

Unit 2 Creating Systems to Manage Information – 1906



**Level 3 National in
Information Technology**

**May 2019
Example Solution**

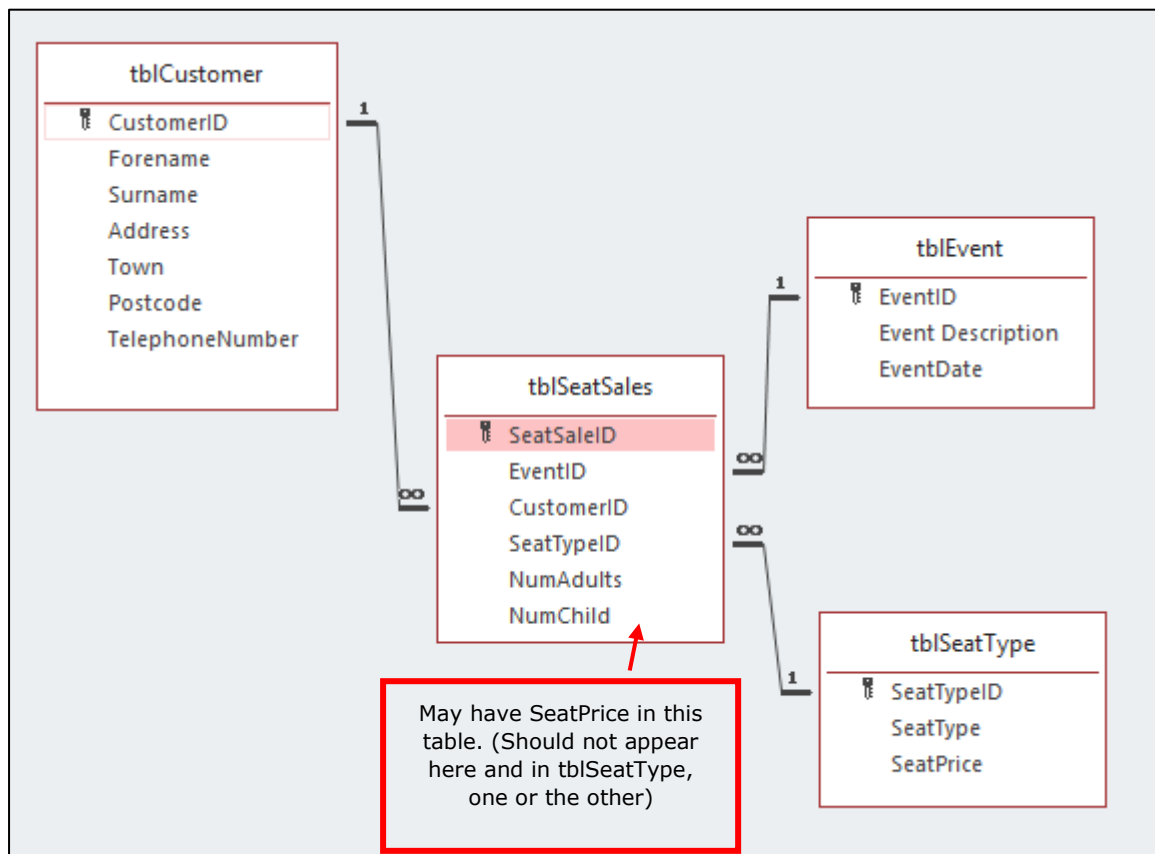
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Introduction

This solution is only **one** example. Candidates could have approached it several different ways. It is important to read the guidance with each activity. It is not assumed that a method that differs from solution is incorrect. Overall, we are looking for a database that works, has been well customised and is sensible in terms of the scenario and what should be considered in terms of that.

Activity 1 Database Relationship Screenprint



Activity 2 – Table Structures and Validation

Table Structures

Field Name	Data Type
CustomerID	AutoNumber
Forename	Short Text
Surname	Short Text
Address	Short Text
Town	Short Text
Postcode	Short Text
TelephoneNumber	Short Text

Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
CustomerID	Number
SeatTypeID	Number
NumAdults	Number
NumChild	Number

Field Name	Data Type
EventID	AutoNumber
Event Description	Short Text
EventDate	Date/Time

Field Name	Data Type
SeatTypeID	AutoNumber
SeatType	Short Text
SeatPrice	Currency

Table Validation

Presence Checks

Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
CustomerID	Number
SeatTypeID	Number
NumAdults	Number

Field Name	Data Type
EventID	AutoNumber
Event Description	Short Text
EventDate	Date/Time

tblEvent	tblSeatSales
EventDescription	EventID
EventDate	CustomerID
	SeatTypeID
	NumAdults

tblCustomer	tblSeatType
Forename	SeatType
Surname	SeatPrice (may be in tblSeatSales)
Address	
Postcode	
TelephoneNumber	

Length Checks

Field Name	Data Type
CustomerID	AutoNumber
Forename	Short Text

Field Name	Data Type
CustomerID	AutoNumber
Forename	Short Text

Field Name	Data Type
Address	Short Text
Town	Short Text

Field Name	Data Type
Address	Short Text
Town	Short Text

Field Name	Data Type
TelephoneNumber	Short Text

Field Name	Data Type
TelephoneNumber	Short Text

Value Lookups

Field Name	Data
SeatTypeID	AutoNumber
SeatType	Short Text
SeatPrice	Currency

General		Lookup	
Display Control	Combo Box		
Row Source Type	Value List		
Row Source	"Table"; "No Table"		
Bound Column	1		

Table Lookups

Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
CustomerID	Number
SeatTypeID	Number

General		Lookup	
Display Control	Combo Box		
Row Source Type	Table/Query		
Row Source	SELECT [tblEvent].[EventID], [tblEvent].[Event D		
Bound Column	1		
Column Count	3		
Column Heads	No		
Column Widths	1.35cm;3.254cm;2.54cm		
List Rows	16		
List Width	7.143cm		
Limit To List	Yes		

Field Name	Data Type
EventID	Number
CustomerID	Number
SeatTypeID	Number
NumAdults	Number

General		Lookup	
Display Control	Combo Box		
Row Source Type	Table/Query		
Row Source	SELECT [tblSeatType].[SeatTypeID],		
Bound Column	1		
Column Count	3		
Column Heads	No		
Column Widths	1.826cm;2.54cm;2.54cm		
List Rows	16		
List Width	6.905cm		
Limit To List	Yes		

Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
CustomerID	Number
SeatTypeID	Number

General		Lookup	
Display Control	Combo Box		
Row Source Type	Table/Query		
Row Source	SELECT [tblCustomer].[CustomerID],		
Bound Column	1		
Column Count	5		
Column Heads	No		
Column Widths	1.826cm;2.646cm;1.35cm;1.482cm;2.		
List Rows	16		
List Width	9.63cm		
Limit To List	Yes		

Range Checks

EventDate	Date/Time
-----------	-----------

General		Lookup	
Format	Short Date		
Input Mask			
Caption			
Default Value			
Validation Rule	Is Not Null And Between #20/12/2019# And #22/12/2019#		
Validation Text	Events are between the 20 and 22 December only. Please try again.		

