Unit 2 – Creating Systems to Manage Information
January 2019 – new format

Script A

Activity	Band	Mark	Max Mark
Part A			
1 – Database relationship screenprint	4	8	8
2 – Table structures	4	8	8
3 – Queries and report	3	9	12
4 – Structure testing	3	5	6
5 – Structure evaluation	2	4	6
Part A Total		**34**	**40**
Part B			
6 – Interface and functionality	3	10	14
7 – Interface and functionality testing	3	5	6
8 – Interface and functionality evaluation	3	5	6
Part B Total		**20**	**26**
Overall Total		**54**	**66**

Contents

Activity 1 – Database Relationship Screenprint, Band 4, Marks 8
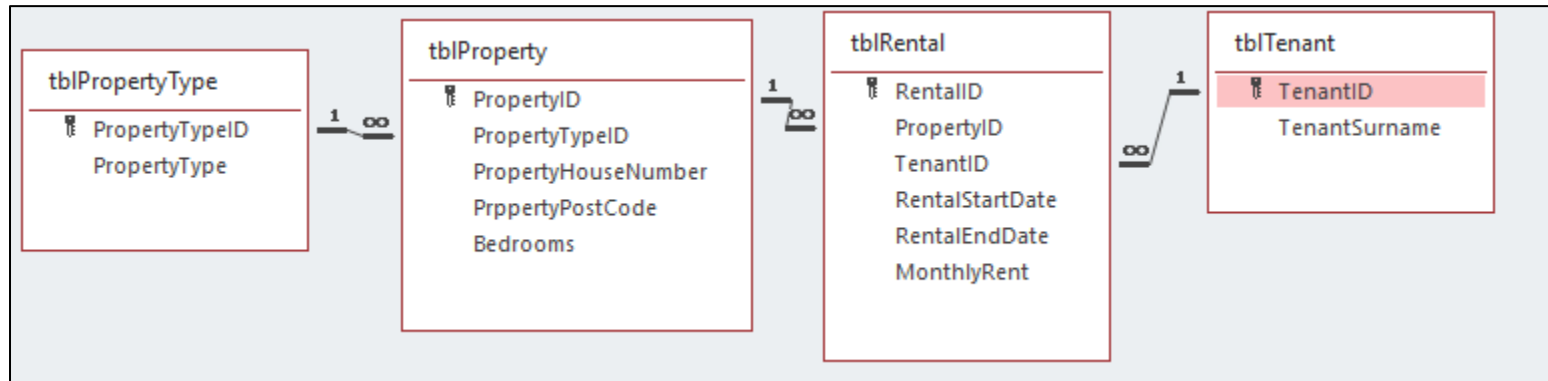
Trait	Band	Comments
1	4	• All fields are in the correct tables • Primary keys are correct • Correctly normalised with no data redundancy
2	4	• Correct relationships and relationship types throughout
Band	**4**	**The learner has fully normalised the data set and has provided an accurate solution. PrppertyPostCode is not penalised.**
Mark	**8**	**Spellings are not checked and it is clear to see what the field refers to.**

Activity 2 – Table Structures and Validation, Band 4, Marks 8

tblProperty

Field Name	Data Type
PropertyID	Number
PropertyTypeID	Number
PropertyHouseNumber	Short Text
PrppertyPostCode	Short Text
Bedrooms	Number

tblPropertyType

Field Name	Data Type
PropertyTypeID	Number
PropertyType	Short Text

tblRental

Field Name	Data Type
RentalID	Number
PropertyID	Number
TenantID	Short Text
RentalStartDate	Date/Time
RentalEndDate	Date/Time
MonthlyRent	Currency

tblTenant

Field Name	Data Type
TenantID	Short Text
TenantSurname	Short Text

Trait 1
- A recognised naming convention has been used throughout (tbl for tables, also consistent naming of tables. Consistent naming of fields – camel case
- There is a spelling error PrppertyPostCode – it is naming conventions that are checked, not spellings. It is clear to see what the field refers to

Trait 2
- Learner has identified all primary and foreign keys from their ERD in Activity 1

Trait 3
- Bedrooms – Number
- PropertyHouseNumber – Short Text
- RentalStartDate – Date/Time
- RentalEndDate – Date/Time
- MonthlyRent – Currency
- TenantID (primary and foreign – Short Text)
- All data types correct

Presence Check

Field Name	Data Type
PropertyTypeID	Number
PropertyHouseNumber	Short Text
PropertyPostCode	Short Text

General Lookup

Field Size	25
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	Please enter the house number
Required	No

Length Check

Field Name	Data Type
PropertyTypeID	Number
PropertyHouseNumber	Short Text
PropertyPostCode	Short Text

