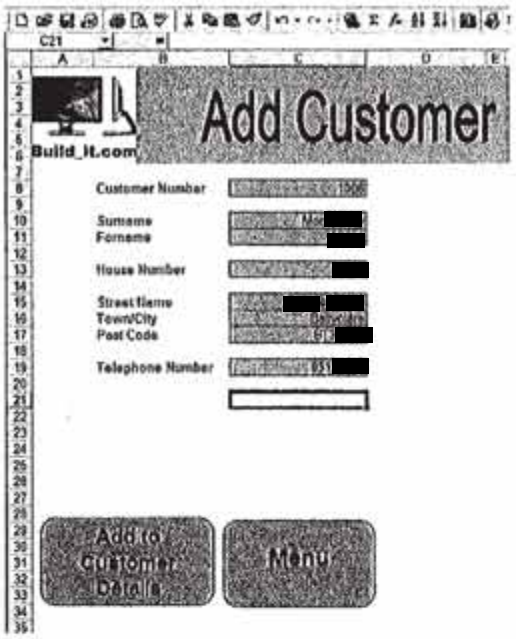
Then move back to the add customer worksheet in order to clear the contents that had been entered, ready for the next customer. Clear each cell individually using the clear option under the Edit toolbar at the top, however, do not clear the customer number.

Then copy the customer number and paste it using the paste special option, again selecting the values option into the cell on the right hand side of the form. This will therefore increment the customer number for the next customer.

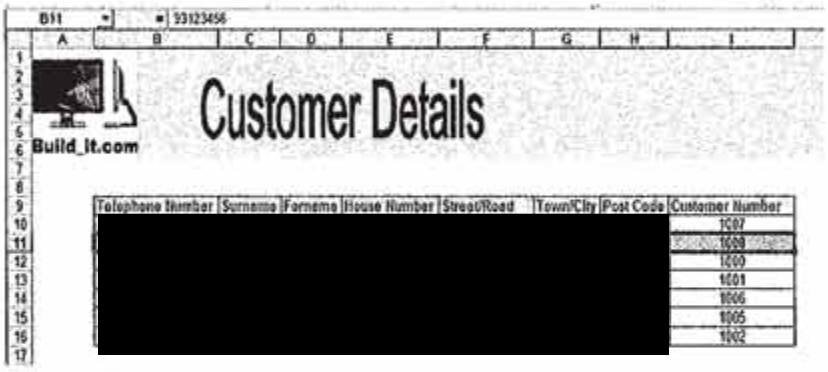
Finally press the Escape button on the keyboard in order to deselect the cell and then stop the macro from recording. Before you assigned the macro, you will need to edit it, including the line of text 'Application.ScreenUpdating = False' so that the macro carries out all of the stops in one move and so the macro does not flash every time an action is being performed.



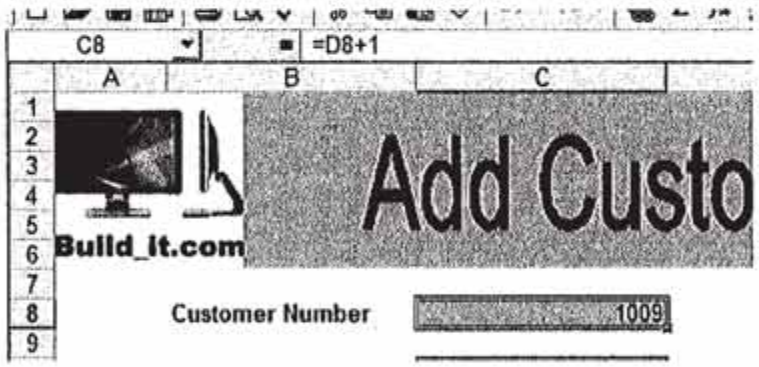
After the macro has been recorded, assigned the macro to the corresponding button within the add customer worksheet.



Then in order to add a customer to the customer to the customer details worksheet, entered all of their details and then selected the add to customer details macro.



The macro will then copy all of the data over and also sorted the content from the telephone number, which will later be used in the invoice worksheet.

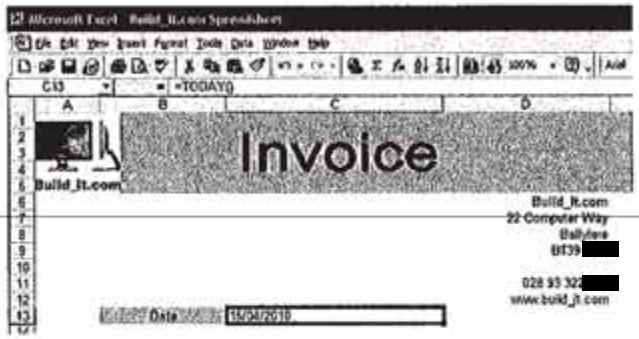


The customer number will also incremented, ready for the next customer so that each customer has a unique customer number.

How to Create an Invoice

The first aspect to consider when creating the invoice is to ensure that all of the cells are within one page which can easily be done using the print preview option as there should also be a print macro within this worksheet to the side so as not to be printed.

Secondly enter the company address in the cells on the top right hand corner and use the formula, =TODAY() to include the date within the invoice sheet.



In order to have an invoice number that increments follow the same process as within the add customer worksheet with the unique customer number. Have a cell reference to the side that included the number 1000, and then add the formula, in this case, =E16+1. This will later be used when creating the add to summary macro using the same process as the add to customer details macro.

VLOOKUP Formula for Customer Details

The next step is to use VLOOKUP formula to retrieve all of the customer details from the customer details worksheet. You could use the customer number to retrieve all of the content, however, very few customers would actually know or remember their customer number. Therefore, the telephone number can be used, as it is also unique. The client will enter their telephone number within the invoice, and through VLOOKUP formulas, it will retrieve all of their other contact information, including the customer number to save time and stop any data entry errors.

Customer Number Cell VLookup example

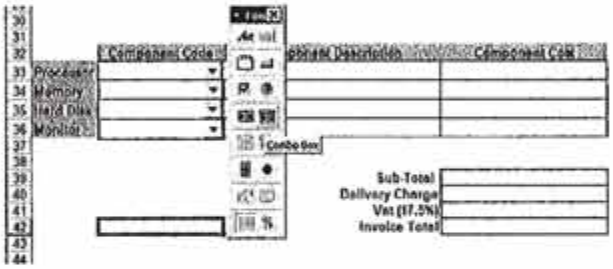
In order for the customer number to be retrieved from the corresponding telephone number, include the formula, =VLOOKUP(C28,Customer2,8). This means that the lookup value is C28, the telephone number cell within the invoice worksheet, the table array is Customer2, which is the cell reference of the complete customer details table and the column index value is 8 as it is the eighth column within the customer details table. The column index number will be the aspect of the formula that will change depending on the cell. Then depending on the telephone number that is entered, the customer number will be retrieved.

The same process should be completed for all of the customer details information, however the column index value will be changed accordingly depending on the column it was under within the customer details worksheet. This therefore means that if you enter a telephone number that was included within the customer details table, it would automatically retrieve all of their other contact information to the invoice worksheet to save time and any data entry errors.

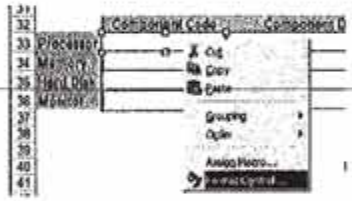
Combo Boxes and VLookups of Components

Combo boxes should then be created so that the customer can select which component they wish to purchase from a drop down tab.

Firstly, select the forms toolbar in which the combo box can be found.

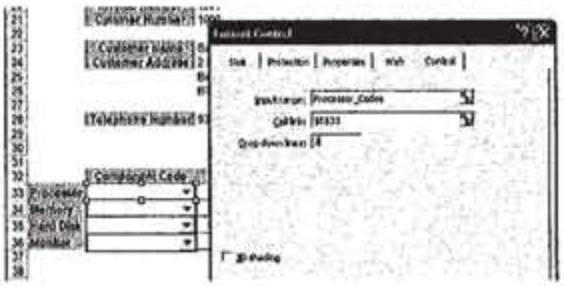


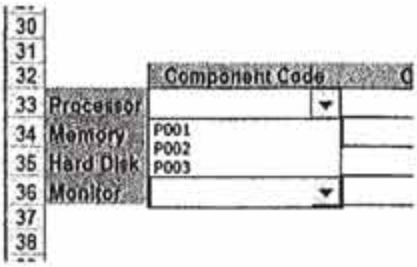
The combo boxes should then be created over the top of the component code cells by selecting the combo box and dragging it to the appropriate size like a text box.



The next step is to right click on the combo box and select format control in order to link the combo boxes to the component codes within the components worksheet.

Within the format control option the input range should be entered as the same name that was given for the processor component codes within the component worksheet. In this case it was 'Processor_Codes'. The cell link should then be selected to the right hand side of the table, with the number one that will later be formatted to the same colour as the worksheet background. The number of drop down lines should then be selected as three or as many items you have.





The drop down tab therefore highlights the component codes of each of the processors available. The same process should then be completed for the memory, hard disk and monitor combo boxes.

The next step is to create VLookups to retrieve the component descriptions and the component costs depending on which component is selected. The VLOOKUP formula should be entered and the fx tab selected. The lookup value in this case is the cell to the immediate right of the table, as it changes according to what component code is selected within the combo box and it corresponds to the same numbers previously added within the component worksheet for each of the different components. The table array should the name of the processor table, being 'Processors' and the column index is three as it was the third column within the components worksheet.

The same process should be completed for the memory, hard disk and monitor component descriptions or any other components within the components worksheet. However, the table array should be changed to the corresponding cell reference of each individual table.

This will therefore bring up all of the component descriptions depending on which component code was selected within the combo boxes.

	Component Code	Component Description	Component Cost
Processor	P001	Intel Pentium 2.60GHz	
Memory	M002	Kingston 1GB 400MHz	
Hard Disk	H003	Fujitsu 500GB SATA-II 2.5"	
Monitor	MR001	Compaq 19" Widescreen	

The next task is to complete the VLookups for the component cost. This was done in the similar manner as the VLookups for the component description. The VLOOKUP formula was entered and the fx tab was selected. The lookup value was again selected as the cell to the immediate right of the table, as it changes according to what component code is selected within the combo box and it corresponds to the same numbers previously added within the component worksheet for each of the different components. The table array is the name of the processor table, being 'Processors' and the column index is four as it was the fourth column within the components worksheet.

The same process was completed for the memory, hard disk and monitor component costs. However, the table array changed to the corresponding cell reference of each individual table.

The component table was therefore complete within the invoice so the customer can select which item they wish to purchase. I think this is one area of weakness as the customer has to buy one of each of the components and if I was to complete a similar task in the future I would include a blank row within the tables in the components worksheet so that if the customer did not wish to buy an item, they could select the component code for none and would therefore be able to buy any combination of the products.

	Component Code	Component Description	Component Cost
Processor	P001	Intel Pentium 2.60GHz	£48.16
Memory	M001	Integral 512MB 800MHz	£8.99
Hard Disk	H001	120GB Hitachi SATA 2.5"	£32.84
Monitor	MR001	Compaq 19" Widescreen	£88.99

Calculation Formula

The invoice worksheet will also need to include formula in order to calculate the sub-total, delivery charge, VAT and also the invoice total.

Sub-Total

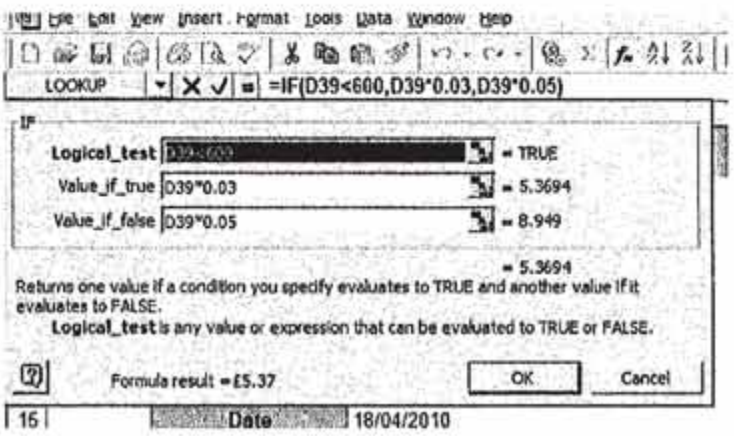
The formula for the sub total should be all of the component costs added together. The sub total will change when the component costs change depending on the selected product.

	Component Code	Component Description	Component Cost
Processor	P001	Intel Pentium 2.60GHz	£48.16
Memory	M001	Integral 512MB 800MHz	£8.99
Hard Disk	H001	120GB Hitachi SATA 2.5"	£32.84
Monitor	MR001	Compaq 19" Widescreen	£88.99

Sub-Total	=D33+D34+D35+D36
Delivery Charge	
Vat (17.5%)	
Invoice Total	

Delivery Charge

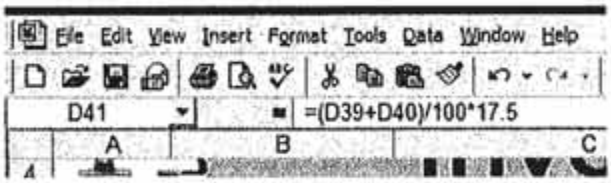
The delivery charge for the products changed depending on the sub total the customer spent. If the sub total is less than £600 then the delivery cost could be set to 3% of the sub total, however, if the sub total was more than £600 then the delivery cost could be set to a higher rate of 5% of the sub total. You therefore need to use an IF formula within this cell. The logical test should be if the sub total cell is less than £600. If this is true then cell the sub total cell would be multiplied by 0.03 (or 3%) however if the logical test was false, then the sub total cell would be multiplied by 0.05 (or 5%). Again this changes according to the value within the sub total cell.