Format Checks

TelephoneNumber	Short Text
-----------------	------------
















General		Lookup	
Field Size	14		
Format			
Input Mask	*+44 *0000000000;		

Postcode	Short Text
----------	------------

General		Lookup	
Field Size	7		
Format			
Input Mask	> LLO\ OLL		

Activity 3 - Interface and Functionality

Object Names

Tables	Queries	Forms	Reports
 DATA1906	 qry1_Dilmouth	 frmCustomer	 rptSales
 tblCustomer	 qry3_DateAndTypeParameter	 frmSeatSale	
 tblEvent	 Qry4_SeatsLeft	 mnuMain	
 tblSeatSales	 qryFormSeatsSold		
 tblSeatType	 qryReport		
	 qry2_UpdateMarsden		

Menu

Sharebrook Estate and Safari Park

Select your option

Add a Customer

Add Seat Sales

View Dilmouth Customers

Update Town

View Customers for an Event

View Seats Left

View Sales Report

Exit

Sharebrook Estate and Safari Park

Select your option

```

Option Compare Database
Private Sub cmdAddCustomer_Click()
    DoCmd.OpenForm "frmCustomer"
End Sub
Private Sub cmdSeatSales_Click()
    DoCmd.OpenForm "frmSeatSale"
    DoCmd.GoToRecord , , acNewRec
End Sub
Private Sub cmdViewDilmouth_Click()
    DoCmd.OpenQuery "qry1_Dilmouth"
End Sub
    
```

```

Private Sub cmdUpdateTown_Click()
    DoCmd.OpenQuery "qry2_UpdateMarsden"
End Sub
Private Sub cmdEventCustomers_Click()
    DoCmd.OpenQuery "qry3_DateAndTypeParameter"
End Sub
Private Sub cmdSeatsLeft_Click()
    DoCmd.OpenQuery "qry4_SeatsLeft"
End Sub
Private Sub cmdSalesReport_Click()
    DoCmd.OpenReport "rptSales", acViewPreview
End Sub
Private Sub cmdExit_Click()
    DoCmd.Quit
End Sub
    
```

Input form to register a new customer

Any suitable method for generating ID eg AutoNumber used in example above. DMax used in example to the right:

Form	
Format	Data
Record Source	SELECT tblCu
Recordset Type	Dynaset
Fetch Defaults	Yes
Filter	
Filter On Load	No
Order By	
Order By On Load	Yes
Wait for Post Processing	No
Data Entry	Yes

This shows the method for ensuring form will open at a new record.

CustomerID	
Format	Data
Control Source	CustomerID
Text Format	Plain Text
Input Mask	
Default Value	=DMax("CustomerID";"tblCustomer")+1
Validation Rule	

Could have used code or macro to go to a new record. Also, could have used code or macro on menu to go to a new record.

Lots of different ways to save. Here are a few examples:

```
Private Sub cmdSave_Click()
    If IsNull(Surname) Or IsNull(Address) Or IsNull(Postcode) Or IsNull(TelephoneNumber) Then
        MsgBox "Error, you must enter the surname, address, postcode and telephone number", vbOKOnly
    Else
        DoCmd.GoToRecord , , acNewRec
        MsgBox "The customer had been saved", vbOKOnly
    End If
End Sub
```

This one uses code rather than relying on the table level validation. Checks for the required fields, displays error message if any missing or saves and moves to a new record. (Band 4 providing all presence checks sensible and ID has also been generated)

```

Private Sub cmdSave_Click()
'This traps any errors when the save button is clicked
'If there is an error the event is cancelled and the error message
'from the table validation rules shown

    On Error GoTo Error_Handler
    If Me.Dirty Then Me.Dirty = False

Exit_Sub:
    Exit Sub

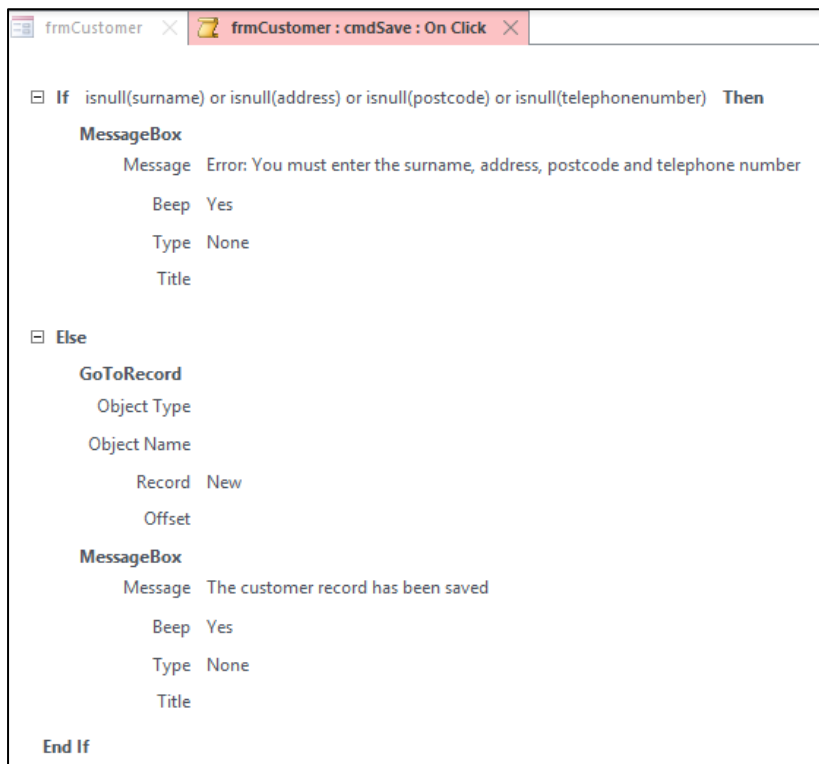
Error_Handler:
    MsgBox Err.Description, vbExclamation
End Sub

Private Sub Form_AfterInsert()
'After the valid record has been added the form is cleared by
'by moving to a new record and a save message displayed
    DoCmd.GoToRecord , , acNewRec
    MsgBox "The customer has been saved", vbOKOnly
End Sub

```

This one checks to see whether the record has changed. If it has table level validation kicks in and the error message is displayed.

