

# Unit 2 Creating Systems to Manage Information 2019



## Level 3 National in Information Technology

### Additional Sample Assessment Material

#### Part A Example Solution

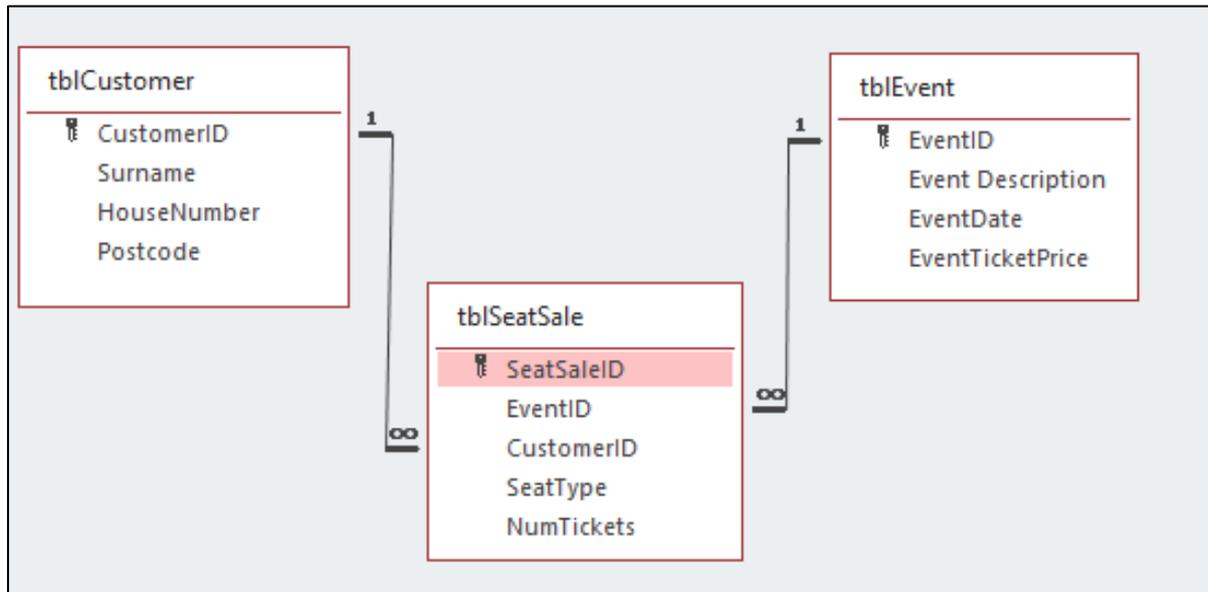
## Contents

Introduction .....	3
Activity 1 Database Relationship Screenprint .....	3
Activity 2 – Table Structures and Validation.....	4
Table Structures.....	4
Table Validation .....	4
Presence and Length Check .....	4
Value Lookup or Range Check .....	4
Table Lookup .....	4
Format Check .....	4
Activity 3 .....	5
Queries .....	5
Query a.....	5
Query b.....	6
Report .....	7
Example 1 .....	7
Example 2 .....	9
Activity 4 - Testing .....	10
Activity 5 – Evaluation .....	13

## Introduction

This solution shown is **one** example only. It is important to read the guidance with each activity. No assumption is made that a method that differs from the solution shown is incorrect.

