

```
1: unit NewOrderForm;
2:
3: interface
4:
5: uses
6:   Winapi.Windows, Winapi.Messages, System.SysUtils, System.Variants,
7:   System.Classes, Vcl.Graphics,
8:   Vcl.Controls, Vcl.Forms, Vcl.Dialogs, Vcl.StdCtrls, Vcl.DBCtrls, Vcl.Mask,
9:   IdBaseComponent, IdDateTimeStamp, Data.DB, Vcl.Grids, Vcl.DBGrids, HTTPApp,
10:  DBWeb, ShellApi;
11:
12: type { Creation of TOrderRecord, this is used in the running of 'Order Array'
13:   as it sets out the shape and diamentions of the array. }
14:   TOrderRecord = Record
15:     Product: String;
16:     Quantity: Integer;
17:     UnitPrice: Currency;
18:   End;
19:
20:   TNewOrdersForm = class (TForm)
21:     Homebtn: TButton;
22:     DateLbl: TLabel;
23:     CompanyNameLbl: TLabel;
24:     ItemsLbl: TLabel;
25:     TakenByLbl: TLabel;
26:     DBProductList: TDBLookupComboBox;
27:     ProductSearchEdit: TEdit;
28:     LookUpBtn: TButton;
29:     DBCompanyNameEdit: TDBEdit;
30:     AddToItemsBtn: TButton;
31:     SaveOrderBtn: TButton;
32:     DBCustomerIDEdit: TDBEdit;
33:     Label1: TLabel;
34:     DiscountEdit: TEdit;
35:     DiscountLbl: TLabel;
36:     RemoveBtn: TButton;
37:     ItemsGrid: TStringGrid;
38:     QuantityEdit: TEdit;
39:     quantityLbl: TLabel;
40:     TotalPriceLbl: TLabel;
41:     TotalPriceEdit: TEdit;
42:     PrintBtn: TButton;
43:     TodayDateLbl: TLabel;
44:     procedure HomebtnClick(Sender: TObject);
45:     procedure LookUpBtnClick(Sender: TObject);
46:     procedure AddToItemsBtnClick(Sender: TObject);
47:     procedure SaveOrderBtnClick(Sender: TObject);
48:     procedure RemoveBtnClick(Sender: TObject);
49:     procedure FormCreate(Sender: TObject);
50:     procedure PrintBtnClick(Sender: TObject);
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51:   private
52:     { Private declarations }
53:     Column, Row: Integer;
54:     PriceT: Currency;
55:     htmlfile: text;
56:     ArrayCount: Integer;
57:     OrderArray: array of TOrderRecord;
58:   public
59:     { Public declarations }
60:   end;
61:
62: var
63:   NewOrdersForm: TNewOrdersForm;
64:
65: implementation
66:
67: {$R *.dfm}
68:
69: uses Home, CustomerDataBasel, CustomerDetailsEditPage, NewCustomerDetails,
70:   DMain,
71:   NewOrderCustomer, TestData;
72:
73: procedure TNewOrdersForm.AddToItemsBtnClick(Sender: TObject);
74: { Adds the selected item from the 'DBProductList' to the 'ItemsGrid' }
75: var
76:   i: Integer;
77: begin
78:   ItemsGrid.RowCount := ItemsGrid.RowCount + 1;
79:   { Increasing the number of rows in the 'ItemsGrid' so that the new item
80:     can be added and not over write the last item added. }
81:   ItemsGrid.Cells[Column, Row] := DBProductList.text;
82:   ItemsGrid.Cells[Column + 1, Row] := QuantityEdit.text;
83:   ItemsGrid.Cells[Column + 2, Row] := DataMain.ProductsSet.FieldValues
84:     ['UnitPrice'];
85:   Inc(Row); { So it starts off at the bottom of the grids when
86:     a new item is added. }
87:   PriceT := 0;
88:   { Setting the global price variable to 0 so that it is not added
89:     to the previous price and subsequently get the wrong price. }
90:   for i := 1 to ItemsGrid.RowCount -
91:     1 do { Goes through the 'ItemsGrid' adding up all the prices with
92:       the quantities to get a total price to display. }
93:   begin
94:     PriceT := (strToFloat(ItemsGrid.Cells[Column + 2, i]) *
95:       strToInt(ItemsGrid.Cells[Column + 1, i])) + PriceT;
96:     { Adding on the the current price to get a running total. }
97:   end;
98:
99:   TotalPriceEdit.text := currToStr(PriceT);
100: { Displaying the calculated price in a 'editbox' on the form. }
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101: end;
102:
103: procedure TNewOrdersForm.FormCreate(Sender: TObject);
104: { When the form is created it does some setting up of the 'ItemsGrid' and making sure the correct buttons are displayed. }