Moving to a new record and the save message will only display if a record has successfully been inserted into the table. (Band 4 providing ID has also been generated))



Same method as shown in code but using a macro. (Band 4 providing all presence checks sensible and ID has been generated)


```

frmCustomer  X  frmCustomer : cmdSaveCustor
-----
OnError
    Go to Next
    Macro Name
RunMenuCommand
    Command SaveRecord
If [MacroError]<>0 Then
    MessageBox
        Message =[MacroError],[Description]
        Beep Yes
        Type None
        Title
End If

```

This is the default code behind the save button that is generated when using the wizard. This would kick in with table level validation and messages but would not move to a new record nor display a save message. (Band 2)

This would be used with an unbound form, would need to see the query with no truncation and it being used in the code/macro. (Band 4 if all other aspects of the save and generating ID are present, the checking for fields present, not accepting invalid record and providing error message(s), saving valid record, save message, move to new record)

Field:	Expr2: [Forms]![frmCustomer]![CustomerForename]	Expr3: [Forms]![frmCustomer]![CustomerSurname]	Expr4: [Forms]![frmCustomer]![Address]
Table:			
Sort:			
Append To:	Forename	Surname	Address
Criteria:			
or:			

Expr7: [Forms]![frmCustomer]![Town]	Expr5: [Forms]![frmCustomer]![Postcode]	Expr6: [Forms]![frmCustomer]![TelephoneNumber]
Town	Postcode	TelephoneNumber

There are many ways to meet the requirements.

Input form to purchase seats if they are available

It should show the relevant event, customer and seat sale information. In addition it should show the total cost for adult tickets, the total cost for child tickets and the overall cost.

There will be many different methods of achieving this.

The save process could be along the lines of those shown for the customer form with more validation occurring as events happen on the form or the save process could include all the validation. One method only is shown here.

Marks toward the top end would ensure the user has a smooth experience eg only being able to select events with seats rather than having to wait until save button is clicked to find that out etc.

The method shown would be worthy of the very top of band 4 providing everything else in the activity overall was sound.

The screenshot shows a web form titled "Add Sale" with the following structure:

- Header:** "Add Sale" title and instructions: "Select the Date, Customer and Seat Type. Enter the number of Adult and Children's tickets required. The SaleID will be generated for you. Click Save to save the sale. If no dates appear in the list of dates all events are sold out."
- Form Fields:**
 - SaleID: (New)
 - Select Date: [Dropdown] *
 - Event Description: [Text Input]
- Customer Information Panel:**
 - Select Customer: [Dropdown] *
 - Customer: [Text Input]
 - Address: [Text Input]
 - Telephone Number: [Text Input]
- Seats and Costs Panel:**
 - Select Seat Type: Table [Dropdown]
 - Seats Sold: [Text Input]
 - Seats Left: [Text Input]
 - Enter Seat Quantities:**
 - Adult: 1 *
 - Child (2-12): 0
 - Cost Per Seat: £29.00
 - Total Cost Adults: £29.00
 - Total Cost Children: £0.00
 - Overall Cost: £29.00
- Buttons:** Save (dashed border), Close

The form already has some default values in place to aid validation.

Form Header

Add a Sale

Select the Date, Customer and Seat Type.
Enter the number of Adult and Children's tickets required
The SaleID will be generated for you.
Click Save to save the sale.
If no dates appear in the list of dates all events are sold out.

Detail

SaleID: SeatSale:

Select Date: EventID:

Event Description:

Customer Information

Select Customer: Cust:

Customer: =[[forename] & " " & [surname]]

Address:

Town:

Postcode:

Telephone Number:

Seats and Costs

Select Seat Type: SeatTy:

Seats Sold: =DLookup("total", "qryFormSeatsSold", "seatTypeID=" & [Forms]![frmSeatSale]![SeatTypeID]) **2**

Seats Left: =IIf([SeatTypeID]=1,40,56)-[SeatsSold] **3**

Enter Seat Quantities

Adult: NumAdu: Child (2-12): NumChi:

Cost Per Seat: =FormatCurrency([SeatTypeID].[column](2),2) **4**

Total Cost Adults: =[SeatCost]*[numAdults] **5**

Total Cost Children: =IIf([NumChild]>0,([SeatCost]*[NumChild])-([SeatCost]*[numChild]*0.1),0) **6**

Overall Cost: =[totalcostadult]+[totalcostchildren] **7**

Save Close

1. Customer name has been concatenated – no requirement to do this though candidates may if they choose
2. This looks up the total seats sold from qryFormSeatsSold where the seatID matches that picked on the form from the Select Seat Type combo box (SeatTypeID). Must be able to see the query in full with no truncation
3. This checks the Select Seat Type combo box (SeatTypeID) and calculates how many of that seat type are left by subtracting the Seats Sold from the relevant number (40 if table, 56 if no table)
4. This picks up the cost per seat from the third column in the Select Seat Type combo (SeatTypeID) and formats it to currency with 2 decimal places.
5. This calculates the total cost for adult seats.
6. This calculates the total cost for child seats considering 10% discount.
7. This calculates the overall seat cost

frmSeatSale x qryFormSeatsSold x

tblSeatSales

- *
 - SeatSaleID
 - EventID
 - CustomerID
 - SeatTypeID
 - NumAdults

Field:	EventID	NumAdults: NumAdults	NumChild: NumChild	SeatTypeID	Total: [NumAdults]+[NumChild]
Table:	tblSeatSales	tblSeatSales	tblSeatSales	tblSeatSales	
Total:	Group By	Sum	Sum	Group By	Expression
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:	[FORMS]![frmSeatSale]![EventID]				
or:					

Used with (2). Links EventID in query to EventID selected from the EventDate combo box on form.

EventDate	▼
Format	Data Event Other All
Control Source	EventID
Row Source	qryFormComboSource
Row Source Type	Table/Query

This shows that the control source for this combo box is EventID and that its row source is qryFormComboSource. Would need to see query in full with no truncation. Expect to see row sources for combo boxes that candidates have done something 'special' to. It is being used so that the user only sees events that have seats left. Notice the query is using query 4 within it. That is fine as will see that query elsewhere though candidates could also include it here.