Sub-Total	£178.98
Delivery Charge	39*0.03,D39*0.05)
Vat (17.5%)	
Invoice Total	

VAT (17.5%)

The VAT is calculated by adding both the sub total and the delivery charge and multiplying the sum of these by 17.5%. Again this will change according to the values within the sub total and also the delivery charge.



Sub-Total	£178.98
Delivery Charge	£5.37
Vat (17.5%)	£32.26
Invoice Total	

Invoice Total

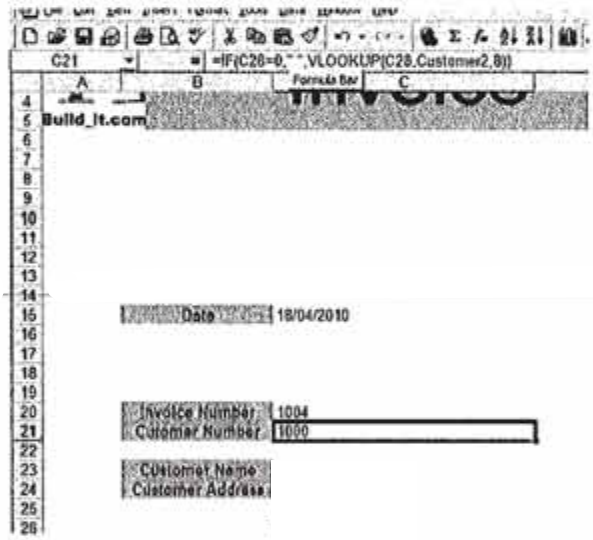
Sub-Total	£178.98
Delivery Charge	£5.37
Vat (17.5%)	£32.26
Invoice Total	=(D39+D40+D41)

The invoice total is simply calculated by adding the sub total, the delivery charge and the VAT together.

Clearing the Invoice Ready for the Next Customer

This process could be used as an additional feature within the invoice worksheet and will use another piece of formula, added to each of the cells in order to make them appear blank. This process is only applicable if you want all of the customer details and the components description and cost to appear blank when you enter 0 in the telephone number, and then when the customer's telephone number is entered it will bring up all of their information again.

In order to do this you will need to use an IF formula; if the telephone number cell is 0 then make this cell blank. The formula should added to the VLookup formula already present for example in the customer number cell; =IF(C28=0, " ", VLOOKUP(C28,Customer2,8)). This formula means that if cell C28 (the telephone number cell) is 0, then have no text, highlighted by the space between the speech marks and if this cell is not 0 then complete the VLookup.

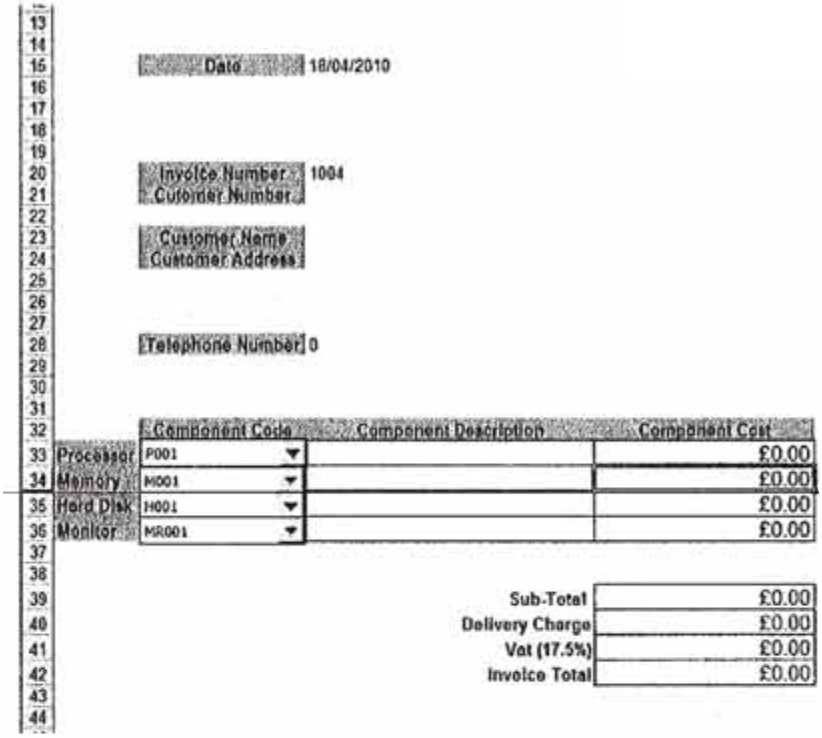


The same process should then be carried out for all of the customer details and also the component description cells.

Component Cost
£0.00
£0.00
£0.00
£0.00

Within the component cost cells the same principle was carried out, however, instead of having the cells blank, you could make them appear as £0.00. Therefore, adapt the formula and within the speech marks, include £0.00.

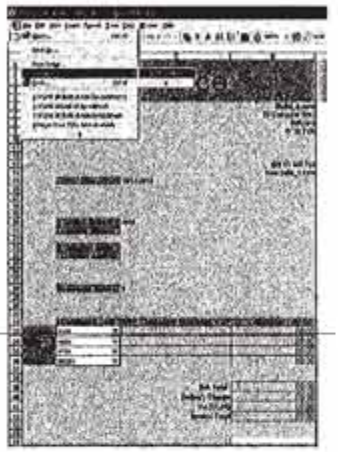
The following screenshot highlights that when the telephone number is zero, the cells are either blank or set to £0.00.



15		Date	18/04/2010	
20		Invoice Number	1004	
21		Customer Number		
23		Customer Name		
24		Customer Address		
28		Telephone Number	0	
32		Component Code	Component Description	Component Cost
33	Processor	P001		£0.00
34	Memory	M001		£0.00
35	Hard Disk	H001		£0.00
36	Monitor	MR001		£0.00
39			Sub-Total	£0.00
40			Delivery Charge	£0.00
41			Vat (17.5%)	£0.00
42			Invoice Total	£0.00

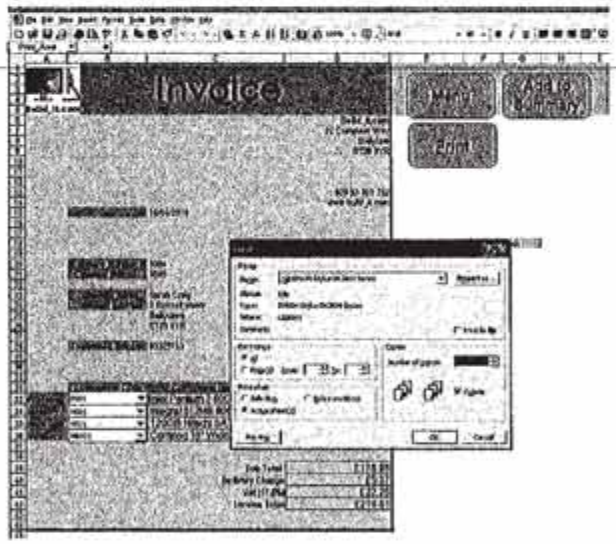
Print Macro

If this invoice is created for a company, you will probably need to print two copies of the invoice, one for the client and one for the company themselves to keep a record of sales. Therefore, for convenience you could create a macro that will enable the user to do this in one step by just clicking on the macro and confirming the print.



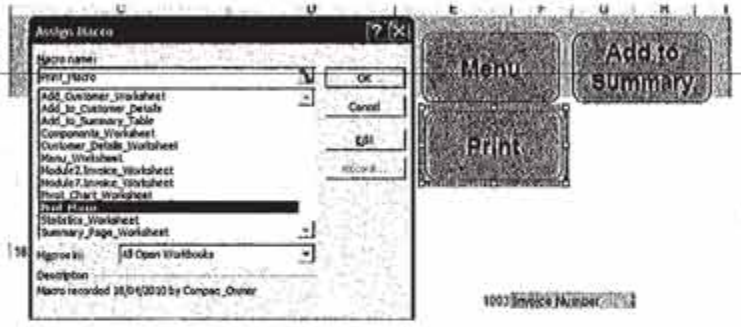
In order for this to work, you will need to ensure that the invoice document is within one page for printing purposes. Select the cells you want to print and set the print area within the toolbar. This names the selected cells, 'Print_Area'.

Then start recording the macro on the invoice worksheet; Tools -> Record New Macro. Then click on the tab containing the cell references at the top left hand corner and selected 'Print_Area'.



The next process is to then click on File -> Print and selected two copies. Then press the Escape key and stopped the macro from recording.

Finally, before you assign the macro, edit it first, including the line 'Application.ScreenUpdating = False' to complete the macro in one move and not for the macro to flash every time an action is being performed in the macro.

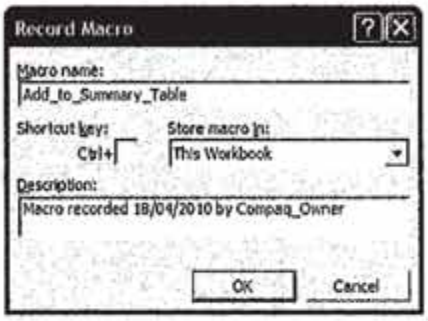


Then assign the macro to the corresponding Print button within the invoice worksheet.

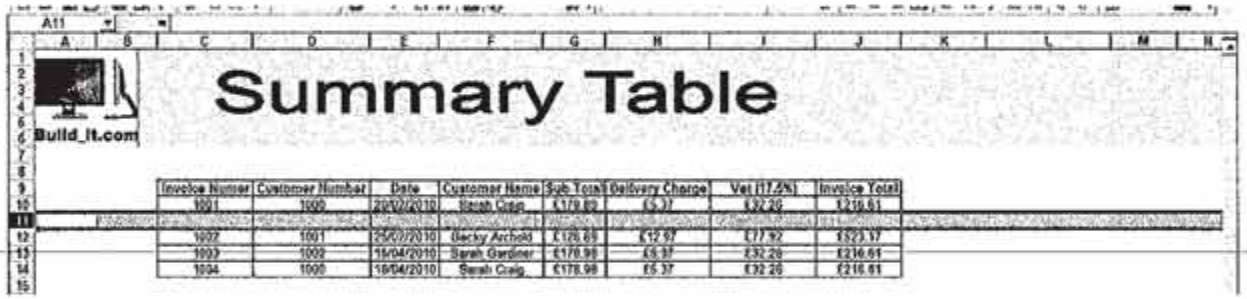
When the print macro is selected the print area was selected and the print option appeared, ready to print two copies.

Insert invoice information into summary table through use of a macro

Firstly begin to record the macro (Tools -> Macro -> Record New Macro) on the summary table worksheet and name the macro accordingly.

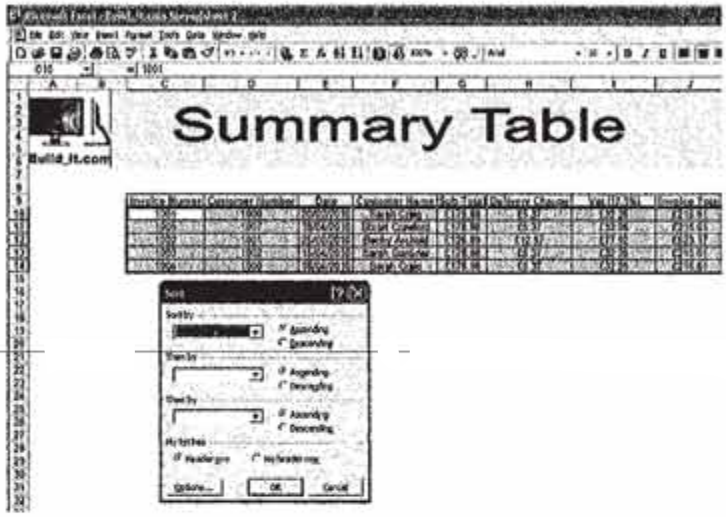


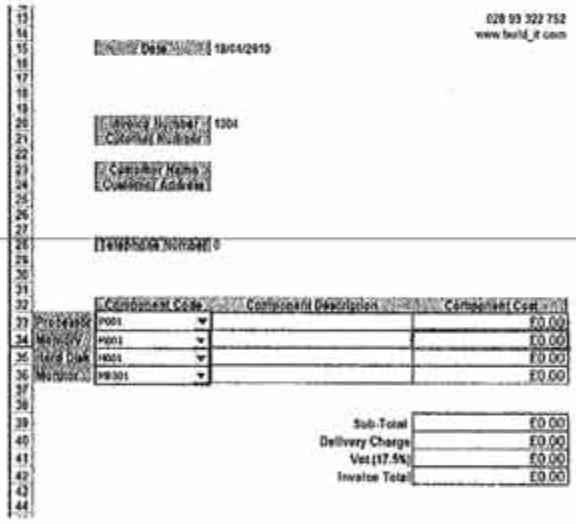
Once the macro has started recording, click on the summary worksheet and inserted a row between the cells where you had previously manually entered the data.



Once the row had been inserted click on the invoice worksheet. Then copied the corresponding data over to the summary table under the various columns. The data should then be pasted into the summary table using the paste special option. The values option should then be selected so only the value is copied across and not any formula that may be included within the cell reference.

The same process should then be continued for all of the other data within the invoice worksheet and the corresponding columns in the summary table. All of the content within the summary table should then be sorted in ascending order according to the invoice number. This is done by selecting the cell range you had previously named Summary and selecting the option within the data menu toolbar.