105: begin
106:   Column := 0;
107:   { Sets the 'Column' value of the 'ItemsGrid' to '0' to make sure it starts at the top of the grid and not in an unpredicted place. }
108:   Row := 0;
109:   { Sets the 'Row' value of the 'ItemsGrid' to '0' to make sure it starts on the left of the grid and not in an unpredicted place. }
110:   ItemsGrid.Cells[Column, Row] := 'ProductID: ';
111:   { Adds the headers to the table columns, starting from the left. }
112:   ItemsGrid.Cells[Column + 1, Row] := 'Quantity: ';
113:   { Second column header being set. }
114:   ItemsGrid.Cells[Column + 2, Row] := 'Price: ';
115:   { Third column header begin set. }
116:   Inc(Row); { Incrementing the row count so that it does not rewrite the previous line and starts on a new one. }
117:   PrintBtn.Visible := false;
118:   { Sets the visibility of the 'Print' button to invisible, as it is not required yet. }
119:   SaveOrderBtn.Visible := True;
120:   { Sets the visibility of the 'Save' button to visible as it is required straight away. }
121:   TodayDateLbl.Caption := dateToStr(Now);
122:   { Sets the date label to the current date. }
123:   SaveOrderBtn.Visible := True;
124:   { Sets the Save button to visible as it is needed when the form opens. }
125:   PrintBtn.Visible := false;
126:   { Sets the visibility of the Print button to invisible as it is not needed until the order has been saved. }
127: end;
128:
129: procedure TNewOrdersForm.HomebtnClick(Sender: TObject);
130: { Closes the current form and makes the 'Main' form visible again so that the user can carry out a new task. }
131: var
132:   i: Integer;
133: begin
134:   with DMain.DataMain.CustomerSet do
135:   begin
136:     Close;
137:     { Data Set must be closed before changing the command text parameter. }
138:     DiscountEdit.text := '0';
139:     { Clears the 'Discount' EditBox and set the value to zero. }
140:     CommandText := 'SELECT * FROM Customers';
141:     { Changes the command text to show all of the records in the DataSet. }
142:     Open; { Opening the Data Set will run the new Command Text and return the records that meet the query. }
143:     for i := 0 to ItemsGrid.RowCount - 1 do
144:     { Start of a loop that clears the 'ItemsGrid', goes through the loop for as long as the 'ItemsGrid' is }
145:     begin
146:       ItemsGrid.RowCount := ItemsGrid.RowCount - 1;
147:       { Decreases the 'RowCount' for every row in the 'ItemsGrid' }
148:     end;
149:     TotalPriceEdit.text := '';
150:     { Sets the 'TotalPrice' EditBox to null so that it can be used from fresh the next time it is needed and does not start from the la
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    st total price. }
151: end;
152:
153: HomeForm.Visible := True;
154: { Shows the 'Main' form so the user can carry out their next task. }
155: NewOrdersForm.Close;
156: { Closes the 'NewOrders' form as it is no longer needed. }
157: end;
158:
159: procedure TNewOrdersForm.LookUpBtnClick(Sender: TObject);
160: { Procedure to search the 'Products' table in the DataBase. }
161: begin
162:     with DMain.DataMain.ProductsSet do
163:     begin
164:         Close;
165:         { Data Set must be closed before changing the command text parameter. }
166:         CommandText := 'SELECT * FROM Products WHERE ProductName Like "%" +
167:             ProductSearchEdit.text + "%"';
168:         Open; { Opening the Data Set will run the new Command Text and return the records that meet the query. }
169:         ShowMessage('Search Complete');
170:         { A message box to let the user know the query has been run and a customer found. }
171:     end;
172: end;
173:
174: procedure TNewOrdersForm.PrintBtnClick(Sender: TObject);
175: { Procedure which handels the creation and opening of the order form file. }