Field:	EventID	EventDate	Event Description	AdultsSeatsSold	ChildSeatsSold	SeatsLeft
Table:	tblEvent	tblEvent	tblEvent	qry4SeatsLeft	qry4SeatsLeft	qry4SeatsLeft
Sort:						
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:						>0
or:						

```

Private Sub Form_Open(Cancel As Integer)
    DoCmd.GoToRecord , , acNewRec
End Sub
Private Sub NumChild_AfterUpdate()
    If IsNull(NumChild) Or NumChild < 0 Then NumChild = 0
End Sub
Private Sub cmdSave_Click()
    If IsNull(CustomerID) Or IsNull(EventDate) Then
        MsgBox "Ensure all required information is present", vbOKOnly
    ElseIf NumAdults + NumChild > 8 Then
        MsgBox "You can only purchase 8 seats", vbOKOnly
    ElseIf NumAdults + NumChild > SeatsLeft Then
        MsgBox "There are not enough of this seat type left on this event", vbOKOnly
    Else
        DoCmd.Save
        DoCmd.GoToRecord , , acNewRec
        MsgBox "The sale has been saved", vbOKOnly
    End If
End Sub

```

1. This is the method that has been used to make sure the form opens at a new record. Could be done by setting Data Entry to Yes on form properties or in macro, or on code or macro for menu.
2. This makes sure that if the user tries to leave the NumChild empty or uses a number less than 0 then it will always reset to 0. Assuming there will always be 1 child is appropriate too if candidates have done that.
3. This checks to make sure the Customer and Event has been selected. It then checks to make sure a maximum of 8 seats have been purchased. It then checks to make sure the number of seats purchased does not exceed the number of seats left. Finally, if all is fine, it saves the record, clears the form by moving to a new record and refreshes the form in order to requery the Select Event Date combo box (EventID) so that if there are no seats left the combo box will be empty.

NumAdults	Number	▼
NumChild	Number	

Field Properties

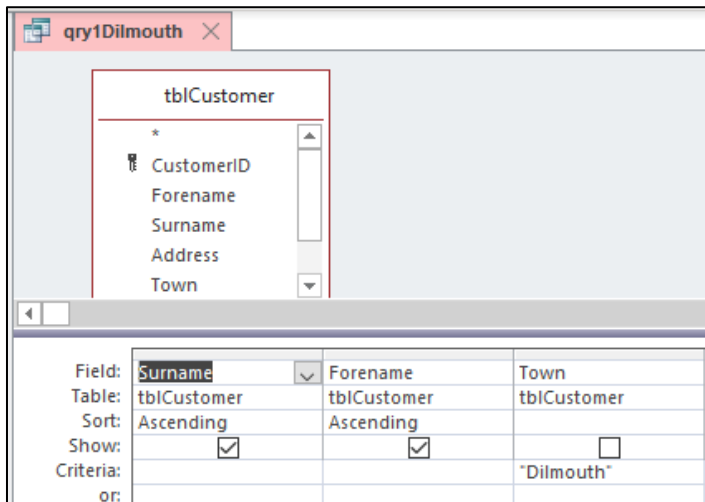
General		Lookup
Field Size	Long Integer	
Format		
Decimal Places	0	
Input Mask		
Caption		
Default Value	1	
Validation Rule	Is Not Null And Between 1 And 8	
Validation Text	There must be at least 1 adult and a maximum of 8	
Required	No	

The table validation ensures that the number of adults is defaulted to 1 as the form opens and must be between 1 and 8. As soon as the user tries to move out of the field the check takes place so that there is always a valid number of adult tickets before the save can take place. Nothing extra needed to be added to the code to do this.

Queries

Query 1

a query to display an alphabetically sorted list of customers from Dilmouth showing customer names and telephone numbers

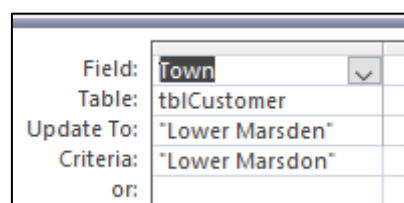


Surname	Forename
Butler	Julie
Cook	John
Dixon	Natalie
Goodwin	Gordon
Gray	Alan
Hartley	Nicholas
Hughes	Gordon
Jackson	Paul
Jenkins	Kyle
Khan	Faraz
Lucas	Sam
Macnamara	Rachel
McAdam	Siobhan
Mckay	Barry
Neilson	David
Palmer	Michael
Perry	Charlotte
Rawlings	Alan
Singleton	Yvonne
Skelton	John
Spencer	Charlotte
Tate	Georgina
Thompson	Peter
Weston	Brian
Wharton	Tina
Williams	Emily

Sort may be either surname/forename or forename/surname. Must be multiple sort. If concatenated treat as multiple sort

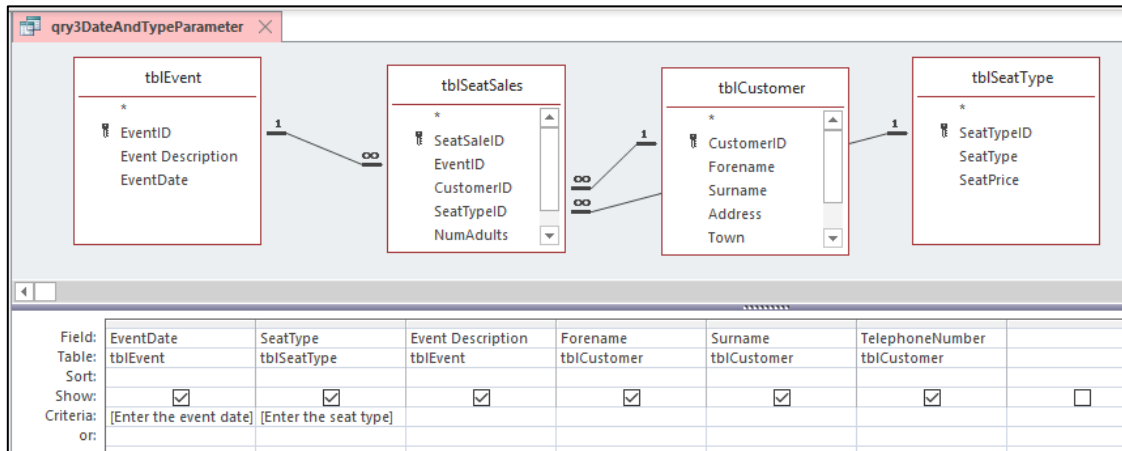
Query 2

a query to update the town name of Lower Marsdon to Lower Marsden



Query 3

a query that would allow a user to enter the parameters event date and seat type. Display the event description, customer names and post codes



This datasheet screenprint is for illustration only. Depends on what date and seat type candidates use.