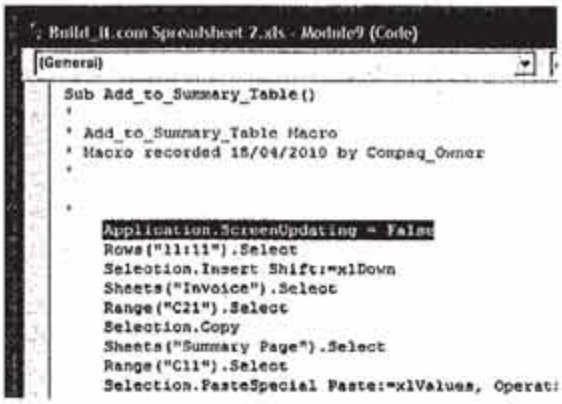




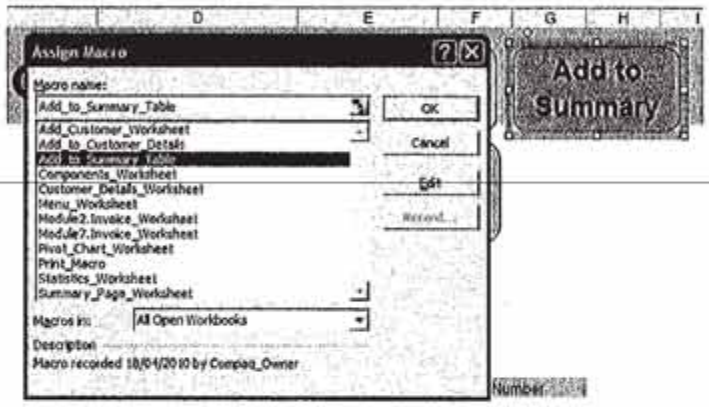
Next, move back to the invoice worksheet and enter 0 into the telephone number cell so that the invoice looked clear, ready for the next customer.

Then copy the invoice number and paste it using the paste special option, again selecting the values option into the cell on the right hand side of the worksheet. This will therefore increment the invoice number for the next customer.

Next press Escape on the keyboard in order to deselect the cell and stop the macro from recording. Before you assigned the macro, edit it using the line of test 'Application.ScreenUpdating = False' to complete the macro in one move and not for the macro to flash every time an action is being performed in the macro.



Addition code entered into the macro.



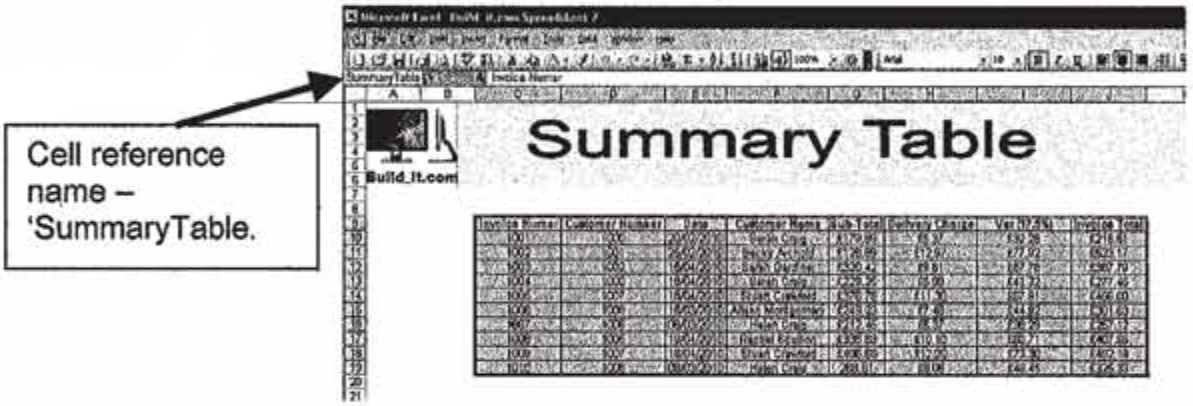
Lastly assign the macro to the corresponding button within the invoice worksheet.

Update pivot table and charts accounting for new data

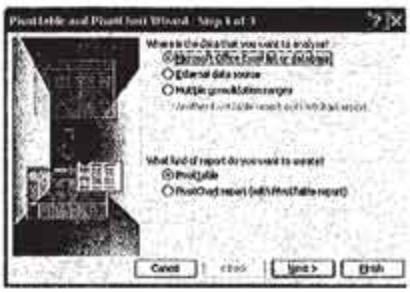
Pivot Table

Firstly, in order to account for the new data, the Pivot Table will need to be created. This is where all of the content within the summary table will be highlighted and will highlight the sales figures for each month. This will therefore change or update when new data is entered within the summary table.

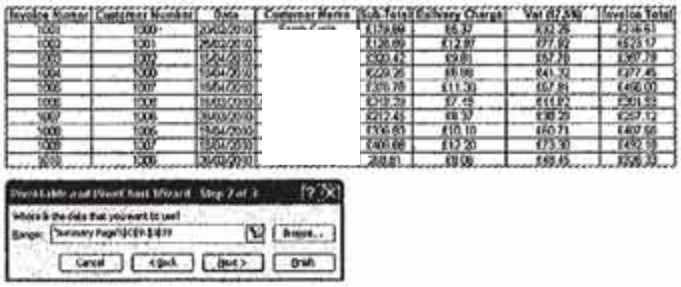
Ensure that the summary table is named, in this case being 'SummaryTable'.



The next step is to select the PivotTable and PivotChart report under the data toolbar.



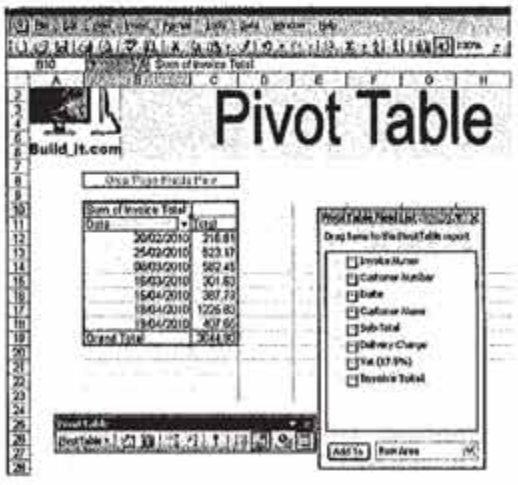
Then keep all of the default settings for the Pivot Table options, as you want to create the Pivot Table using the data within an Excel worksheet and need to create a Pivot Table first.



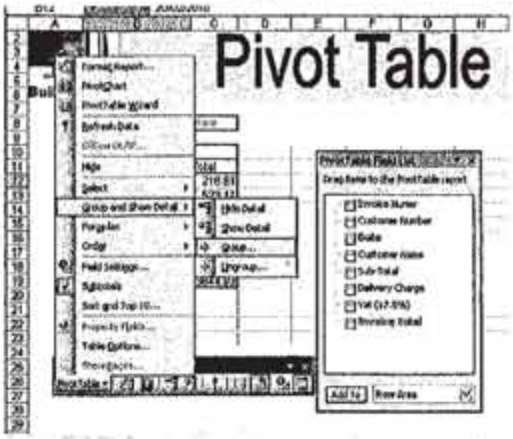
The next step is to select the data that will be included within the Pivot Table. This is the summary table.

Then select what you want to include within the Pivot Table from an existing worksheet and selected the cell from which you want the table to begin. Then select Finish.

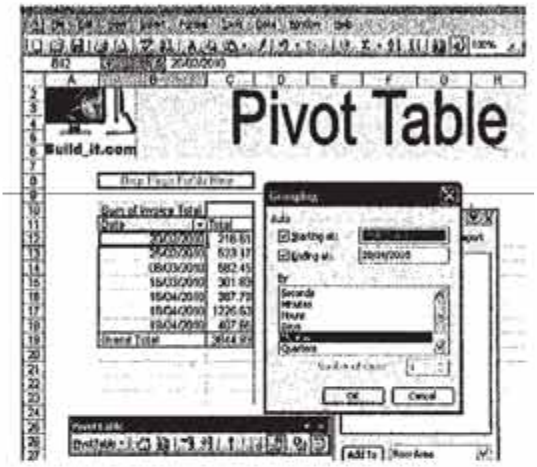
This then creates the template for the Pivot Table and you now need to include the data such as the date and also the invoice total.



On the left hand side drag across the date and on the right hand side drag across the invoice total. This then brings up all of the sales figures including the date of the sale and the total spent from the summary table worksheet.



Then sort the content within the table by date. Using the popup Pivot Table toolbar select the group option.



Then select the option to group the dates by month so they will be in date order.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2021.07
Grand Total	3644.93

The Pivot Table therefore shows the total sales figures for each month and how much the company has made in sales so far.

This data changes according to the content within the summary table, therefore taking into account when new sales have been made.

Updated Data

When a new record is entered within the summary table, the data for April and consequently the Grand total changes in the Pivot Table once it is refreshed. Therefore showing that it updates any new data entered within the Summary Table.

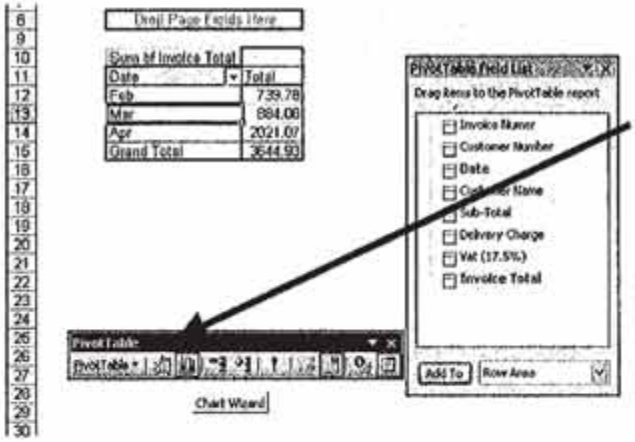
1008	1005	19/04/2010
1009	1007	18/04/2010
1010	1006	08/03/2010
1011	1005	20/04/2010

£335.83	£10.10	£60.71	£407.65
£406.69	£12.20	£73.30	£492.18
£269.81	£8.06	£48.45	£325.33
£320.42	£9.61	£57.76	£387.79

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	4032.72

Pivot Chart

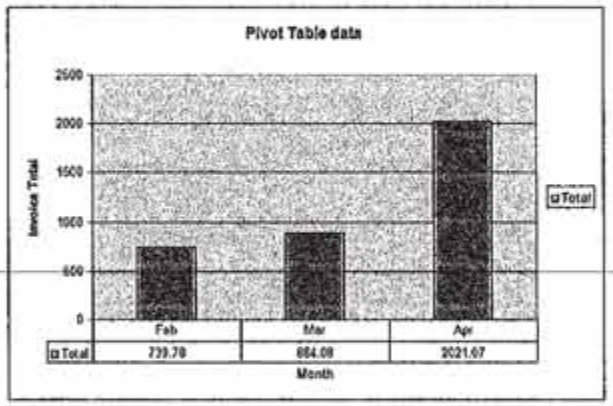


Then create the Pivot Chart using the using the chart wizard option within the Pivot Table toolbar. The Pivot Chart will be a data representation of the data within the pivot table and will therefore change when the data does.

Updated Data

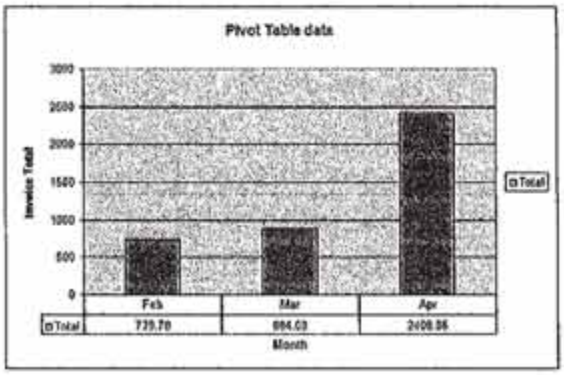
The graph data is the same data within the Pivot Table, therefore only presenting the results in a graph form.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2021.07
Grand Total	3644.93



When new data is updated within the Pivot Table to account for new records in the summary table, the Pivot Chart will refresh and change according to the data within the Pivot Table. Therefore showing that it updates any new data entered within the Summary Table.

Sum of Invoice Total	
Date	Total
Feb	739.78
Mar	884.08
Apr	2408.86
Grand Total	4032.72

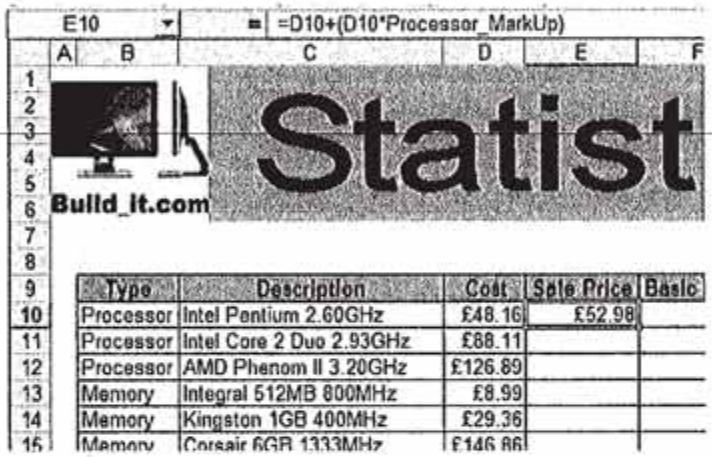


How to use statistics within the statistics worksheet

This involved using the appropriate formula in order to generate a statistics worksheet.