176: var { Declaring the Variables that are needed for this procedure. }
177:     FileName, Address, FileString: String;
178:     i: Integer;
179:     LineTotal, UnitPrices, VATValue, VATPrice: Currency;
180: begin
181:     FileName := DataMain.OrdersSet.FieldValues['OrderID'];
182:     { Creating the filename, from the last 'OrderID' in the DataBase 'Orders' table. }
183:     assignfile(htmlfile, 'Order ' + FileName + '.html');
184:     { Creates the file in memory that everything is going to be written to. }
185:     rewrite(htmlfile); { Opens the file to receive text and editing. }
186:
187:     WriteLn(htmlfile, '<!DOCTYPE HTML>');
188:     { Setting up the html file, by declaring its 'DOCTYPE'. }
189:
190:     WriteLn(htmlfile, '<html> <head> <meta http-equiv="Content-Type">');
191:     { Initilise that text to follow is the main part of the page and is html. }
192:
193:     WriteLn(htmlfile, '<title>Mail Order Buddy Order</title>');
194:     { Creates a title for the page, top left hand }
195:
196:     WriteLn(htmlfile, '</head><body class="verdana">');
197:     { Sets the body font type and stops the heading. }
198:     WriteLn(htmlfile, '<h1 align=center>All 4 Wheels Order</h1>');
199:     { Adds the title, this is the company name. }
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200:   WriteLn(htmlfile, '<p align="center">');
201:   { Aligns a paragraph to the center under the title. }
202:   WriteLn(htmlfile, 'Order Number: ' + FileName + '');
203:   { Adds text 'Order Number', followed by the 'OrderID'. }
204:
205:   WriteLn(htmlfile, '<p align="right">');
206:   { Aligns the 'Customer' to the right of the page. }
207:   WriteLn(htmlfile, '' + DataMain.CustomerSet.FieldValues['CompanyName']);
208:   { Adds the selected 'CompanyName' from the 'Customers' table. }
209:   WriteLn(htmlfile, '<br>');
210:   Address := DataMain.CustomerSet.FieldValues['Address'];
211:   { Adds the selected 'Address' from the 'Customers' table. }
212:   WriteLn(htmlfile, '' + Address);
213:   WriteLn(htmlfile, '<br>');
214:   WriteLn(htmlfile, '' + DataMain.CustomerSet.FieldValues['City']);
215:   { Adds the selected 'City' from the 'Customers' table. }
216:   WriteLn(htmlfile, '<br>');
217:   WriteLn(htmlfile, '' + DataMain.CustomerSet.FieldValues['County']);
218:   { Adds the selected 'County' from the 'Customers' table. }
219:   WriteLn(htmlfile, '<br>');
220:   WriteLn(htmlfile, '' + DataMain.CustomerSet.FieldValues['PostCode']);
221:   { Adds the selected 'PostCode' from the 'Customers' table. }
222:   WriteLn(htmlfile, '<br><br>');
223:   WriteLn(htmlfile, 'Telephone: ' + DataMain.CustomerSet.FieldValues['Phone']);
224:   { Adds the selected 'Phone Number' from the 'Customers' table. }
225:   WriteLn(htmlfile, '<br><br><br>');
226:   WriteLn(htmlfile, '' + dateToStr(Now) + '');
227:   { Adds the current date that is set on the computer system. }
228:   WriteLn(htmlfile, '</p>'); { Ends the paragraph part of the page. }
229:
230:   WriteLn(htmlfile, '<br><br>'); { Drops two line of the page. }
231:
232:   WriteLn(htmlfile, '<table align="left" border="2">');
233:   { Setting up the table aligning it to the left, like it was in the document already used. }
234:   WriteLn(htmlfile, '<tr>'); { Creates the first row of the table. }
235:   WriteLn(htmlfile, '<td width="100">');
236:   { Creates the first cell and sets the width to 100 pixels. }
237:   WriteLn(htmlfile, 'Product ID'); { Sets the string inside the cell. }
238:   WriteLn(htmlfile, '</td>'); { Ends the cell. }
239:   WriteLn(htmlfile, '<td width="350">');
240:   { Adds a new cell to the table and set the width to 350 pixels, bigger than the last as more data needs to be held. }
241:   WriteLn(htmlfile, 'Product Description');
242:   { Sets the string inside the cell. }