EventDate	SeatType	Event Description	Forename	Surname	TelephoneNumber
21/12/2019	Table	The Polar Express Extravaganza	Hannah	Hudson	+44 121891101
21/12/2019	Table	The Polar Express Extravaganza	Barry	Mckay	+44 162415874
21/12/2019	Table	The Polar Express Extravaganza	Peter	Thompson	+44 123781733
21/12/2019	Table	The Polar Express Extravaganza	Richard	Thorpe	+44 256974744
21/12/2019	Table	The Polar Express Extravaganza	Emily	Williams	+44 258690151
21/12/2019	Table	The Polar Express Extravaganza	Oliver	Catt	+44 315340094
21/12/2019	Table	The Polar Express Extravaganza	Yvonne	Singleton	+44 332968003
21/12/2019	Table	The Polar Express Extravaganza	Ian	Bell	+44 115427598

Query 4

a query to display the number of seats remaining for each event. It should show the event description, total adult seats sold, total child seats sold and the total number of seats remaining

qry4SeatsLeft

tblEvent

- EventID
- Event Description
- EventDate

tblSeatSales

- SeatSaleID
- EventID
- CustomerID
- SeatTypeID
- NumAdults
- NumChild

tblSeatType

- SeatTypeID
- SeatType
- SeatPrice

Field:	Event Description	AdultsSeatsSold: NumAdults	ChildSeatsSold: NumChild	SeatsLeft: 96-([AdultsSeatsSold]+[ChildSeatsSold])	EventID
Table:	tblEvent	tblSeatSales	tblSeatSales		tblEvent
Total:	Group By	Sum	Sum	Expression	Group By
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:					

qry4SeatsLeft

Event Description	AdultsSeats	ChildSeatsS	SeatsLeft	EventID
Home Alone Extravaganza	39	57	0	3
Sing A Long Christmas Extravaganza	48	48	0	1
The Polar Express Extravaganza	39	46	11	2

Report

a report that shows customer sales information. It should display the forename, surname, number of adult seats bought and number of child seats bought for each customer. Calculate and display the total number of seats each customer has bought and the sales income this would generate, without any child discount. Calculate and display the overall number of seats sold and sales income without any child discount.

The screenshot shows the design view of an Access report titled 'Sales per Customer'. The report is divided into sections: Report Header, Page Header, Detail, Page Footer, and Report Footer. The Report Header contains the title 'Sales per Customer'. The Page Header and Detail sections both contain a table with columns for Surname, Forename, Adult Seats, Child Seats, Total Seats, and Sales Without Discount. The Report Footer section contains two summary rows: 'Overall Number of Seats Sold' with the formula '=Sum([TotalSeats])' and 'Overall Sales Without Discount' with the formula '=Sum([SalesWithoutDiscount])'. The report is displayed on a grid with 24 columns.

Should be an actual pdf document of report to look at. This is extract of first and second page

The first page of the report displays a table with the following data:

Surname	Forename	Adult Seats	Child Seats	Total Seats	Sales Without Discount
Anderson	James	2	3	5	£100.00
Armstrong	Laura	1	3	4	£80.00
Barker	Fiona	4	4	8	£232.00
Barrett	Lisa	2	1	3	£60.00
Barry	Sean	1	3	4	£80.00
Bell	Ian	4	4	8	£232.00
Booth	Recca	2	1	3	£60.00

Page 1

The second page of the report displays a table with the following data:

Williams	Emily	3	5	8	£232.00
Williams	Nathan	2	5	7	£140.00
Wood	Stephen	4	4	8	£232.00
Overall Number of Seats Sold					277
Overall Sales Without Discount					£6,584.00

Page 2

qryReport

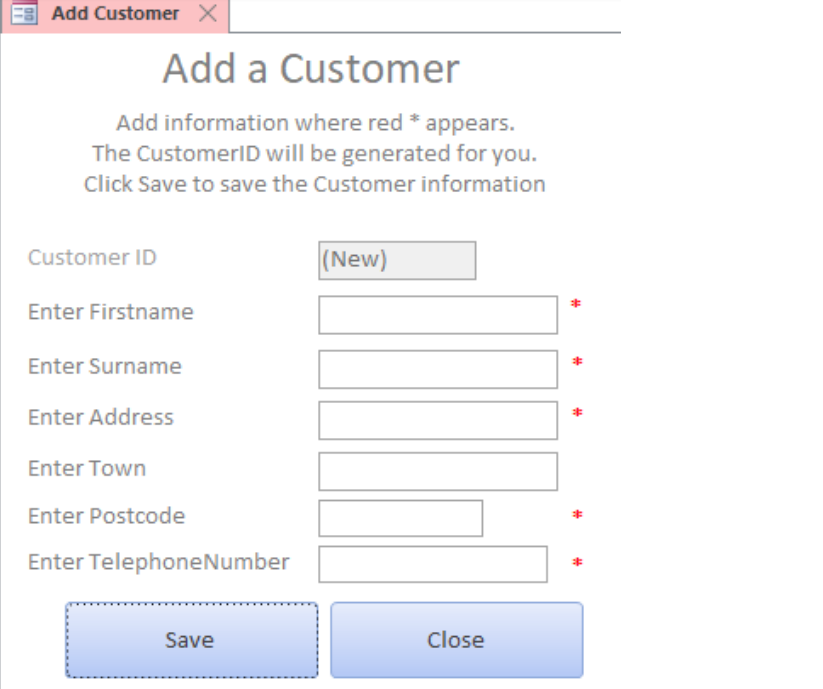
Field:	Surname	Forename	AdultSeats: NumAdults	ChildSeats: NumChild	TotalSeats: [AdultSeats] + [ChildSeats]
Table:	tblCustomer	tblCustomer	tblSeatSales	tblSeatSales	
Total:	Group By	Group By	Sum	Sum	Expression
Sort:					
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:					

SeatPrice	SalesWithoutDiscount: [TotalSeats]*[SeatPrice]	CustomerID
tblSeatType		tblCustomer
Group By	Expression	Group By
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Activity 4 - Testing

Input form to register a new tenant testing

Screenprints may be on the small side here. Learners can put the screenshots after the table or use A3.