Sale Price Formula

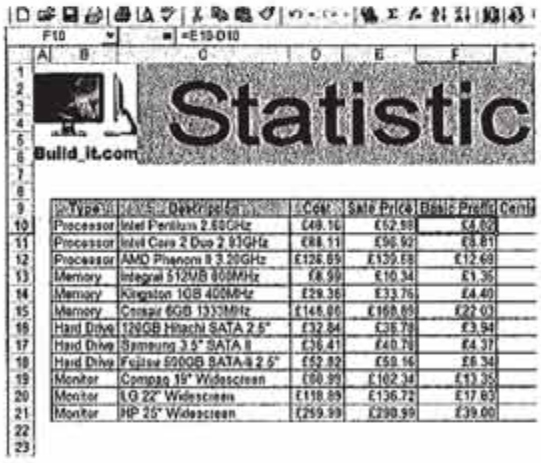
To generate the sale price, it is the cost price of the product multiplied by the corresponding MarkUp value according to the type of component, e.g. processor or memory etc. The same principle is used when creating all of the cost price cells.



Type	Description	Cost	Sale Price	Basic
Processor	Intel Pentium 2.60GHz	£48.16	£52.98	
Processor	Intel Core 2 Duo 2.93GHz	£88.11		
Processor	AMD Phenom II 3.20GHz	£126.89		
Memory	Integral 512MB 800MHz	£8.99		
Memory	Kingston 1GB 400MHz	£29.36		
Memory	Corsair 6GB 1333MHz	£146.86		

The formula should be the cost price cell added to the value of the cost cell multiplied by the MarkUp value cell. This will however change depending on the MarkUp value.

Basic Profit Formula

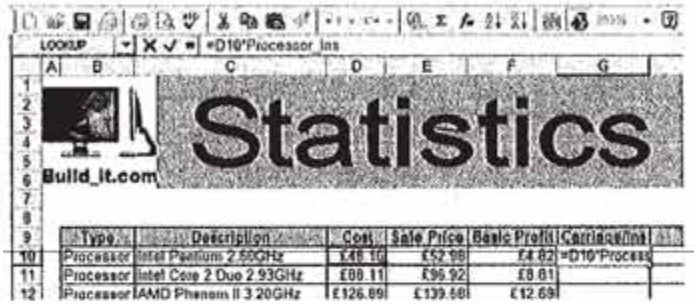


Type	Description	Cost	Sale Price	Basic Profit	Cent
Processor	Intel Pentium 2.60GHz	£48.16	£52.98	£4.82	
Processor	Intel Core 2 Duo 2.93GHz	£88.11	£96.92	£8.81	
Processor	AMD Phenom II 3.20GHz	£126.89	£139.58	£12.69	
Memory	Integral 512MB 800MHz	£8.99	£10.34	£1.35	
Memory	Kingston 1GB 400MHz	£29.36	£33.76	£4.40	
Memory	Corsair 6GB 1333MHz	£146.86	£168.89	£22.03	
Hard Drive	120GB Hitachi SATA 2.5"	£32.84	£36.78	£3.94	
Hard Drive	Samsung 3.5" SATA II	£36.41	£40.78	£4.37	
Hard Drive	Fujitsu 500GB SATA-II 2.5"	£52.82	£59.16	£6.34	
Monitor	Compaq 19" Widescreen	£90.99	£102.34	£11.35	
Monitor	LG 22" Widescreen	£118.89	£136.72	£17.83	
Monitor	HP 25" Widescreen	£259.99	£298.99	£39.00	

The basic formula is simply the sale price minus the cost price. The same principle should again be used for all the cells within the basic profit column.

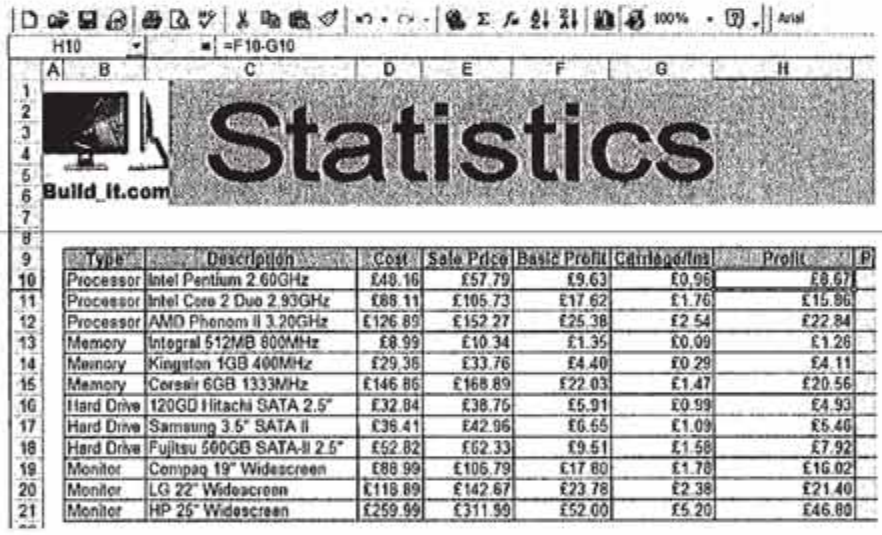
Carriage / Insurance Formula

These cell formulas are dictated by the percentage entered within the corresponding Carriage / Insurance cells to the immediate right of the statistics table. The formula is the cost price multiplied by the carriage / insurance percentage for the corresponding component. The same principle should then be carried out for the rest of the column, with the carriage / insurance cells changing depending on weather the product is a processor, a memory product, a hard drive or a monitor etc.



	Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins
10	Processor	Intel Pentium 2.60GHz	£48.16	£52.98	£4.82	=D10*Process
11	Processor	Intel Core 2 Duo 2.93GHz	£88.11	£96.92	£8.81	
12	Processor	AMD Phenom II 3.20GHz	£126.69	£139.58	£12.69	

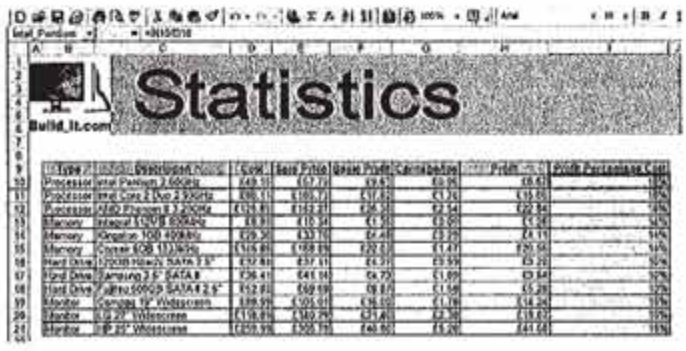
Profit Formula



	Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit
10	Processor	Intel Pentium 2.60GHz	£48.16	£57.79	£9.63	£0.96	£8.67
11	Processor	Intel Core 2 Duo 2.93GHz	£88.11	£105.73	£17.62	£1.76	£15.86
12	Processor	AMD Phenom II 3.20GHz	£126.89	£152.27	£25.38	£2.54	£22.84
13	Memory	Integral 512MB 800MHz	£8.99	£10.34	£1.35	£0.09	£1.26
14	Memory	Kingston 1GB 400MHz	£29.36	£33.76	£4.40	£0.29	£4.11
15	Memory	Corsair 6GB 1333MHz	£146.86	£168.89	£22.03	£1.47	£20.56
16	Hard Drive	120GD Hitachi SATA 2.5"	£32.84	£38.75	£5.91	£0.99	£4.93
17	Hard Drive	Samsung 3.5" SATA II	£36.41	£42.96	£6.55	£1.09	£5.46
18	Hard Drive	Fujitsu 500GB SATA-II 2.5"	£52.82	£62.33	£9.51	£1.58	£7.92
19	Monitor	Compaq 19" Widescreen	£88.99	£105.79	£17.80	£1.78	£16.02
20	Monitor	LG 22" Widescreen	£118.89	£142.67	£23.78	£2.38	£21.40
21	Monitor	HP 25" Widescreen	£259.99	£311.99	£52.00	£5.20	£46.80

The profit formula is simply the basic profit cell minus the carriage / insurance cell. This value should defiantly not be a minus or the company would be losing money.

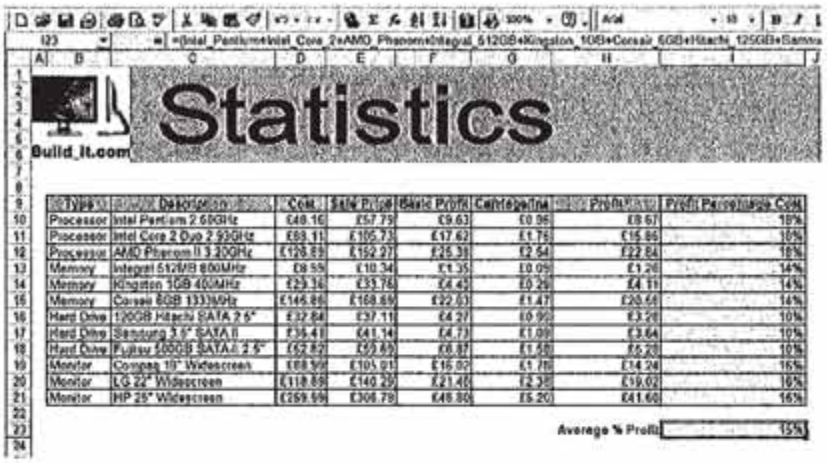
Profit Percentage Cost



The profit percentage cost is simply the profit cell divided by the cost cell with the profit cells being formatted to percentages. The same process should then be carried out for the whole column with the formula changing accordingly.

Average Percentage Cost

This value is simply obtained by adding all of the profit percentage cells and dividing them by the number of products there are.



Statistics

Build_it.com

Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
Processor	Intel Pentium 2.60GHz	£48.16	£57.79	£9.63	£0.96	£8.67	18%
Processor	Intel Core 2 Duo 2.93GHz	£88.11	£105.73	£17.62	£1.76	£15.86	18%
Processor	AMD Phenom II 3.20GHz	£126.89	£152.27	£25.38	£2.54	£22.84	18%
Memory	Integral 512MB 800MHz	£8.99	£10.34	£1.35	£0.18	£1.17	13%
Memory	Kingston 1GB 400MHz	£29.36	£33.76	£4.40	£0.59	£3.81	13%
Memory	Corsair 8GB 1333MHz	£146.86	£168.89	£22.03	£1.47	£20.56	14%
Hard Drive	120GB Hitachi SATA 2.5"	£32.84	£37.11	£4.27	£0.99	£3.28	10%
Hard Drive	Samsung 3.5" SATA II	£36.41	£41.14	£4.73	£1.09	£3.64	10%
Hard Drive	Fujitsu 500GB SATA II 2.5"	£52.82	£59.69	£6.87	£1.58	£5.29	10%
Monitor	Compaq 19" Widescreen	£88.99	£105.01	£16.02	£1.78	£14.24	16%
Monitor	LG 22" Widescreen	£118.89	£140.29	£21.40	£2.38	£19.02	16%
Monitor	HP 25" Widescreen	£259.99	£306.79	£46.80	£5.20	£41.60	16%
					Average % Profit		15%

MarkUp Cell and Carriage / Insurance Cells

The MarkUp Cells and the Carriage / Insurance cells ultimately effect the data within the table, and once these values are changed so too does the statistics within the table.

MarkUp Changes

When different values are entered within the MarkUp cell the data will change within the statistics table. The same is true for all of the cells within the table, when the corresponding MarkUp is changed.

When the MarkUp cell is 20% the following values are calculated.

Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
Processor	Intel Pentium 2.60GHz	£48.16	£57.79	£9.63	£0.96	£8.67	18%
Processor	Intel Core 2 Duo 2.93GHz	£88.11	£105.73	£17.62	£1.76	£15.86	18%
Processor	AMD Phenom II 3.20GHz	£126.89	£152.27	£25.38	£2.54	£22.84	18%
Memory	Integral 512MB 800MHz	£8.99	£10.34	£1.35	£0.18	£1.17	13%

MarkUp	%
Processor	20.00%
Memory	15.00%
Hard Drive	13.00%
Monitor	18.00%

While when the MarkUp is changed to 10%, the values within the statistics table changed as highlighted below.

Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
Processor	Intel Pentium 2.60GHz	£48.16	£52.98	£4.82	£0.96	£3.85	8%
Processor	Intel Core 2 Duo 2.93GHz	£88.11	£96.92	£8.81	£1.76	£7.05	8%
Processor	AMD Phenom II 3.20GHz	£126.89	£139.58	£12.69	£2.54	£10.15	8%
Memory	Integral 512MB 800MHz	£8.99	£10.34	£1.35	£0.18	£1.17	13%
Memory	Kingston 1GB 400MHz	£29.36	£33.76	£4.40	£0.59	£3.82	13%

MarkUp	%
Processor	10.00%
Memory	15.00%
Hard Drive	13.00%
Monitor	18.00%

Carriage / Insurance Changes

The same process occurs when the carriage / insurance cells are changed, only with different cells changing that are using the formula dependant on the carriage / insurance. Therefore the data within the statistics table will change when the value within the carriage / insurance cells are too changed, with the same being true for all of the cells within the table.

When the Carriage / Insurance cell is 5% the following values are calculated.

	Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
10	Processor	Intel Pentium 2.60GHz	£48.16	£67.79	£9.63	£2.41	£7.22	15%
11	Processor	Intel Core 2 Duo 2.93GHz	£88.11	£105.73	£17.62	£4.41	£13.22	15%
12	Processor	AMD Phenom II 3.20GHz	£126.89	£152.27	£25.38	£6.34	£19.03	15%

MarkUp	%
Processor	20.00%
Memory	15.00%
Hard Drive	13.00%

Carriage/Insurance	%
Processor	5.00%
Memory	2.00%
Hard Drive	3.00%

When the carriage / insurance is changed to 2%, the values within the statistics table are changed as highlighted below.