## Activity 1 Database Relationship Screenprint



# Activity 2 – Table Structures and Validation

## Table Structures

Field Name	Data Type
CustomerID	Number
Surname	Short Text
HouseNumber	Short Text
Postcode	Short Text

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

Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number
CustomerID	Number
SeatType	Short Text
NumTickets	Number

## Table Validation

### Presence and Length Check

Field Name	Data Type
Surname	Short Text

Property	Value
Field Size	20
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	You must enter the customer's surname

### Value Lookup or Range Check

Field Name	Data Type
NumTickets	Number

Property	Value
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	Between 1 And 8
Validation Text	Must be at least 1 ticket bought and no more than 8

### Table Lookup

Field Name	Data Type
SeatSaleID	AutoNumber
EventID	Number

Property	Value
Display Control	Combo Box
Row Source Type	Table/Query
Row Source	SELECT (tblEvent].[EventID], (tblEvent].[Event Description], (tblEvent].[Event
Bound Column	1
Column Count	4
Column Heads	No
Column Widths	1.35cm;4.974cm;1.799cm;2.408cm
List Rows	16
List Width	10.529cm
Limit To List	Yes

### Format Check

Field Name	Data Type
HouseNumber	Short Text
Postcode	Short Text

Property	Value
Field Size	7
Format	
Input Mask	>LLO\ OLL
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	You must enter the customer's postcode
Required	No

## Activity 3

### Queries

#### Query a

Create a query to display an alphabetically sorted list of the events running on the 20th and 21st of December. It must show event description and event ticket price only.

Field:	Event Description	EventTicketPrice	EventDate
Table:	tblEvent	tblEvent	tblEvent
Sort:	Ascending		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Criteria:			Between #20/12/2019# And #21/12/2019#
or:			

Event Description	EventTicket
Sing A Long Christmas Extravaganza	£10.00
The Polar Express Extravaganza	£10.00
*	£0.00

## Query b

Create a query that will calculate:

- the number of table tickets sold
- the income the tickets sold would generate.

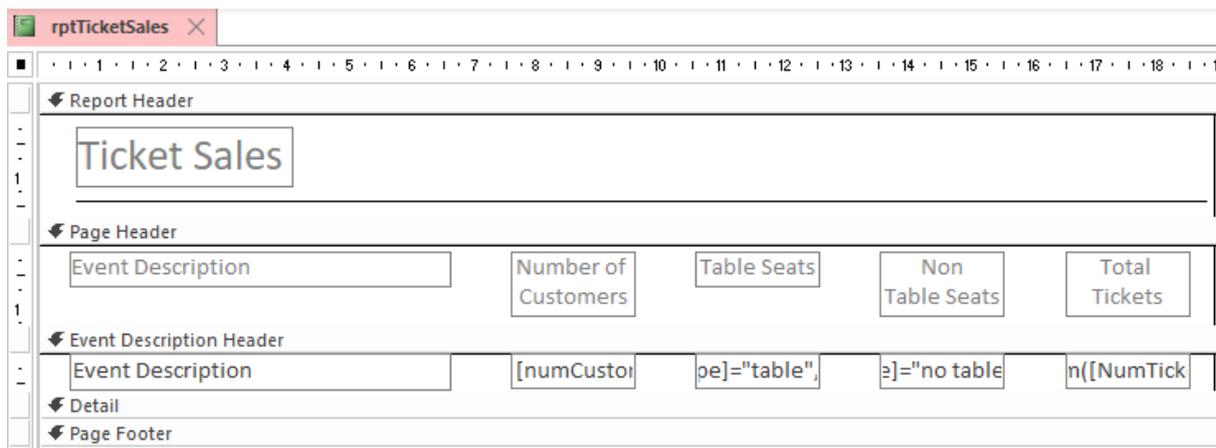
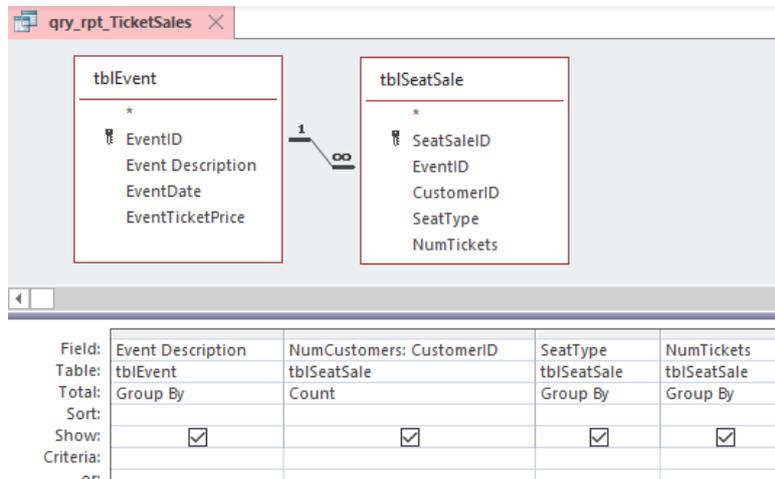
Display:

- the event description
- the number of table seat tickets sold
- the income generated.

Event Description	TableTicketsSold	Income
Christmas Songtime	2	£20.00
Home Alone	4	£50.00
The Polar Express	4	£60.00

# Report

## Example 1



Calculation for table seats

```
=Sum(IIf([seattype]="table",[numtickets],0))
```

Calculation for no table seats

```
=Sum(IIf([seattype]="no table",[numtickets],0))
```

Calculation for total tickets

```
=Sum([NumTickets])
```

Many different ways to achieve. Could use grouping on Event Description etc. Any method that shows what we want is valid.

The screenshot shows a report window with the title 'rpt\_TicketSales'. The report content is titled 'Ticket Sales' and contains a table with the following data:

Event Description	Number of Customers	Table Seats	Non Table Seats	Total Tickets
Christmas Songtime	2	2	1	3
Home Alone	2	4	8	12
The Polar Express	2	4	2	6

**Presentation of report cannot be marked from screenprint. Need to see actual report. Report here for illustration purposes only.**

## Example 2

rptTicketSales\_example2 X

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Report Header

Page Header

### Ticket Sales

EventID Header

#### Event Description

<b>Number of Customers:</b>	<b>=Count([customerID])</b>
<b>Total Tickets Sold</b>	<b>=Sum([NumTickets])</b>
Seat Type	Tickets Sold

Detail

SeatType	NumTickets
----------	------------

Page Footer

Report Footer

rptTicketSales\_example2 X

### Ticket Sales

#### Christmas Songtime

<b>Number of Customers:</b>	<b>2</b>
<b>Total Tickets Sold</b>	<b>3</b>
Seat Type	Tickets Sold
No Table	1
Table	2

#### The Polar Express

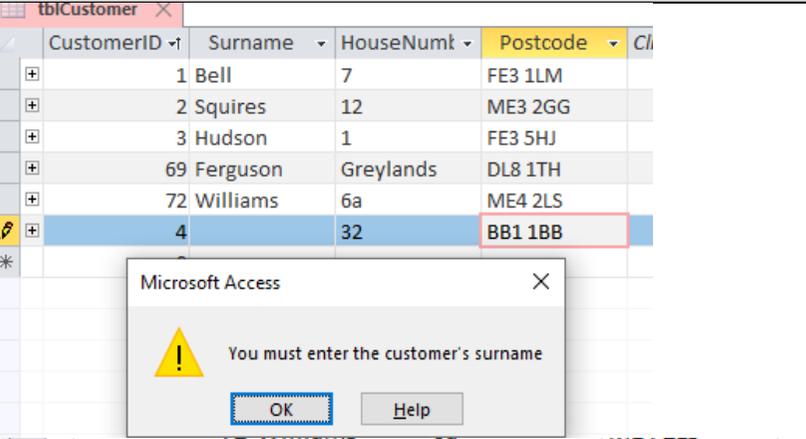
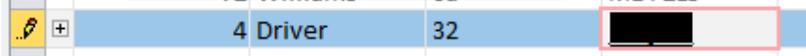
<b>Number of Customers:</b>	<b>2</b>
<b>Total Tickets Sold</b>	<b>6</b>
Seat Type	Tickets Sold
No Table	2
Table	4