Test No	type test	Purpose of Test	Add suitable test data	Add the results you would expect to get from a fully working system	Add screenshot(s) of the results of this test carried out on your database. Ensure you show the test data used in the screenshot(s)	Only complete this column if the results are not as expected • Explain the error If you correct the error explain how you have done it including a screenshot
1	N	To ensure customer form opens at a new record	Open form	Form opens CustomerID = New (generated autonumber) Rest of fields blank		

3	R	To ensure a new customer cannot be saved without a customer forename	CustomerID : New Forename: Meek Surname: Meek Address: 10 The Grove Town: Dilmouth Postcode: FE3 1LL Telephone Number: +44 123456789 0	Error message to be displayed saying "You must enter a forename"
---	---	--	--	--

I realised that I had not included a validation rule to make sure a forename was entered so I added this to the table rules and added an asterisk to the form. I did not need to change my code on the save button as that forces table validation to come into effect anyway.

Field Name	Data Type
CustomerID	AutoNumber
Forename	Short Text

Field Name	Property Value
Forename	Field Size: 30
Forename	Format:
Forename	Input Mask:
Forename	Caption:
Forename	Default Value:
Forename	Validation Rule: Is Not Null
Forename	Validation Text: You must enter a forename

Add Customer X

Add a Customer

Add information where red * appears.
The CustomerID will be generated for you.
Click Save to save the Customer information

Customer ID (New)

Enter Firstname *

Enter Surname *

Enter Address *


Enter Town

Enter Postcode *

Enter TelephoneNumber *

Sort & Filter

Microsoft Access X

 You must enter a forename

OK

The CustomerID will be generated for you.
Click Save to save the Customer information

Customer ID 252

Enter Firstname *

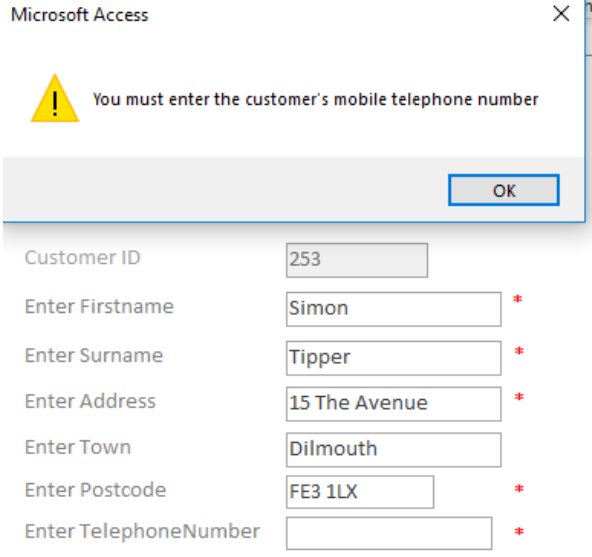
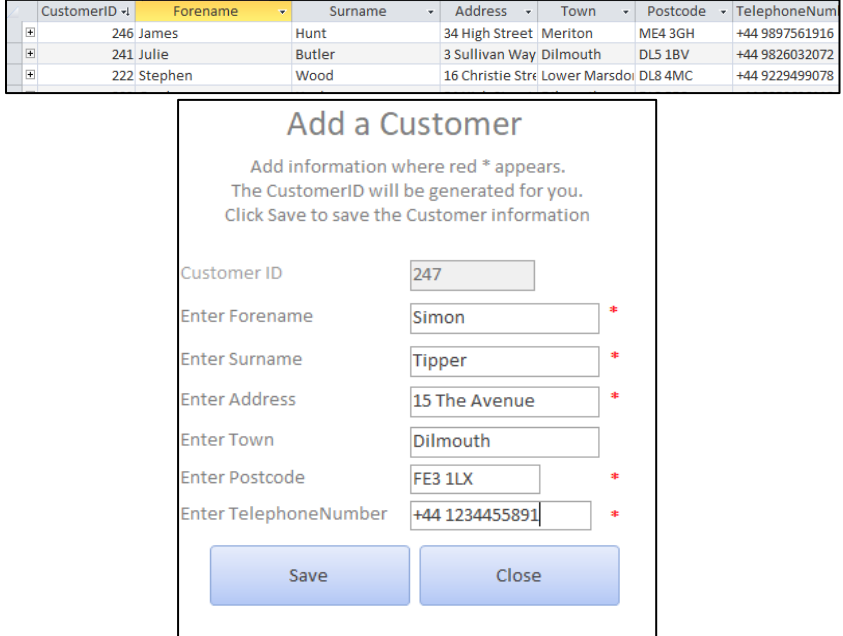
Enter Surname Meek *