Type	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
Processor	Intel Pentium 2.60GHz	£48.16	£57.79	£9.63	£0.96	£8.67	18%
Processor	Intel Core 2 Duo 2.93GHz	£88.11	£105.73	£17.62	£1.76	£15.86	18%
Processor	AMD Phenom II 3.20GHz	£126.89	£152.27	£25.38	£2.54	£22.84	18%
Memory	Integral 512MB 800MHz	£8.99	£10.34	£1.35	£0.18	£1.17	13%

MarkUp	%
Processor	20.00%
Memory	15.00%
Hard Drive	13.00%
Monitor	18.00%

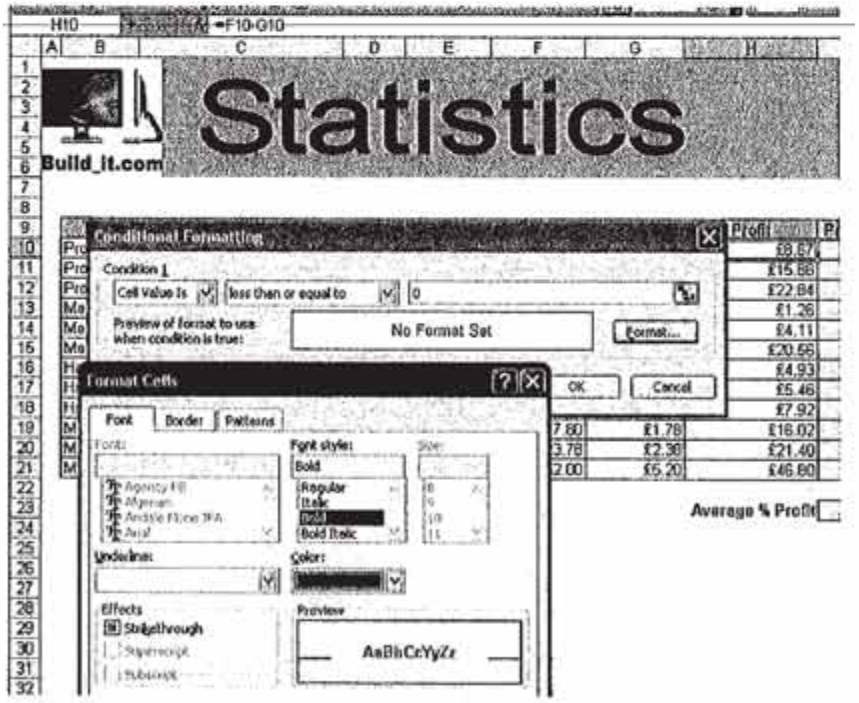
Carriage/Insurance	%
Processor	2.00%
Memory	2.00%
Hard Drive	3.00%
Monitor	1.00%

How to use conditional formatting

An added feature that could be used within the statistics worksheet, is conditional formatting as it was not easily recognisable if the profit was a minus or 'in the red' within the statistics worksheet. This could be easily caused by human error when entering too low a mark up value or too high a value in carriage the carriage or insurance cell.

Therefore by using conditional formatting it will highlight if the cells are a minus figure or equal than 0, therefore making zero profit, the cells would be formatted to red, bold text. This would therefore result in the worksheet being more user friendly and ultimately more efficient.

This process is done by clicking on the selected cells you want this process to effect and selecting the Conditional Formatting option under the format toolbar at the top of the Excel software. Then selected condition 1 as the 'cell value is' and 'less than or equal to' and then entered 0. Then select the format tab and selected the bold font style and the red font colour. The same process should be continued for all of the basic profit and profit cells



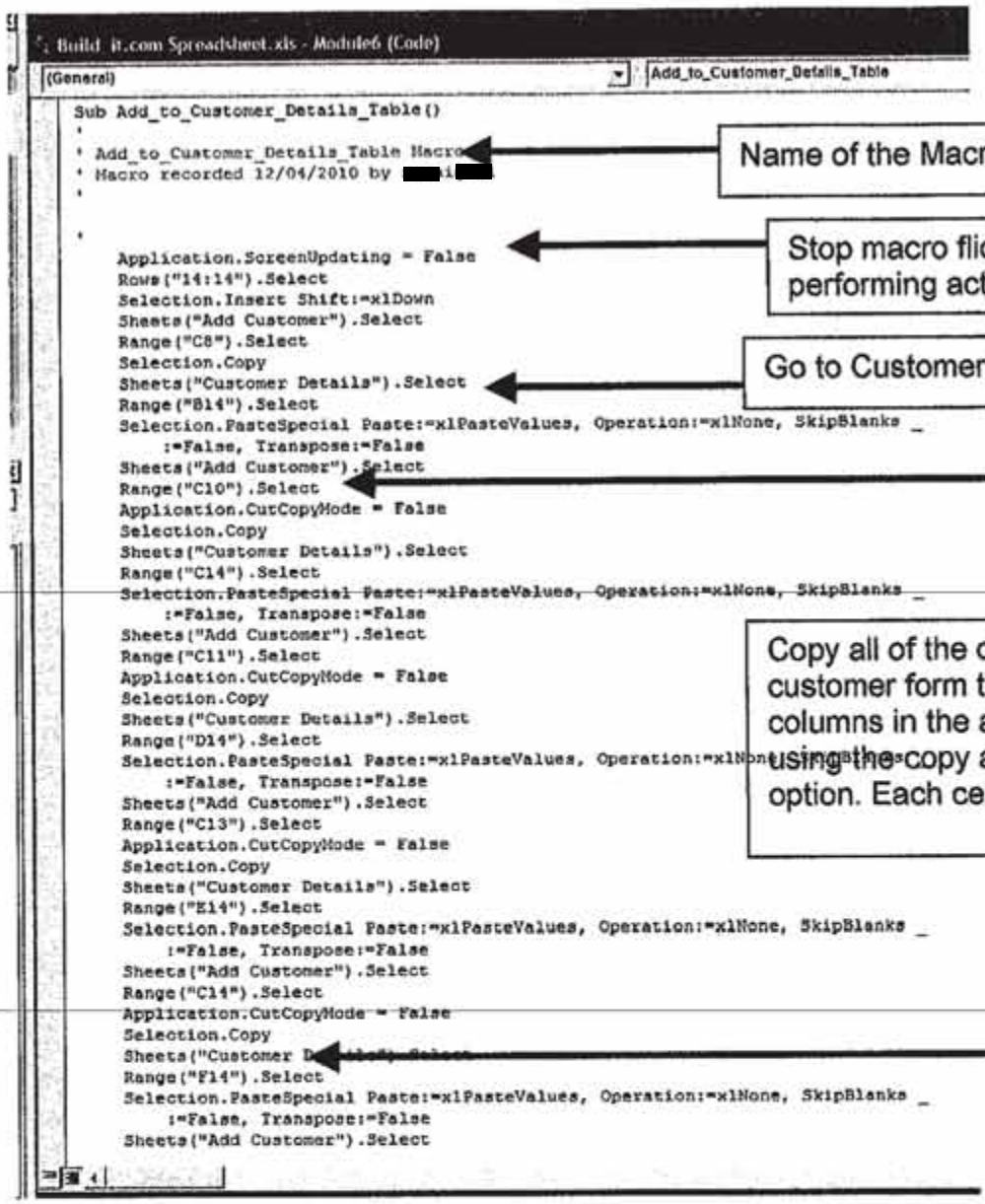
Therefore, when you enter 0 into the MarkUp processor cell, it means that the basic profit should be 0 and therefore should be red and bold text, while the profit cells for the processors will be minus, as the carriage will be taken away from the profit, which will be 0.

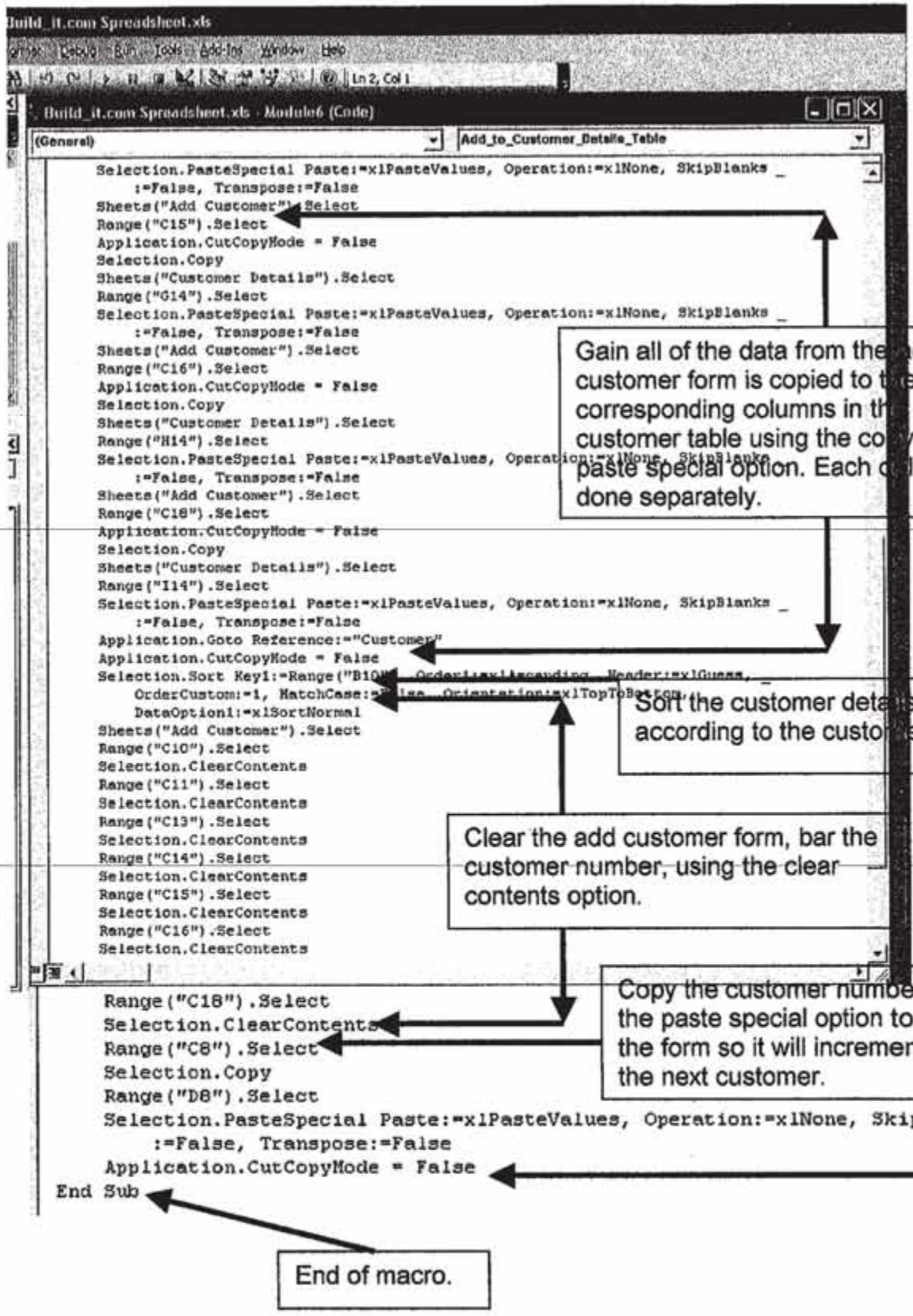
9	Description	Cost	Sale Price	Basic Profit	Carriage/Ins	Profit	Profit Percentage Cost
10	Intel Pentium 2.60GHz	£48.16	£48.16	£0.00	£0.96	-£0.96	
11	Intel Core 2 Duo 2.93GHz	£88.11	£88.11	£0.00	£1.76	-£1.76	
12	AMD Phenom II 3.20GHz	£126.89	£126.89	£0.00	£2.54	-£2.54	
13	Integral 512MB 800MHz	£8.99	£10.34	£1.35	£0.09	£1.26	

MarkUp	%
Processer	0.00%
Memory	15.00%
Hard Drive	18.00%
Monitor	20.00%

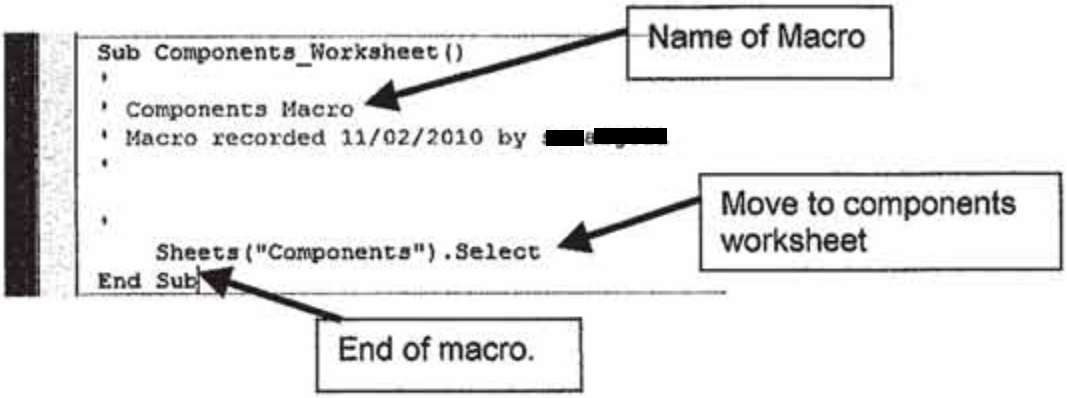
Carriage/I
Processer
Memory
Hard Drive
Monitor

Macro Code (Add to Customer Details Macro)