243:   WriteLn(htmlfile, '</td>'); { Ends the cell. }
244:   WriteLn(htmlfile, '<td width="100">');
245:   { Creates another cell and sets the width to '100' as it only hold a number. }
246:   WriteLn(htmlfile, 'Quantity');
247:   { Sets the string inside the cell, this will be the header. }
248:   WriteLn(htmlfile, '</td>'); { Ends the cell. }
249:   WriteLn(htmlfile, '<td width="100">');
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250:   { Creates a new cell that will hold the price header. }
251:   WriteLn(htmlfile, 'Price'); { Sets the column header. }
252:   WriteLn(htmlfile, '</td>'); { Ends the cell. }
253:   WriteLn(htmlfile, '<td width="100">');
254:   { Creates a cell that will be the column for the line total. }
255:   WriteLn(htmlfile, 'Sub Total'); { Column header setting. }
256:   WriteLn(htmlfile, '</td>'); { Ends the cell. }
257:   WriteLn(htmlfile, '</tr>'); { Ends the first line of the table. }
258:
259:   with DataMain.ProductsSet
260:   do { Selects the 'Products' table from the DataBase. }
261:   begin
262:     for i := 0 to (length(OrderArray) - (length(OrderArray) - (ArrayCount - 1)))
263:     do { Initialisation of a loop that will go through the 'OrderArray' a record at a time. }
264:     begin
265:       LineTotal := 0;
266:       { Sets the line total to zero so that it is not adding to the previous line total. }
267:       Close; { Data Set must be closed before changing the command text parameter. }
268:       WriteLn(htmlfile, '<tr>'); { Starts a new row on the table in the file. }
269:       WriteLn(htmlfile, '<td align="right">' + OrderArray[i].Product + '</td>');
270:       { Enters the 'ProductID' from the 'OrderArray' at position 'i'. }
271:       CommandText := 'SELECT * FROM Products WHERE ProductID Like "' +
272:         OrderArray[i].Product + '"';
273:       { Searches the DataBase for the record where the 'ProductID' is the same as the 'ProductID' in the 'OrderArray' at position 'i'. }
274:     }
275:     Open; { Opening the Data Set will run the new Command Text and return the records that meet the query. }
276:     WriteLn(htmlfile, '<td>' + FieldValues['ProductName'] + '</td>');
277:     { Adds the 'ProductName' from the record that has been returned from the DataBase. }
278:     WriteLn(htmlfile, '<td align="right">' + intToStr(OrderArray[i].Quantity)
279:       + '</td>');
280:     { Adds the 'Quantity' from the 'OrderArray' at position 'i' in to the 'Quantity' column of the table. }
281:     UnitPrices := FieldValues['UnitPrice'];
282:     { Sets the variable 'UnitPrices' to the 'UnitPrice' from the 'Products' table. }
283:     WriteLn(htmlfile, '<td align="right">' +
284:       floatToStrf(FieldValues['UnitPrice'], ffcurrency, 18, 2) + '</td>');
285:     { Adds the 'UnitPrice' to the table from the 'Products' table in the database. }
286:     LineTotal := ((OrderArray[i].Quantity) * (UnitPrices));
287:     { Works out the line total by doing the 'OrderArray' quantity multiplied by the 'UnitPrice'. }
288:     WriteLn(htmlfile, '<td align="right">' + floatToStrf(LineTotal,
289:       ffcurrency, 18, 2) + '</td>');
290:     { Adds the calculated line total to the last cell of the table in the page. }
291:     WriteLn(htmlfile, '<tr>');
292:     { Adds a new line to the table so that the values already enter to the table are not over written. }
293:   end;
294: end;
295:
296: WriteLn(htmlfile, '</tr>'); { Ends the table lines. }
297:
298: WriteLn(htmlfile, '<tr>');
299: { Adds a new line to the table so that you can add the price excluding the VAT. }
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299: WriteLn(htmlfile, '<td></td>');
300: WriteLn(htmlfile, '<td></td>');
301: { Formats the cell position so that it starts on the penultimate cell. }
302: WriteLn(htmlfile, '<td></td>');