Enter Address 12 The Grove *

Enter Town Dilmouth

Enter Postcode FE3 1LL *

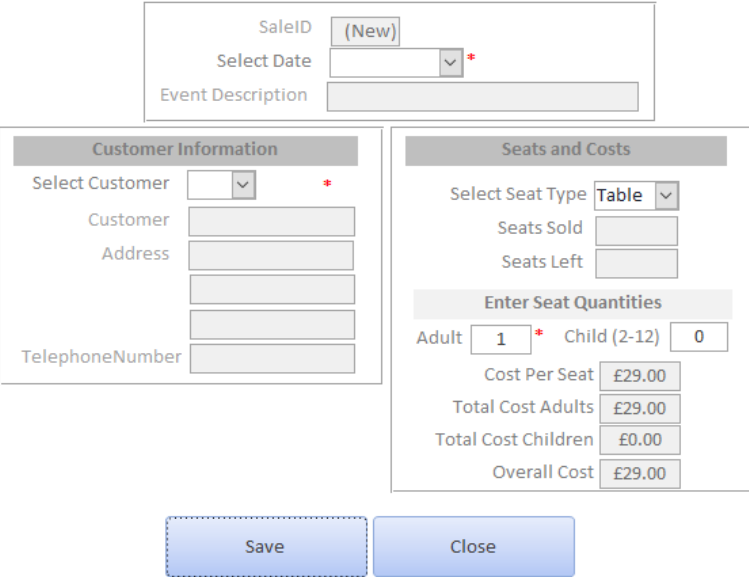
Enter TelephoneNumber +44 1234567890 *

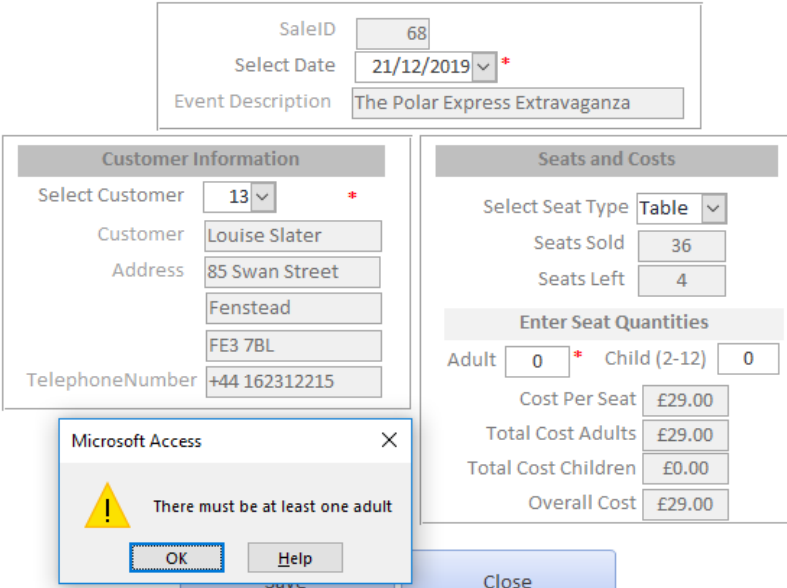
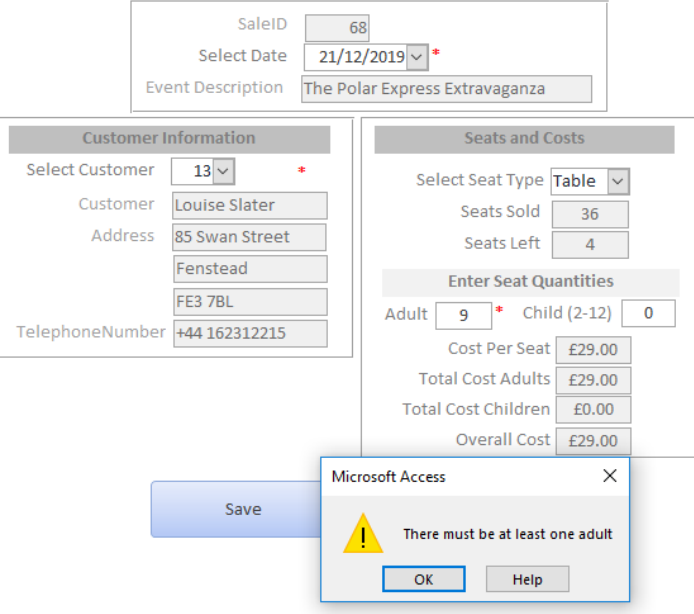
3	R	To ensure a new customer cannot be saved without a telephone number	CustomerID : New Forename: Simon Surname: Tipper Address: 15 The Avenue Town: Dilmouth Postcode: FE3 1LX Telephone Number:	Error message to display saying "You must enter the customer's mobile telephone number"		
4	N	To ensure a valid new customer can be saved correctly	CustomerID : New Forename: Simon Surname: Tipper Address: 15 The Avenue Town: Dilmouth Postcode: FE3 1LX Telephone Number: +44 123445589 1	Record to be saved in tblCustomer with an autonumber higher than the last used. Message to be displayed saying "The customer has been saved" Form to clear		

The screenshot displays a web application interface for adding a customer. A modal dialog box titled "Microsoft Access" is open, displaying the message "The customer has been saved" and an "OK" button. Below the dialog, a form titled "Add Customer" is visible, featuring several input fields: "Customer ID" (with a "(New)" dropdown), "Enter Firstname", "Enter Surname", "Enter Address", "Enter Town", "Enter Postcode", and "Enter TelephoneNumber". Each of the last six fields has a red asterisk to its right, indicating they are required. Below the form is a table with the following data:

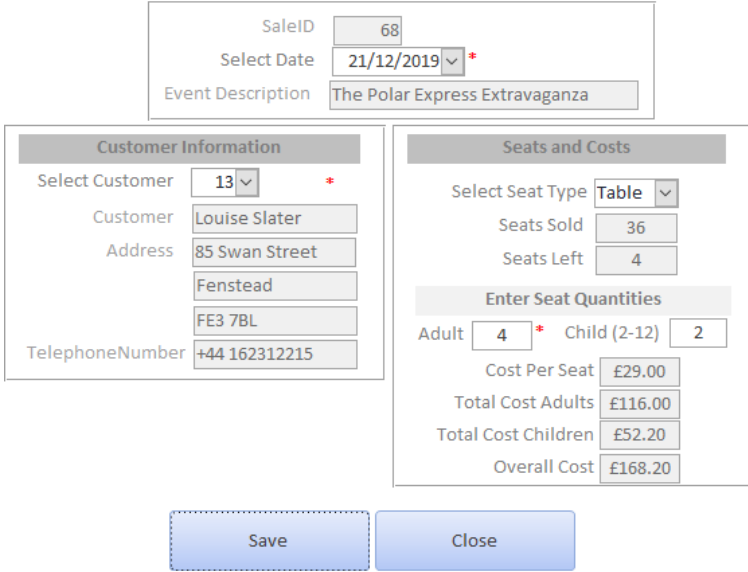
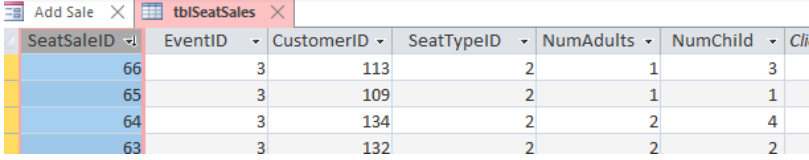
CustomerID	Forename	Surname	Address	Town	Postcode	TelephoneNumber
247	Simon	Tipper	15 The Avenue	Dilmouth	FE3 1LX	+44 1234455891
246	James	Hunt	34 High Street	Meriton	ME4 3GH	+44 9897561916
241	Julie	Butler	3 Sullivan Way	Dilmouth	DL5 1BV	+44 9826032072