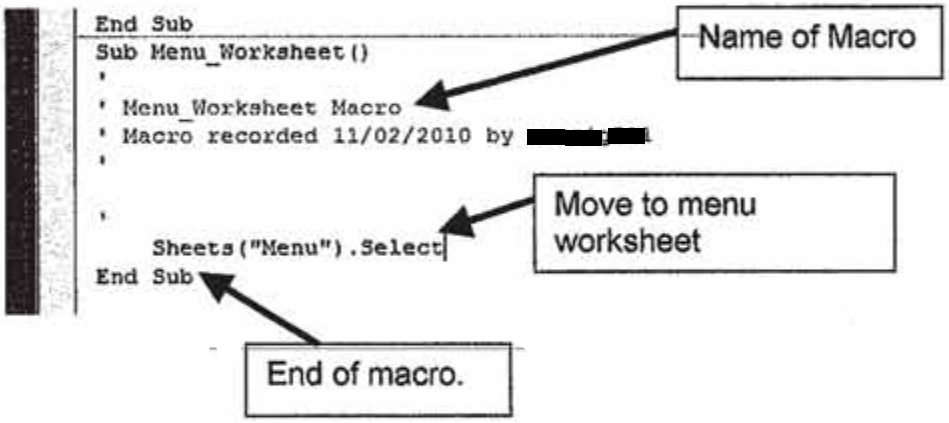



Build_it.com Spreadsheet.xls
Build_it.com Spreadsheet.xls - Module6 (Code)
(General)
Add_to_Customer_Details_Table
Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks _
:=False, Transpose:=False
Sheets("Add Customer").Select
Range("C15").Select
Application.CutCopyMode = False
Selection.Copy
Sheets("Customer Details").Select
Range("G14").Select
Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks _
:=False, Transpose:=False
Sheets("Add Customer").Select
Range("C16").Select
Application.CutCopyMode = False
Selection.Copy
Sheets("Customer Details").Select
Range("H14").Select
Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks
:=False, Transpose:=False
Sheets("Add Customer").Select
Range("C18").Select
Application.CutCopyMode = False
Selection.Copy
Sheets("Customer Details").Select
Range("I14").Select
Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks _
:=False, Transpose:=False
Application.Goto Reference:="Customer"
Application.CutCopyMode = False
Selection.Sort Key1:=Range("B10"), Order1:=xlAscending, Header:=xlGuess, _
OrderCustom:=1, MatchCase:=False, Orientation:=xlTopToBottom, _
DataOption1:=xlSortNormal
Sheets("Add Customer").Select
Range("C10").Select
Selection.ClearContents
Range("C11").Select
Selection.ClearContents
Range("C13").Select
Selection.ClearContents
Range("C14").Select
Selection.ClearContents
Range("C15").Select
Selection.ClearContents
Range("C16").Select
Selection.ClearContents
Range("C18").Select
Selection.ClearContents
Range("C8").Select
Selection.Copy
Range("D8").Select
Selection.PasteSpecial Paste:=xlPasteValues, Operation:=xlNone, SkipBlanks _
:=False, Transpose:=False
Application.CutCopyMode = False
End Sub
Gain all of the data from the add customer form is copied to the corresponding columns in the add customer table using the copy and paste special option. Each cell is done separately.
Sort the customer details table according to the customer number.
Clear the add customer form, bar the customer number, using the clear contents option.
Copy the customer number and using the paste special option to the right of the form so it will increment ready for the next customer.
End of macro.

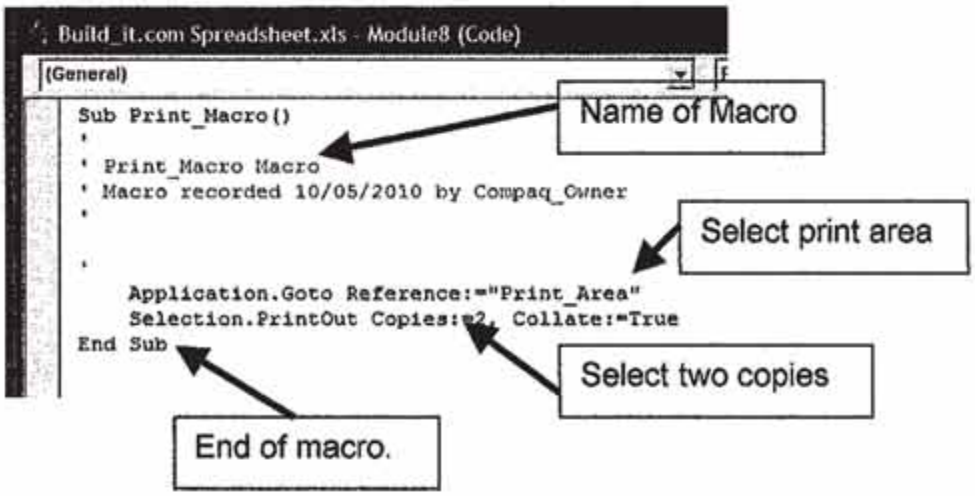
Macro Code (Components Navigation Macro in Menu Worksheet)



Macro Code (Menu Navigation Macro in all worksheets)



Macro Code (Print Macro in Invoice Worksheet)



Unit 10

Task F

Task F

For this task I will critically evaluate my performance in relation to planning, my performance in implementing the final product and also evaluate the final product.

Evaluation of Performance in Relation to Planning

I will critically evaluate the planning process that I carried out previously before the implementation of the Excel spreadsheet could be completed. Within Task A, I used storyboard planning techniques in order to plan the creation of the spreadsheet and also highlighted the outputs that I expect to obtain, also planning the general design choices and macros that I will use.

The first planning tool that I used was the planning the solution for the scenario that was highlighted by the client. For this I planned what will be included within all of the worksheets in order to comply with the scenario that was given. For this, I simply planned the output information for each worksheet, information I felt that was necessary to plan before the actual creation of the Excel document. As I split the planning for each of the worksheets in turn, I feel that this planning technique was structured well and ultimately led to the effective planning tool which I could look back on before I created each worksheet.

The second planning tool was identifying initial and additional aspects to consider before the creation of the Excel spreadsheet. This included planning the naming of the spreadsheets, the inserting of the worksheets, the worksheet tabs, the adding of buttons within the worksheet, the adding of macros within the individual worksheets, planning the general design choices, the general format choices, planning the creation of a logo, planning of the formatting of the cells and also planning of the formulas and additional features. I think that this planning technique was very effective as it helped identify all of the tasks I have to complete when creating the Excel document. Therefore I think that this written planning tool I created greatly contributed to the effective planning of my web site.

The third planning tool that I used was the creation of a storyboard for each of the worksheets and a written explanation of the processes and design choices that were to be completed once the creation of the spreadsheet began. I feel that this aspect of my planning was the most useful, as I was able to look back when creating each worksheet to see what aspects had to be created and how the worksheet was to be presented. Therefore I think that this planning tool I created was the most use when it came to creating the spreadsheet.

However, there are some weaknesses to this planning technique, especially due to the fact that I had to plan to use formula when I was yet to start the Excel document. Therefore, to plan the exact formula was very difficult to achieve and when it came to creating the worksheets, at times this formula has to be slightly changed, with the same concept remaining.

Therefore, if I was to complete a planning state of a similar task in the future I would still use the storyboard planning technique to highlight all the layout of the worksheets and also where the formulas have to be included. Overall, I feel that the planning techniques used culminated in an effective creation process.

SWOT Analysis

Strengths	Weaknesses
I think that the storyboard planning was a particular strength as it highlighted all of the tasks in order and also both the layout of each worksheet. It also highlighted what aspects had to be included such as formulas and macros. Therefore, I was very happy with the overall planning techniques used for the creation of the spreadsheet.	I think that within the given time I produced an extensive planning stage. However, an area of weakness, in my opinion, was that I had to plan to use formula when I was yet to start the Excel document. Therefore, to plan the exact formula was very difficult to achieve and at times this formula has to be slightly changed, with the same concept remaining.
Opportunities	**Threats**
The planning techniques that I carried out enabled me to understand that the more thorough the planning, the more time saved when it comes to the implementation of the web site. This task also gave me the opportunity to learn new planning skills such as Critical Path Analysis.	I think that time constraints were the main threat for the planning stage. It put me under pressure to complete the tasks within the time frame, even if unforeseen issues arose such as illness. However, I am very pleased with the effectiveness of my performance in the planning process.

SWOT analysis

Evaluation of Performance in Implementing the Project

I will critically evaluate my performance in the implementation process, using SWOT analysis to identify both the strengths and weaknesses and I will also address the problems to suggest improvements if I were to complete a similar task in the future using the Microsoft Excel software.

In order to create the spreadsheet, I followed the plans that had previously been laid out so that the implementation process would be more effective. Therefore, I think that collectively the planning tools resulted in comprehensive and extensive planning which was greatly effective when it came to implementing the web site.

The first task was to complete the menu worksheet that functioned to take the user to the specified worksheet through the use of macros attached to the buttons within this menu worksheet. I was comprehensively able to create these macros and attach them to the corresponding buttons and I was also able to include the formula to display today's date within one of the cells. I feel that the menu worksheet not only functioned well but also looked aesthetically pleasing with the inclusion of the logo I created using the Photoshop software. This was a consistent feature within each of the worksheets as well. Therefore, in my opinion, the menu worksheet was implemented well and is of a high standard.

The next task was the creation of the add customer worksheet. I was effectively able to use a formula for the customer number to increment to ensure the customer receives a unique customer number and I think the layout of the add customer form ensured ease of use when entering the data. I was also able to effectively implement the menu macro, however, I had a slight problem to overcome for the add to customer details macro. The problem was not in the steps taken to create the macro itself, but when the macro was clicked upon to add the customer to the customer details table, it kept flashing. I checked the macro code using the edit macro option and there did not seem to be anything wrong with the process that I recorded. I then researched ways to fix this problem and found a source which stated that if I included the line of text, Application.ScreenUpdating = False before the code to perform the macros, it would stop the screen from flickering and perform the processes in one step. Therefore, I feel when implementing this worksheet I used my initiative in looking for ways to fix

any problems which occurred and I also learnt new aspects about the Excel software that is beneficial when I was creating the other macros within the Excel document and also if I was to complete a similar task in the future. I therefore think that overall, the implementation process for the add customer worksheet was a success.

The next task was the creation of the customer details worksheet. This included the creation of a table to ensure that the data was presented in a clear and concise manner under the various headings. I also effectively named the customer details cell references to ensure that when the data is entered from the add customer worksheet using the macro, it will sort the data according to the telephone number, which will later be used when implementing the invoice worksheet to retrieve all the customer's details when only entering the telephone number. I was also able to include a menu macro so the user can move back to the menu worksheet effectively. Therefore, I think that overall, the creation of the customer details worksheet was very effective and the layout was functional and concise.

The next task was the creation of the components worksheet. This included the creation of tables to include the components details, such as component code, component code and component cost. This was done for each of the four products, including, processor, memory, hard drive and monitor. The data was included within tables to ensure that the data was presented in a clear and concise way under the various headings. Also, when implementing I had to ensure that the tables containing the information were named and that they were numbered to ensure that the VLOOKUP function could work within the invoice worksheet. Therefore, when completing this worksheet, I also had to implement ahead, keeping in mind that this worksheet would affect another worksheet within the spreadsheet. I was also able to include a menu macro so the user can move back to the menu worksheet effectively. Therefore, I think that overall, the creation of the customer details worksheet was very effective and the layout was functional and concise.

The next task was the creation of the invoice worksheet and this is the area that I feel I implemented best within the creation process due to the use of additional features. I was effectively able to ensure the layout of this worksheet was not only clear and concise but fitted into one page for the printing output purposes. I was also able to effectively use the data formula that would state today's date, and would change according to the computer's settings.

Another aspect which I effectively implemented within this worksheet was using formula to ensure that the invoice number incremented when another invoice was complete and added to the summary table. This worksheet included the use of the VLookup formulas so that the when the customer's telephone number was entered, it retrieved all of the customer details for the corresponding telephone number. The VLookup formula was also used to retrieve the component descriptions and the component costs from the component worksheet. I was also able to effectively use combo boxes so the customer could select which product they would like to purchase. However, if I was to complete a task like this in the future, I would include the option that the customer does not have to buy one of each component, but can select to buy any product and also be able to buy multiples of the same product. Unfortunately, the spreadsheet that I have implemented does not allow for this. This worksheet also enabled me to use formula to calculate the sub total, the delivery charge, the VAT and also the invoice total.

Also, when implementing this worksheet, I was effectively able to create the macros, including a menu macro, a print macro and an add to summary macro. The menu macro was created similarly to the other worksheets and a print macro was also created which allowed for the user the print the invoice. By clicking on this macro, it sends two copies of the invoice to print, one for the client and one for the company themselves to keep a record of sales. I think that this aspect was an important part of the implementation process as it takes into consideration the end user and how the spreadsheet will benefit them. I also created an add to summary macro within this worksheet. Therefore, when this macro is clicked once the customer has entered their customer details and selected the products they wish to purchase, the data will be transferred over to the summary table to store all transactions. I am very pleased with this macro as it clears the invoice form ready for the next customer by inserting 0 in the telephone number. I inserted an IF formula in the other cells that are linked to the telephone number cell and they appear blank, while the component cost is displayed as £0.00. Therefore, I think that I implemented this worksheet to the best of my ability

and included additional features that are very beneficial to both the customer and the user. Overall, I believe the implementation of this worksheet was a success.

The next task was the creation of the summary table worksheet, which was created in conjunction with the invoice worksheet as they were linked by the add to summary macro within the invoice worksheet. This included the creation of a table to ensure that the data was presented in a clear and concise manner under the various headings. I also effectively named the summary table cell references to ensure that when the data is entered from the invoice worksheet using the macro, it will sort the data according to the invoice number. I was also able to include a menu macro so the user can move back to the menu worksheet effectively. Therefore, I think that overall, the creation of the summary worksheet was very effective and the layout was functional and concise.

The next task was the completion of the Pivot Table worksheet. I had never used this feature before and therefore had to use my initiative in order to learn how to effectively create it. I feel that I was able to effectively highlight the sales figures for each month, as presented within the summary table worksheet and I will therefore be able to use this knowledge if I had to complete a similar task in the future. Again, I showed consistency and how the spreadsheet affects the end user by including a menu macro on this worksheet.