303: WriteLn(htmlfile, '<td align="right">Price Ex-VAT: </td>');
304: { Adds the header for the following cell in the same row. }
305: VATPrice := ((PriceT / 120) * 100);
306: { Works out the VAT, which is 20% of the original price, so you have to divide by 120. }
307: WriteLn(htmlfile, '<td align="right">' + floatToStrf(VATPrice, ffcurrency, 18,
308:     2) + '</td>'); { Adding the calculated VAT price to the table in the file. }
309:
310: WriteLn(htmlfile, '<tr>'); { Adds a new line to the table. }
311: WriteLn(htmlfile, '<td></td>');
312: WriteLn(htmlfile, '<td></td>');
313: { Formats the cell position so that it starts on the penultimate cell. }
314: WriteLn(htmlfile, '<td></td>');
315: WriteLn(htmlfile, '<td align="right">VAT: </td>');
316: { Adds the header for the cell which will display the VAT which is included in the price }
317: VATValue := (PriceT - VATPrice);
318: { Works out how much VAT there is, does this by taking away the 'VATPrice' from the 'TotalPrice'. }
319: WriteLn(htmlfile, '<td align="right">' + floatToStrf(VATValue, ffcurrency, 18,
320:     2) + ''); { Adding the calculated VAT value to the table in the file. }
321:
322: WriteLn(htmlfile, '<tr>'); { Adds a new line to the table. }
323: WriteLn(htmlfile, '<td></td>');
324: WriteLn(htmlfile, '<td></td>');
325: { Formats the cell position so that it starts on the penultimate cell. }
326: WriteLn(htmlfile, '<td></td>');
327: WriteLn(htmlfile, '<td align="right">Price In-VAT: </td>');
328: { Adds the header for the cell to follow. }
329: WriteLn(htmlfile, '<td align="right">' + floatToStrf(PriceT, ffcurrency, 18,
330:     2) + ''); { Adding the 'TotalPrice' to the table. }
331:
332: WriteLn(htmlfile, '</tr>'); { Ending the table lines. }
333: WriteLn(htmlfile, '</table>');
334: { Ends the table and stops adding things to the table. }
335:
336: WriteLn(htmlfile, '</body></html>');
337: { Ends the main body of the file, then ends the 'html' part of the file. }
338: closefile(htmlfile);
339: { Closes and saves the file, next to the application file. }
340:
341: FileString := 'G:\Computer Science Project\Win32\Debug\Order ' + (FileName) +
342:     '.html'; { Gets the 'path' for the file that has just been created and saves it in a variable. }
343:
344: ShellExecute(Handle, 'open',
345:     'C:\Program Files (x86)\Internet Explorer\iexplore.exe',
346:     PWideChar(FileString), nil, SW_SHOWNORMAL);
347: { A 'ShellExecute' procedure that handles the opening of the file that has just been created. }
348: { It opens the file automatically, this makes it easier for the user to use as then they don't have to go and search for the file. }
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349:
350:   ShowMessage('Printed');
351: end;
352:
353: Procedure TNewOrdersForm.RemoveBtnClick(Sender: TObject);
354: { Procedure that removes the selected row from the 'ItemsGrid'. }
355: var
356:   i, j: Integer;
357: begin
358:   for i := 0 to 2 do { }
359:   begin
360:     ItemsGrid.Cells[i, ItemsGrid.Row] := '';
361:     { Clears the selected row and puts all of the cell values to null. }
362:   end;
363:   for j := ItemsGrid.Row to ItemsGrid.RowCount do
364:   begin { Goes through the 'ItemsGrid' starting at the selected row and moves all of rows up one until the end of the 'ItemsGrid' }
365:     ItemsGrid.Cells[Column, j] := ItemsGrid.Cells[Column, j + 1];
366:     { Moves the first column in the table up by one row. }
367:     ItemsGrid.Cells[Column + 1, j] := ItemsGrid.Cells[Column + 1, j + 1];
368:     { Moves the second column in the table up by one row. }
369:     ItemsGrid.Cells[Column + 2, j] := ItemsGrid.Cells[Column + 2, j + 1];
370:     { Moves the second column in the table up by one row. }
371:   end;
372:   ItemsGrid.RowCount := ItemsGrid.RowCount - 1;
373:   { Decreases the row count by one to remove the empty space that will be left in the 'ItemsGrid'. }