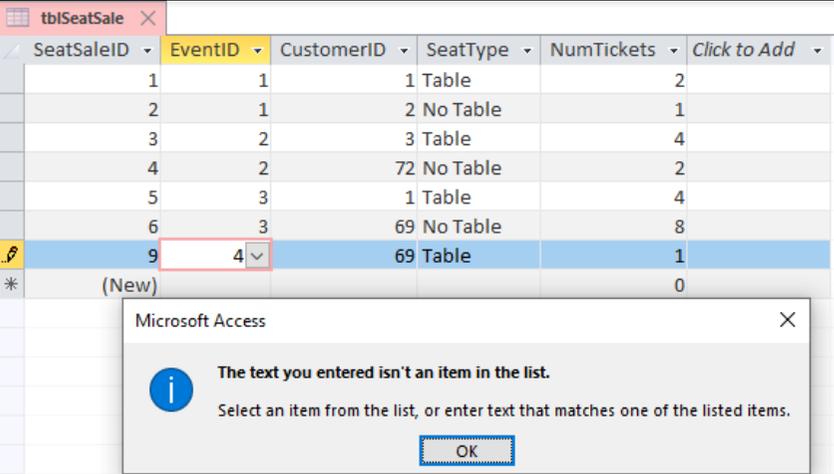
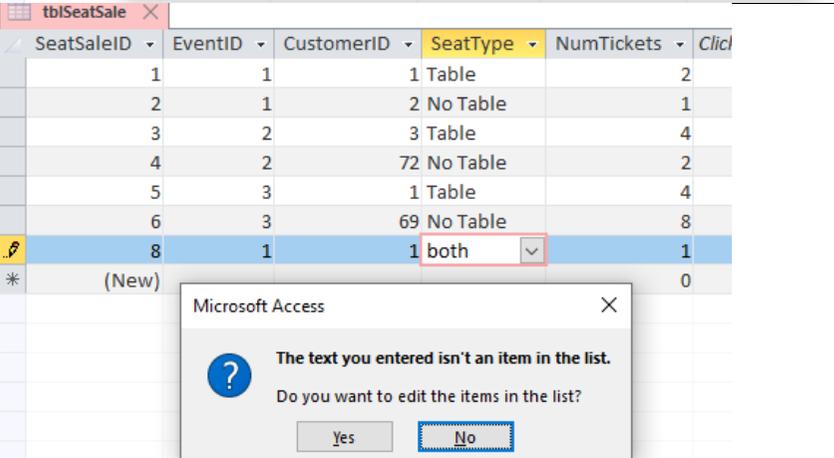
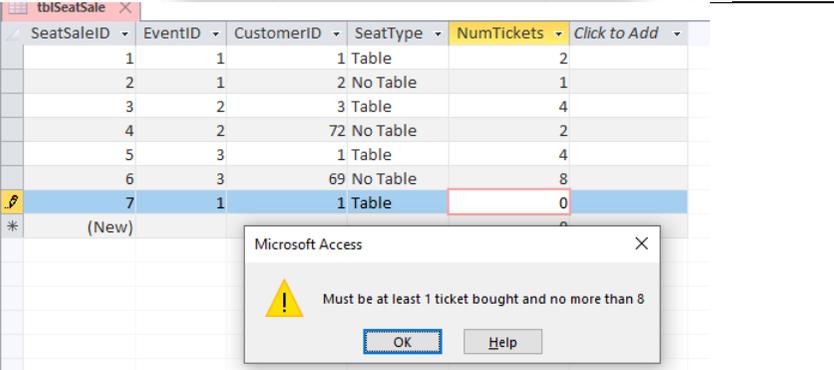
#### Home Alone