The next task was the completion of the Pivot Chart worksheet. The Pivot Chart is essentially a data representation of the pivot table data and I was able to simply create this feature using the chart wizard tool on the pivot chart toolbar. Again this is another new feature I have learned how to use if I was to complete a similar task in the future. Again, I showed consistency and how the spreadsheet affects the end user by including a menu macro on this worksheet. Whilst creating this worksheet, I came across a problem that was fixed; ensuring the pivot table was located within the already created pivot chart worksheet, instead of a separate worksheet without a menu macro of the consistent design features. Therefore, overall I think that my implementation of this worksheet was successful, resulting in another consistent worksheet within the Excel spreadsheet.

The next task was the implementation of the statistics worksheet. This worksheet I feel contained a lot of formulae, and as a result I was able to show my ICT skills in the creation of this worksheet. I was effectively able to use formula to calculate the sale price, the basic profit, the carriage / insurance, the profit, the profit % cost and the average % profit, with the cells being dictated by the content included within the mark up % cells and the carriage / insurance cells to the immediate right of the statistics worksheet. I was also able to use the additional feature of conditional formatting in order to highlight if the cells are a minus figure or equal than 0, therefore making zero profit, the cells would be formatted to red, bold text. I feel that this additional feature of conditional formatting resulted in a user-friendly spreadsheet as it will detect some human errors and ultimately, in my opinion, has made my spreadsheet more efficient. Again, I showed consistency and how the spreadsheet affects the end user by including a menu macro on this worksheet. Overall, I believe the implementation of this worksheet was a success.

The next task was the completion of the scenario summary worksheet. I found this task slightly harder than some of the others, as again this process was new to me. However, I was effectively able to create scenarios which would highlight that when different mark up % values and carriage / insurance % values are entered, the profits would change accordingly. Once I created the scenarios, the table was created which highlighted to the client if they set the mark up values and the insurance values to the stated amounts, this will be their expected profits. This will therefore enable the client to maximise their profits according to the rate the certain products are selling at. The scenario table ensured that the data was presented in a clear and concise manner. Again, I showed consistency and how the spreadsheet affects the end user by including a menu macro on this worksheet. I feel that this worksheet was another success both for me creating it and for the end user, as it is an additional feature which is beneficial, with the layout of the table also being functional and concise.

I think that overall I have learnt from the process of implementation that it is essential to plan everything in detail to ensure that it is easier when it comes to putting together the actual content for the spreadsheet. I have also learnt more about the additional features to include within the spreadsheet, which would be beneficial to the end user and add to the professionalism of the completed spreadsheet.

The major problems which I encountered included implementing the add to customer details macro and the invoice worksheet in which I wanted to have it appear blank for the next customer. However, through time and advice I was able to fix these problems in order to implement a very consistent spreadsheet that meets the needs of the client and ultimately the user.

If I was to complete a similar task in the future I would implement the option that the customer does not have to buy one of each component, but can select to buy any product and also be able to buy multiples of the same product. Unfortunately, the spreadsheet that I have implemented does not allow for this. This worksheet also enabled me to use formula to calculate the sub total, the delivery charge, the VAT and also the invoice total.

SWOT Analysis

Strengths	Weaknesses
I think that the invoice worksheet was a particular strength in the implementation process as I was able to include many additional features such as combo boxes, using VLookups and also using IF formula to ensure that the invoice looks blank for the next customer.	I think that a weakness with this spreadsheet is that within the invoice worksheet, the customer cannot purchase multiple items or any two from the list of components such as two different types of processors.
Opportunities	**Threats**
The overall creation of the Excel spreadsheet allowed me to use the additional features within this software that I had never used before.	I think that the complexity of some of the features I wanted to include within the spreadsheet were the main threat for the creation of the spreadsheet. However, I think that the overall implementation of the final product was effective and cohesive.

Evaluation of Final Product

For this assignment I will critically evaluate the final product by comparing it against the scenario highlighted by the client. I will also create a questionnaire to see how others evaluate the spreadsheet. This result will conclude if the completed web site has met its intended use and purpose.

Comparing against the Scenario

I will compare the final product against the scenario to ensure that the final product has met the needs of the client effectively.

The final product should be able to;

- *Computerise all the data and keep a record of all customer and order details* – The staff of E :om are able to enter new customers into the spreadsheet through the add customer macro to the customer details table in order to effectively store their details for future reference when it comes to purchasing a product. The summary worksheet also keeps a record of all the order details from the invoice worksheet. Therefore, the final product has met the client's need of effectively storing all customer and order details in the form of a table so the data is clear and concise. ✓ Ist Spec
- *Generate invoices for the customer* – The invoice worksheet enables the customer to enter their telephone number and this will retrieve the rest of their contact details from the customer details worksheet and also to select the products they wish to purchase. This data is then added to the summary table using the add to summary macro and the print macro can be used to print two copies of the invoice. The print macro is therefore the output information of the invoice worksheet and spreadsheet as a whole.
- *Create management reports to clearly represent sales figures and patterns* – I created a pivot chart which clearly highlighted the total the total money spent every month. I think that the creation of the graphs allowed the data to be presented in a clear and concise manner for the client to look at.
- *Investigate new ways to improve the profit margins* – This was done through the creation of scenarios, culminating in a scenario summary table which effectively highlighted that when different mark up % values and carriage /

insurance % values are entered, the profits would change accordingly. The scenario summary table was created to highlight to the client that if they set the mark up values and the insurance values to the stated amounts, this will be their expected profits. This will therefore enable the client to maximise their profits according to the rate the certain products are selling at, with the scenario table ensuring that the data was presented in a clear and concise manner.

I think that after assessing the completed spreadsheet against the scenarios, I have met the requirements and therefore think that the overall creation of the spreadsheet was successful. I believe that the final product, as a result, meets both the clients and the user's needs.

SWOT Analysis

Strengths	Weaknesses
I think that the invoice worksheet was a particular strength in the final product as I was able to include many additional features such as combo boxes, using VLookups and also using IF formula to ensure that the invoice looks blank for the next customer. It therefore culminated in the effective output using the print macro that the client stated in the scenario.	I think that a weakness with this spreadsheet is that within the invoice worksheet, the customer cannot purchase multiple items or any two from the list of components such as two different types of processors. However, it did not state in the scenario it had to but I feel it would have added to the overall success of the spreadsheet.
Opportunities	**Threats**
The overall creation of the Excel spreadsheet allowed me to use the additional features within this software that I had never used before.	I think that the complexity of some of the features I wanted to include within the spreadsheet were the main threat for the creation of the final product. However, I think that the overall final product was effective and cohesive and met the clients needs.

SWOT analysis

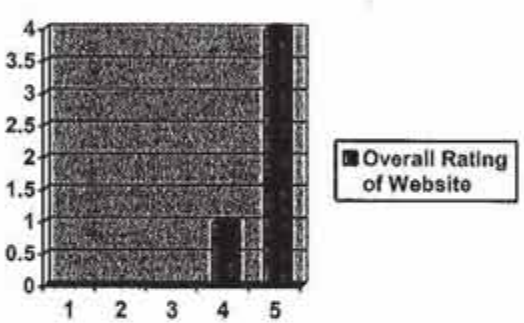
User Evaluation Questionnaire

The questionnaire was created and given to 5 people who worked for the company om so they can evaluate the system they will be using within their work. Most of the questions were answered on a scale of 1-5, with 5 being excellent and 1 being poor or as yes or no questions.

See Appendix 1 for complete questionnaires.

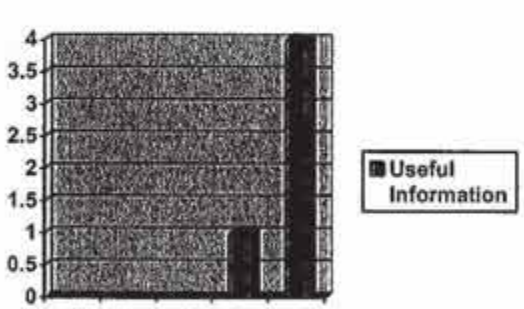
The following questions were asked and the following responses were given:

How did you like the spreadsheet overall?



This highlights that from the questionnaire, 3 out of 5 people thought the spreadsheet was excellent, while the other two people thought it was very good.

How useful did you find all of the worksheets included within the spreadsheet?

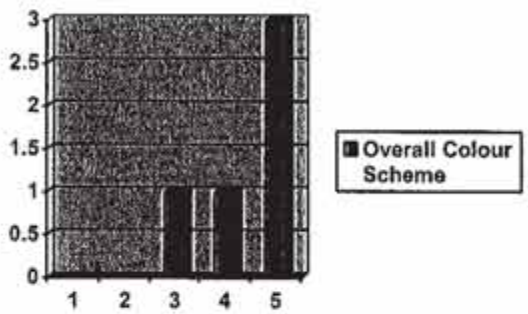


80% of the people thought that the worksheets included within the web site were excellent, with a further 20% stating it they were very good. This would therefore highlight that worksheets effectively met the user needs in the day to day working of the company.

Was the colour scheme used in the spreadsheet consistent throughout?

All of the people that answered this question stated 'yes', meaning they believed the overall colour scheme used throughout the spreadsheet was consistent.

How well did you like the overall colour scheme?

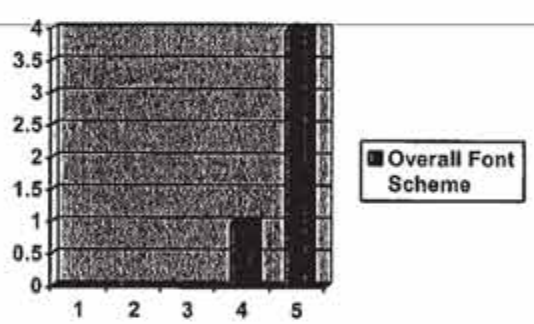


3 out of 5 people believed that the overall colour scheme was excellent, while a further I person believed it was very good and another person believed it was just good. This is therefore an aspect that I could improve upon and make the colours in the worksheets more prominent.

Was the layout used in the spreadsheet consistent throughout?

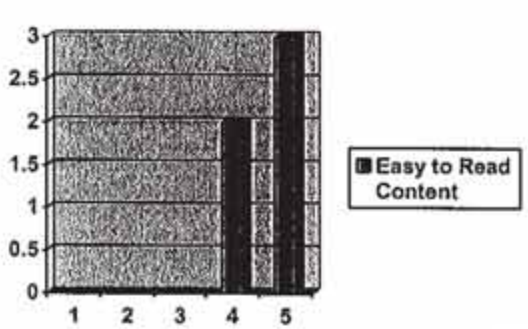
All of the people that answered this question stated 'yes', meaning they believed the overall font scheme used throughout the spreadsheet was consistent.

How well did you like the overall layout of data within the spreadsheet?



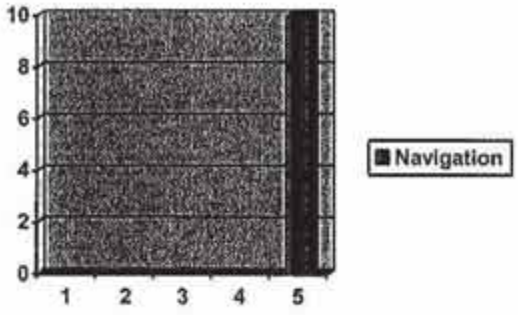
80% of the people believed that the overall layout within the spreadsheet was excellent, while a further 20% believed it was very good.

Was the content easy to read from the spreadsheet?



3 people stated that the content was easy to read within the spreadsheet, while a further 2 people through the content was quite easy to read.

How well did you find it to navigate your way through the spreadsheet?



100% of the people thought that the spreadsheet navigation was excellent. This is therefore a particular strength in the spreadsheet with the effective use of navigation macros within the menu worksheet and within every other worksheet also.

Did the macro buttons work effectively for both navigation and data entry purposes?

100% of the people thought that the macros within the worksheet were excellent. This is therefore a particular strength in the spreadsheet with the effective use of navigation macros and also to aid data entry into other worksheets and table accordingly.

Did the date formula work effectively within the menu worksheet and the invoice worksheet?

100% of the people thought that the date function worked effectively in both the menu worksheet and the invoice worksheet. The invoice date function was need for the purpose of stating the date the customer's purchased their products.

Did the add to customer macro ensure that;

The data was copied over to the customer details table?

100% of the people stated that when the add to customer macro was clicked upon, all of the data was transferred effectively over to the corresponding columns within the customer details table. Thus highlighting that this aspect of the add customer macro was effective for the clients to use.

The customer number incremented, ready for the next customer?

100% of the people stated that when the add to customer macro was clicked upon, the customer number within the add customer worksheet incremented for the next customer, thus ensuring each customer had a unique customer number. This therefore highlights that this aspect of the add customer macro was effective for the clients to use.

The add customer form was cleared, ready for the next customer?

100% of the people stated that when the add to customer macro was clicked upon, the add customer form was cleared ready for the next customer. This therefore highlights that this aspect of the add customer macro was effective for the clients to use.

The customer details worksheet was sorted by the telephone number is ascending order?

100% of the people stated that when the add to customer macro was clicked upon, the data that was transferred over to the customer details table was sorted by the telephone number in ascending order, which was essential for creating the VLookups within the invoice worksheet. This therefore highlights that this aspect of the add customer macro was effective for the clients to use.

Did the invoice worksheet retrieve all of the customer details when the customer's telephone number was entered?

100% of the people stated that when the customer's telephone number was entered, it retrieved the rest of their details from the customer details table. I think that this was a particular strength in the implementation and my performance as it was relevant for the end user for ease of use.

In the invoice worksheet, when the drop down boxes were selected, did the component description and cost change accordingly?