374:   Row := ItemsGrid.RowCount;
375:   { Sets the variable 'Row' to the length of the 'ItemsGrid' }
376:   PriceT := 0;
377:   { Sets the price variable to zero ready to recalculate the total price. }
378:   for i := 1 to ItemsGrid.RowCount - 1 do
379:   begin
380:     PriceT := (strToFloat(ItemsGrid.Cells[Column + 2, i]) *
381:       strToInt(ItemsGrid.Cells[Column + 1, i])) + PriceT;
382:     { Recalculates the total price and saves it in the variable 'PriceT'. }
383:   end;
384:
385:   TotalPriceEdit.text := currToStr(PriceT);
386:   { Displays the new calculated total price in the 'TotalPrice' EditBox. }
387:
388:   ShowMessage('Deleted');
389: end;
390:
391: procedure TNewOrdersForm.SaveOrderBtnClick(Sender: TObject);
392: { Procedure to save the order to the database in the 'Orders' and 'OrderDetails' tables. }
393: var
394:   i, j, QuantityInStock: Integer;
395:   Discount: Real;
396:   TotalPrice: Currency;
397:   DateT: string;
398:
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399: begin
400:   PrintBtn.Visible := True;
401:   { Sets the print button to visible so that it can be used after the procedure has finished. }
402:   SaveOrderBtn.Visible := false;
403:   { Sets the save button to invisible as it is no longer needed and could cause an error if clicked again with orders. }
404:   SetLength(OrderArray, ItemsGrid.RowCount);
405:   { Sets the length of the 'OrderArray' to the length of the 'ItemsGrid' so that there are enough spaces, and no overflow errors. }
406:   ArrayCount := 0;
407:   { Sets the 'OrderArray' count to zero so that the program knows how many spaces are filled, and adds from the start. }
408:   for i := 1 to ItemsGrid.RowCount -
409:     1 do { Goes through the 'ItemsGrid' missing out the first row as we don't need to add the headers to the database. }
410:   begin
411:     j := 0; { Sets 'j' variable to zero so that it searches through the whole of the 'OrderArray' each time and does not start from a r
andom place. }
412:     while (j < length(OrderArray) - 1) And
413:       (OrderArray[j].Product <> (ItemsGrid.Cells[Column, i]))
414:       do { Goes through the 'OrderArray' until it find two 'ProductID's that are the same. }
415:     begin
416:       Inc(j); { Increases 'j' by one so that it will move on the next row in the 'ItemsGrid'. }
417:     end;
418:     if OrderArray[j].Product = (ItemsGrid.Cells[Column, i])
419:     then { Searching for the 'ProductID' from the 'ItemsGrid' that matches one in the 'OrderArray'. }
420:     begin
421:       Inc(OrderArray[j].Quantity);
422:       // OrderArray[j].Quantity:= (OrderArray[j].Quantity + ItemsGrid.Cells[Column + 1, i]);
423:       { Adds the existing quantity of the selected 'ProductID' to the new quantity of the 'ProductID' that has been found. }
424:       Inc(j); { Increments 'j' by one so that it moves on to the next item in 'OrderArray'. }
425:     end
426:
427:   else
428:   begin
429:     OrderArray[ArrayCount].Product := (ItemsGrid.Cells[Column, i]);
430:     { If the 'ProductID' is not found then it will add a new item to the 'OrderArray'. }
431:     OrderArray[ArrayCount].Quantity := strToInt(ItemsGrid.Cells[Column + 1, i]
432:       ); { Adds the quantity to the array that is stored in the 'ItemsGrid'. }
433:     Inc(ArrayCount)
434:     { Increments the 'ArrayCount' by one as there is now another space that has been filled in the 'OrderArray'. }
435:   end;
436: end;
437:
438: if DiscountEdit.text <> ''
439: then { Checks to see if there is a value in the 'EditBox' or if it is empty. }
440: begin
441:   Discount := strToInt(DiscountEdit.text);
442:   { If there is a value, then it converts it to an integer and then saves it in a variable space. }
443:   if Discount > 0