Input form to purchase seats if they are available

Test No	Type test	Purpose of Test	Add suitable test data	Add the results you would expect to get from a fully working system	Add screenprint(s) of the results of this test carried out on your database. Ensure you show the test data used in the screenprint(s)	Only complete this column if the results are not as expected • Explain the error If you correct the error explain how you have done it including a screenprint
1	N	To ensure sale form opens at a new record	Open form	SaleID: New SeatTypeID: 1 – table to show in combo box Adult:1 Child:0 CostPerSeat: £29.00 Total Cost Adults: £29.00 Total Cost Children: £0.00 Overall Cost: £29.00 All other fields to be empty	<div style="text-align: center;"> <h3>Add a Sale</h3> <p>Select the Date, Customer and Seat Type. Enter the number of Adult and Children's tickets required The SaleID will be generated for you. Click Save to save the sale. If no dates appear in the list of dates all events are sold out.</p> </div> 	

2	X	To ensure a sale cannot be made where the number of adult tickets being purchased is below the acceptable range	SaleID; Autonumber higher than currently used EventID: 1, 21/12/2019 CustomerID:13 SeatTypeID: 1, Table Adult: 0 Child: 0	Error message to be displayed saying "There must be at least one adult"																																													
3	X	To ensure a sale cannot be made where the number of adult tickets being purchased is above the acceptable range	SaleID; Autonumber higher than currently used EventID: 1, 21/12/2019 CustomerID:13 SeatTypeID: 1, Table Adult: 9 Child: 0	Error message to be displayed saying "There cannot be more than 8 adults"		<p>The error message did not display as I expected. I realised that my validation text was only suitable when less than 1 was input.</p> <table border="1" data-bbox="1720 858 2130 1093"> <tr> <td>NumAdults</td> <td>Number</td> </tr> <tr> <td>NumChild</td> <td>Number</td> </tr> </table> <p>Field Proper</p> <table border="1" data-bbox="1720 930 2130 1093"> <thead> <tr> <th colspan="2">General</th> <th colspan="2">Lookup</th> </tr> </thead> <tbody> <tr> <td>Field Size</td> <td></td> <td>Long Integer</td> <td></td> </tr> <tr> <td>Format</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Decimal Places</td> <td>0</td> <td></td> <td></td> </tr> <tr> <td>Input Mask</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Caption</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Default Value</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Validation Rule</td> <td>Is Not Null And Between 1 And 8</td> <td></td> <td></td> </tr> <tr> <td>Validation Text</td> <td>There must be at least one adult</td> <td></td> <td></td> </tr> </tbody> </table> <p>I amended the text to be suitable for the range so that is was clear what the error was</p> <table border="1" data-bbox="1720 1241 2130 1316"> <tr> <td>Is Not Null And Between 1 And 8</td> </tr> <tr> <td>There must be at least 1 adult and a maximum of 8</td> </tr> <tr> <td>No</td> </tr> </table>	NumAdults	Number	NumChild	Number	General		Lookup		Field Size		Long Integer		Format				Decimal Places	0			Input Mask				Caption				Default Value				Validation Rule	Is Not Null And Between 1 And 8			Validation Text	There must be at least one adult			Is Not Null And Between 1 And 8	There must be at least 1 adult and a maximum of 8	No
NumAdults	Number																																																
NumChild	Number																																																
General		Lookup																																															
Field Size		Long Integer																																															
Format																																																	
Decimal Places	0																																																
Input Mask																																																	
Caption																																																	
Default Value																																																	
Validation Rule	Is Not Null And Between 1 And 8																																																
Validation Text	There must be at least one adult																																																
Is Not Null And Between 1 And 8																																																	
There must be at least 1 adult and a maximum of 8																																																	
No																																																	

4	N	To ensure the relevant event and customer information appears when an event and customer has been selected/input	<p>SaleID; Autounumber higher than currently used EventID: 1, 21/12/2019 CustomerID:13 SeatTypeID: 1, Table Adult: 4 Child: 2</p>	<p>Event Description: The Polar Express Extravaganza</p> <p>Customer: Louise Slater Address 85 Swan Street Town: Fenstead Postcode: FE3 7BL Telephone Number: +44 162312215</p>	

5	N	<p>To ensure all costs are correct including</p> <ul style="list-style-type: none"> • Cost per seat • Total cost for adults • Total cost for children • Overall cost 	<p>SaleID; Autonumber higher than currently used EventID: 1, 21/12/2019 CustomerID:13 SeatTypeID: 1, Table Adult: 4 Child: 2</p>	<p>Cost per seat: £29.00 Total Cost Adults: 4 x 29 = £116.00 Total Cost Children: (2*29.00)- (2x29.00*0.1)=£52.50 Overall Cost= £116.00+£52.50=£168.20</p>		
6	N	<p>To ensure a valid sale saves correctly</p>	<p>SaleID; Autonumber higher than currently used EventID: 1, 21/12/2019 CustomerID:12 SeatTypeID: 1, Table Adult: 2 Child: 2</p>	<p>Record to be saved in tblSale with an autonumber higher than the last used. Message to be displayed saying "The sale has been saved" Form to clear</p>		

Add Sale X

Add a Sale

Select the Date, Customer and Seat Type.
 Enter the number of Adult and Children's tickets required.
 The SaleID will be generated for you.
 Click Save to save the sale.
 If no dates appear in the list of dates all events are sold out.

SaleID

Select Date *

Event Description

Customer Information

Select Customer *

Customer

Address

TelephoneNumber

Seats and Costs

Select Seat Type ▼

Seats Sold

Seats Left

Enter Seat Quantities

Adult * Child (2-12)

Cost Per Seat

Total Cost Adults

Total Cost Children

Overall Cost

Save

Close

Activity 4 – Testing – 1906

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SaleID (New)
 Select Date [] *
 Event Description []

Customer Information

Select Customer [] *

Customer []

Address []

[]

TelephoneNumber []

Seats and Costs

Select Seat Type Table []

Seats Sold []

Seats Left []

Enter Seat Quantities

Adult 1 * Child (2-12) 0

Cost Per Seat []

Total Cost Adults []

Total Cost Children []

Overall Cost []

Microsoft Access X

The sale has been saved

OK

Close

SeatSaleID	EventID	CustomerID	SeatTypeID	NumAdults	NumChild	Cl
65	2	12	1	2	2	
66	3	113	2	1	3	
65	3	109	2	1	1	
64	2	124	2	2	4	

Activity 5 - Evaluation

No evaluation included as centres sometimes coach learners to produce the evaluation using exactly the format given or learners think they must produce their evaluation to exactly the format given. Evaluations must be relevant to their solution and the scenario/task requirements.

Scripts A and B include examples of evaluations seen.