Again, all of the people who answered the questionnaire stated that this feature worked accordingly. This was because the drop down boxes with the component code were linked to the component worksheet, which in turn retrieved the component description and cost according to the selected component code. This was therefore an effective aspect of the completed worksheet.

Did the add to summary macro ensure that;

The data was copied over to the summary table?

All of the people stated that when the add to summary macro was clicked upon, all of the data was transferred effectively over to the corresponding columns within the summary table. Thus highlighting that this aspect of the add to summary macro was effective for the clients to use.

The invoice number was incremented, ready for the next customer?

Again, all of the people stated that when the add to summary macro was clicked upon, the invoice number within the invoice worksheet incremented for the next customer, thus ensuring each customer had a unique invoice number. This therefore highlights that this aspect of the add to summary macro was effective for the clients to use.

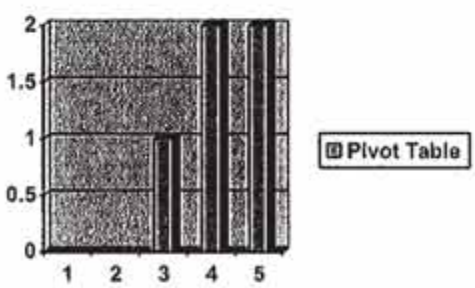
The invoice form was cleared and cells set to £0.00, ready for the ext customer?

All of the people who filled in the questionnaire were in agreement that when the add to summary macro was clicked upon, the invoice form appeared clear, only highlighting the invoice number and the component cost cells appeared as £0.00. This was done through using IF formula, if 0 was entered in the telephone number cell, then it would make the cells blank or as £0.00.

The summary table was sorted by the invoice number in ascending order?

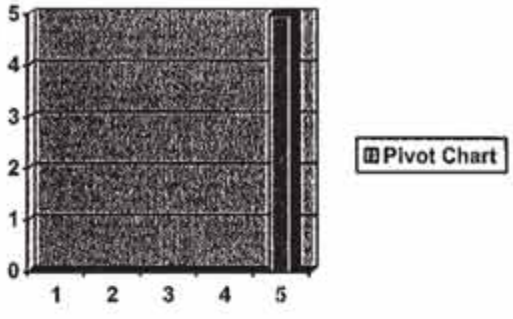
100% of the people stated that when the add to summary macro was clicked upon, the data that was transferred over to the summary table was sorted by the invoice number in ascending order. This therefore highlights that this aspect of the add customer macro was effective for the clients to use.

How useful was the pivot table in presenting the data?



Two people stated that the data presented in the pivot table was excellent, a further two people stated it was very good and one person highlighted it was average. This is therefore an aspect I could improve upon, however I feel the response was due to the table being very small and only highlighting the sales figures for each month. As the company grows, this table will therefore expand.

How useful was the pivot chart in presenting the data?



All of the people who completed the spreadsheet were in agreement that the data presented in the pivot chart was excellent. I think this highlighted a strong area in my performance and of the final product as a result.

Please state any improvements you would like the spreadsheet to have.

Only one person left an answer for this question within the questionnaire and stated that a more prominent colour scheme should be use. I can therefore take this into consideration if I was to complete a similar task in the future.

Overall, I think that the results from the questionnaire were pleasing, highlighting both particular strengths and weaknesses of the web site and overall I feel that I have met the specification and succeeded in the implementation of the web site.

Appendix 1 - Website Evaluation Questionnaire

This questionnaire is for completion to determine whether the spreadsheet that has been created fulfilled the needs of the client. Thank you for taking the time to fill out this questionnaire.

Please tick the boxes using the following scale: 1 meaning poor up to 5 meaning excellent.

1. How did you like the spreadsheet overall?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

2. How useful did you find all of the worksheets included within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

3a. Was the colour scheme used in the spreadsheet consistent throughout?

Yes ☑ No ☐

3b. How well did you like the overall colour scheme?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

4. Was the layout used in the spreadsheet consistent throughout?

Yes ☑ No ☐

5. How well did you like the overall layout of data within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

6. Was the content easy to read from the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

7. How well did you find it to navigate your way through the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

8. Did the macro buttons work effectively for both navigation and data entry purposes?

Yes ☑ No ☐

9. Did the date formula work effectively within the menu worksheet and the invoice worksheet?

Yes ☑ No ☐

Did the add to customer macro ensure that;

10a.The data was copied over to the customer details table?

Yes ☑ No ☐

10b.The customer number was incremented, ready for the next customer?

Yes ☑ No ☐

10c.The add customer form was cleared, ready for the next customer?

Yes ☑ No ☐

10d.The customer details worksheet was sorted by the telephone number in ascending order?

Yes ☑ No ☐

11. Did the invoice worksheet retrieve all of the customer details when the customer's number was entered?

Yes ☑ No ☐

12. In the invoice worksheet, when the drop down boxes were selected, did the component description and cost change accordingly?

Yes ☑ No ☐

Did the add to summary macro ensure that;

12a.The data was copied over to the summary table?

Yes ☑ No ☐

12b.The invoice number was incremented, ready for the next customer?

Yes ☑ No ☐

12c.The invoice form was cleared and cells set to £0.00, ready for the next customer?

Yes ☑ No ☐

12d.The summary table was sorted by the invoice number in ascending order?

Yes ☑ No ☐

13. How useful was the pivot table in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

14. How useful was the pivot chart in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

Please state any improvements you would like the spreadsheet to have.

Appendix 1 - Website Evaluation Questionnaire

This questionnaire is for completion to determine whether the spreadsheet that has been created fulfilled the needs of the client. Thank you for taking the time to fill out this questionnaire.

Please tick the boxes using the following scale: 1 meaning poor up to 5 meaning excellent.

1. How did you like the spreadsheet overall?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

2. How useful did you find all of the worksheets included within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

3a. Was the colour scheme used in the spreadsheet consistent throughout?

Yes ☑ No ☐

3b. How well did you like the overall colour scheme?

1 ☐ 2 ☐ 3 ☑ 4 ☐ 5 ☐

4. Was the layout used in the spreadsheet consistent throughout?

Yes ☑ No ☐

5. How well did you like the overall layout of data within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

6. Was the content easy to read from the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

7. How well did you find it to navigate your way through the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

8. Did the macro buttons work effectively for both navigation and data entry purposes?

Yes ☑ No ☐

9. Did the date formula work effectively within the menu worksheet and the invoice worksheet?

Yes ☑ No ☐

Did the add to customer macro ensure that;

10a.The data was copied over to the customer details table?

Yes ☑ No ☐

10b.The customer number was incremented, ready for the next customer?

Yes ☑ No ☐

10c.The add customer form was cleared, ready for the next customer?

Yes ☑ No ☐

10d.The customer details worksheet was sorted by the telephone number in ascending order?

Yes ☑ No ☐

11. Did the invoice worksheet retrieve all of the customer details when the customer's number was entered?

Yes ☑ No ☐

12. In the invoice worksheet, when the drop down boxes were selected, did the component description and cost change accordingly?

Yes ☑ No ☐

Did the add to summary macro ensure that;

12a.The data was copied over to the summary table?

Yes ☑ No ☐

12b.The invoice number was incremented, ready for the next customer?

Yes ☑ No ☐

12c.The invoice form was cleared and cells set to £0.00, ready for the next customer?

Yes ☑ No ☐

12d.The summary table was sorted by the invoice number in ascending order?

Yes ☑ No ☐

13. How useful was the pivot table in presenting the data?

1 ☐ 2 ☐ 3 ☑ 4 ☐ 5 ☐

14. How useful was the pivot chart in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

Please state any improvements you would like the spreadsheet to have.

/

Appendix 1 - Website Evaluation Questionnaire

This questionnaire is for completion to determine whether the spreadsheet that has been created fulfilled the needs of the client. Thank you for taking the time to fill out this questionnaire.

Please tick the boxes using the following scale: 1 meaning poor up to 5 meaning excellent.

1. How did you like the spreadsheet overall?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

2. How useful did you find all of the worksheets included within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

3a. Was the colour scheme used in the spreadsheet consistent throughout?

Yes ☑ No ☐

3b. How well did you like the overall colour scheme?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

4. Was the layout used in the spreadsheet consistent throughout?

Yes ☑ No ☐

5. How well did you like the overall layout of data within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

6. Was the content easy to read from the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

7. How well did you find it to navigate your way through the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

8. Did the macro buttons work effectively for both navigation and data entry purposes?

Yes ☑ No ☐

9. Did the date formula work effectively within the menu worksheet and the invoice worksheet?

Yes ☑ No ☐

Did the add to customer macro ensure that;

10a.The data was copied over to the customer details table?

Yes ☑ No ☐

10b.The customer number was incremented, ready for the next customer?

Yes ☑ No ☐

10c.The add customer form was cleared, ready for the next customer?

Yes ☑ No ☐

10d.The customer details worksheet was sorted by the telephone number in ascending order?

Yes ☑ No ☐

11. Did the invoice worksheet retrieve all of the customer details when the customer's number was entered?

Yes ☑ No ☐

12. In the invoice worksheet, when the drop down boxes were selected, did the component description and cost change accordingly?

Yes ☑ No ☐

Did the add to summary macro ensure that;

12a.The data was copied over to the summary table?

Yes ☑ No ☐

12b.The invoice number was incremented, ready for the next customer?

Yes ☑ No ☐

12c.The invoice form was cleared and cells set to £0.00, ready for the next customer?

Yes ☑ No ☐

12d.The summary table was sorted by the invoice number in ascending order?

Yes ☑ No ☐

13. How useful was the pivot table in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

14. How useful was the pivot chart in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

Please state any improvements you would like the spreadsheet to have.

Use a more prominent colour scheme.

Appendix 1 - Website Evaluation Questionnaire

This questionnaire is for completion to determine whether the spreadsheet that has been created fulfilled the needs of the client. Thank you for taking the time to fill out this questionnaire.

Please tick the boxes using the following scale: 1 meaning poor up to 5 meaning excellent.

1. How did you like the spreadsheet overall?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

2. How useful did you find all of the worksheets included within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

3a. Was the colour scheme used in the spreadsheet consistent throughout?

Yes ☑ No ☐

3b. How well did you like the overall colour scheme?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

4. Was the layout used in the spreadsheet consistent throughout?

Yes ☑ No ☐

5. How well did you like the overall layout of data within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

6. Was the content easy to read from the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

7. How well did you find it to navigate your way through the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

8. Did the macro buttons work effectively for both navigation and data entry purposes?

Yes ☑ No ☐

9. Did the date formula work effectively within the menu worksheet and the invoice worksheet?

Yes ☑ No ☐

Did the add to customer macro ensure that;

10a.The data was copied over to the customer details table?

Yes ☑ No ☐

10b.The customer number was incremented, ready for the next customer?

Yes ☑ No ☐

10c.The add customer form was cleared, ready for the next customer?

Yes ☑ No ☐

10d.The customer details worksheet was sorted by the telephone number in ascending order?

Yes ☑ No ☐

11. Did the invoice worksheet retrieve all of the customer details when the customer's number was entered?

Yes ☑ No ☐

12. In the invoice worksheet, when the drop down boxes were selected, did the component description and cost change accordingly?

Yes ☑ No ☐

Did the add to summary macro ensure that;

12a.The data was copied over to the summary table?

Yes ☑ No ☐

12b.The invoice number was incremented, ready for the next customer?

Yes ☑ No ☐

12c.The invoice form was cleared and cells set to £0.00, ready for the next customer?

Yes ☑ No ☐

12d.The summary table was sorted by the invoice number in ascending order?

Yes ☑ No ☐

13. How useful was the pivot table in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

14. How useful was the pivot chart in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

Please state any improvements you would like the spreadsheet to have.

Appendix 1 - Website Evaluation Questionnaire

This questionnaire is for completion to determine whether the spreadsheet that has been created fulfilled the needs of the client. Thank you for taking the time to fill out this questionnaire.

Please tick the boxes using the following scale: 1 meaning poor up to 5 meaning excellent.

1. How did you like the spreadsheet overall?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

2. How useful did you find all of the worksheets included within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

3a. Was the colour scheme used in the spreadsheet consistent throughout?

Yes ☑ No ☐

3b. How well did you like the overall colour scheme?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

4. Was the layout used in the spreadsheet consistent throughout?

Yes ☑ No ☐

5. How well did you like the overall layout of data within the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

6. Was the content easy to read from the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

7. How well did you find it to navigate your way through the spreadsheet?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

8. Did the macro buttons work effectively for both navigation and data entry purposes?

Yes ☑ No ☐

9. Did the date formula work effectively within the menu worksheet and the invoice worksheet?

Yes ☑ No ☐

Did the add to customer macro ensure that;

10a.The data was copied over to the customer details table?

Yes ☑ No ☐

10b.The customer number was incremented, ready for the next customer?

Yes ☑ No ☐

10c.The add customer form was cleared, ready for the next customer?

Yes ☑ No ☐

10d.The customer details worksheet was sorted by the telephone number in ascending order?

Yes ☑ No ☐

11. Did the invoice worksheet retrieve all of the customer details when the customer's number was entered?

Yes ☑ No ☐

12. In the invoice worksheet, when the drop down boxes were selected, did the component description and cost change accordingly?

Yes ☑ No ☐

Did the add to summary macro ensure that;

12a.The data was copied over to the summary table?

Yes ☑ No ☐

12b.The invoice number was incremented, ready for the next customer?

Yes ☑ No ☐

12c.The invoice form was cleared and cells set to £0.00, ready for the next customer?

Yes ☑ No ☐

12d.The summary table was sorted by the invoice number in ascending order?

Yes ☑ No ☐

13. How useful was the pivot table in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☑ 5 ☐

14. How useful was the pivot chart in presenting the data?

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☑

Please state any improvements you would like the spreadsheet to have.

/