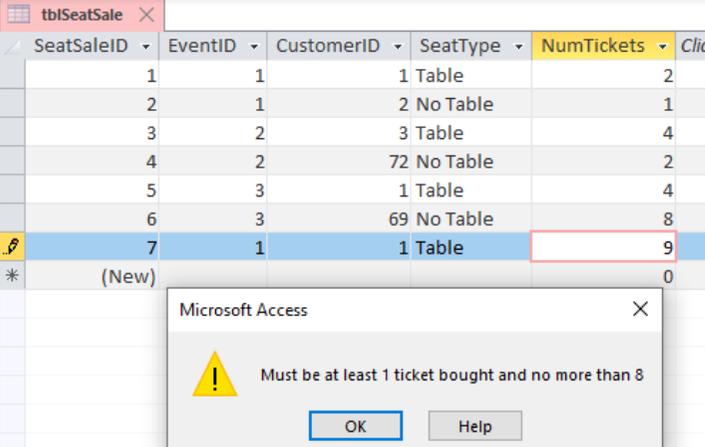
<b>Number of Customers:</b>	<b>2</b>
<b>Total Tickets Sold</b>	<b>12</b>
Seat Type	Tickets Sold
No Table	8
Table	4

## Activity 4 - Testing

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

Test No	type 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	R	CustomerID:4 Surname: blank HouseNumber:32 Postcode: BB1 1BB	An error message telling the user the surname is required		
2	R	CustomerID:4 Surname:Driver HouseNumber:32 Postcode 11B B11	No error message but the user will not be able to add a character where a number should be or a number where a character should be. The character will not be input		

3	X	SeatSaleID:Autonumber EventID:4 CustomerID:69 SeatType: Table NumTickets:1	Error message saying they must select an item from the list.		
4	R	SeatSaleID:Autonumber EventID:1 CustomerID:1 SeatType:both NumTickets:1	Error message saying they must select an item from the list.		
5	X	SeatSaleID:Autonumber EventID:1 CustomerID:1 SeatType:Table NumTickets:0	Error message telling the user the input has to be between 1 and 8		

6	X	SeatSaleID:Autonumber EventID:1 CustomerID:1 SeatType:Table NumTickets:9	Error message telling the user the input has to be between 1 and 8	 <table border="1" data-bbox="840 103 1545 391"> <thead> <tr> <th>SeatSaleID</th> <th>EventID</th> <th>CustomerID</th> <th>SeatType</th> <th>NumTickets</th> <th>Clicked</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td><td>1</td><td>Table</td><td>2</td><td></td></tr> <tr><td>2</td><td>1</td><td>2</td><td>No Table</td><td>1</td><td></td></tr> <tr><td>3</td><td>2</td><td>3</td><td>Table</td><td>4</td><td></td></tr> <tr><td>4</td><td>2</td><td>72</td><td>No Table</td><td>2</td><td></td></tr> <tr><td>5</td><td>3</td><td>1</td><td>Table</td><td>4</td><td></td></tr> <tr><td>6</td><td>3</td><td>69</td><td>No Table</td><td>8</td><td></td></tr> <tr><td>7</td><td>1</td><td>1</td><td>Table</td><td>9</td><td></td></tr> <tr><td>(New)</td><td></td><td></td><td></td><td>0</td><td></td></tr> </tbody> </table>	SeatSaleID	EventID	CustomerID	SeatType	NumTickets	Clicked	1	1	1	Table	2		2	1	2	No Table	1		3	2	3	Table	4		4	2	72	No Table	2		5	3	1	Table	4		6	3	69	No Table	8		7	1	1	Table	9		(New)				0		
SeatSaleID	EventID	CustomerID	SeatType	NumTickets	Clicked																																																						
1	1	1	Table	2																																																							
2	1	2	No Table	1																																																							
3	2	3	Table	4																																																							
4	2	72	No Table	2																																																							
5	3	1	Table	4																																																							
6	3	69	No Table	8																																																							
7	1	1	Table	9																																																							
(New)				0																																																							

## **Activity 5 – Evaluation**

No evaluation example included as these can end up becoming the 'only way' candidates evidence this activity.