444:   then { Makes sure that the value entered is more than zero. }
445:   begin
446:     TotalPrice := PriceT - (PriceT * (Discount / 100));
447:     { If the value is more than zero then it will calculate the new 'TotalPrice' with the discount applied. }
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448:     End
449:   else { If the value entered is equal to, or less than then the 'TotalPrice' is the same. }
450:   begin
451:     TotalPrice := PriceT;
452:   end;
453: End;
454: PriceT := TotalPrice;
455: { Makes sure the gobal variable has been changed for other procedures to use. }
456:
457: with DMain.DataMain.OrdersSet do
458: begin
459:   Append; { Opens the 'Orders' table in the database so that it is ready for a new record to be added to the end. }
460:   FieldValues['CustomerID'] := DBCustomerIDEdit.text;
461:   { Adds the 'CustomerID' from the 'EditBox' on the form, in to the correct column in the 'Orders' table. }
462:   FieldValues['TotalPrice'] := TotalPrice;
463:   { Adds the total price from the 'TotalPrice' variable that has been calculated, in to the correct column in the 'Orders' table. }
464:   FieldValues['OrderDate'] := TodayDateLbl.Caption;
465:   { Adds the current date from the 'EditBox' on the form that holds the current date, in to the correct column in the 'Orders' table. }
466: }
467:   Post; { Save the new record. }
468: end;
469:
470: with DMain.DataMain.OrderDetailsSet do
471: begin
472:   for i := 0 to ArrayCount -
473:   1 do { Sets up a loop that goes through the 'ArrayCount', so as many times as there are spaces filled in the 'OrderArray'. }
474:   begin
475:     Append; { Opens the 'OrderDetails' table in the database so that it is ready for a new record to be added to the end. }
476:     FieldValues['OrderID'] := DataMain.OrdersSet.FieldValues['OrderID'];
477:     { Adds the 'OrderID' that has already been created, retrieves it from the 'Orders' table. }
478:     FieldValues['ProductID'] := strToInt(OrderArray[i].Product);
479:     { Adds the current 'ProductID' from the 'OrderArray'. }
480:     FieldValues['Quantity'] := OrderArray[i].Quantity;
481:     { Adds the current 'Quantity' from the 'OrderArray'. }
482:     FieldValues['Discount'] := Discount;
483:     { Adds the current value stored in the variable 'Discount'. }
484:     Post; { Saves the new record to the table. }
485:   end;
486: end;
487:
488: with DMain.DataMain.ProductsSet do
489: begin
490:   for i := 0 to ArrayCount -
491:   1 do { Sets up a loop that goes through the 'ArrayCount', so as many times as there are spaces filled in the 'OrderArray'. }
492:   begin
493:     Close; { Data Set must be closed before changing the command text parameter. }
494:     CommandText := 'SELECT * FROM Products WHERE ProductID = ' + OrderArray[i]
495:       .Product + '';
496:     Open; { Opening the Data Set will run the new Command Text and return the records that meet the query. }
497:     QuantityInStock := FieldValues['UnitsInStock'];
```

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497:      { Gets the value from the record that has been selected based on the SQL query. }
498:      QuantityInStock := QuantityInStock - OrderArray[i].Quantity;
499:      { Works out the new quantity and stores it in the variable, 'QuantityInStock'. }
500:      Edit; { Sets the DataSet up ready for editing values inside of it. }
501:      FieldValues['UnitsInStock'] := QuantityInStock;
502:      { Changes the 'UnitsInStock' to the value that is in the 'QuantityInStock' variable. }
503:      Post; { Save the new record. }
504:   end;
505:
506: end;
507: ShowMessage('The total price is: £' + floatToStrf(TotalPrice, ffcurrency, 18,
508: 2) + ''); { Tells the user the total price, formated to 2 decimal places, so they can then tell the customer and take the payment.
509: }
510: end;
511: end.
```