General Lookup

Field Size	25
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	Please enter the house number
Required	No

Format Check

Field Name	Data Typ
PropertyHouseNumber	Short Text
PrppertyPostCode	Short Text
Bedrooms	Number

General Lookup

Field Size	7
Format	
Input Mask	> LL0\ 0LL;;_
Caption	
Default Value	
Validation Rule	Is Not Null
Validation Text	Please enter the postcode
Required	No

Range Check

Field Name	Data Type
PrppertyPostCode	Short Text
Bedrooms	Number

Field Properties

General Lookup

Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	Is Not Null And Between 1 And 5
Validation Text	Please enter the number of bedrooms from 1 to 5

Table Lookup

Field Name	Data Type
PropertyID	Number
PropertyTypeID	Number
PropertyHouseNumber	Short Text

Field Properties

General **Lookup**

Display Control	Combo Box
Row Source Type	Table/Query
Row Source	SELECT tblPropertyType.PropertyTypeID FROM tblPropertyType;
Bound Column	1
Column Count	1
Column Heads	No
Column Widths	
List Rows	16
List Width	Auto
Limit To List	Yes

Trait 4

The presence check is relevant to the scenario, activity 2 and testing. It includes a suitable error message. The length check is fine and evidence for that can be taken from the presence check, length check or format check screenprint. More than one type of validation can be shown in a single screenprint if it is relevant. For example the evidence for the presence check, length check and format check could all have come from the same screenprint i.e. postcode – all three were checks on that field were relevant to the scenario/activity 2/testing. One screenprint would have been enough to show all three. The range check is fine. The paper asked for a range check rather than Lookup check – though either would have been acceptable. The table lookup is fine – it has been added to a foreign key and lookups to to the primary key. Limit to List has been set to Yes.

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 2: Table structure and validation	0	1-2	3-4	5-6	7-8	8
	No rewardable material	Uses some meaningful field and table names with some inconsistencies.	Uses meaningful field and table names with minor inconsistencies.	Uses a recognised naming convention with minor inconsistencies for fields and tables.	Uses a recognised naming convention consistently for fields and tables.	
		The table structure identifies some primary and foreign key fields.	The table structure identifies most primary and foreign key fields.	The table structure identifies all primary and most foreign key fields.	The table structure identifies all primary and foreign key fields.	
		The table structure has limited use of correct data types.	The table structure has correct data types for most fields.	The table structure has correct data types for most fields including matching primary and foreign key fields.	The table structure has correct data types for all fields.	
		Limited use of validation which may be inaccurate.	Accurate validation rules for some of the fields that require validation.	Accurate validation rules for most of the fields that require validation.	Accurate validation rules for all fields that require validation.	

Trait	Band	Comments
1	4	• A recognised naming convention has been used for table names (tbl). Field names use camel case consistently. Names for key fields are fine.
2	4	• All primary and foreign keys present in Activity 1 can be seen in the table structure. They fully match.
3	4	• Text, number, currency, date and time data types have been used effectively. All data types are correct.
4	4	• There is evidence of an appropriate (when taking scenario etc into account) presence check including validation text, range check including suitable validation text, length check, format check and table lookup including limit to list set to yes. Evidence meets band 4.
Band	**4**	**The evidence fully meets mark band 4 across all traits.**
Mark	**8**	

Activity 3 – Queries and Report, Band 3, Marks 9

Please see the marking guidance for details on awarding the points in each trait and the points/band overall.

(a) Create a query to display an alphabetically sorted list of the current rentals for properties that have at least 3 bedrooms. It must show the sorted property postcode and monthly rent only

Field:	MonthlyRent	PrppertyPostCode	Bedrooms	RentalEndDate
Table:	tblRental	tblProperty	tblProperty	tblRental
Sort:	Ascending			
Show:	☑	☑	☐	☐
Criteria:			>2	Is Not Null
or:				

qryThreeBedroomVacantProp

MonthlyRent	Prpp
£489.67	BV0 6JI
£641.33	BV2 0G

Trait 1

- PropertyPostcode, Bedrooms, MonthlyRent and RentalEndDate are present (4 points)
- The design view screenprint does not show the tables that have been included so no judgement can be made as to whether there were any unnecessary tables (fields) included. (This is taken into account for Band 4)

Trait 2

- The sort should have been on Postcode not MonthlyRent (0 point)
- The criteria used for Bedrooms would only find the properties with at least 3 bedrooms. (1 point)
- The critieria used for RentalEndDate would not find current rentals. It would find rentals that have ended. (0 point)

Trait 3

- The ordering of the columns is fine. Could argue that it would be better to see PropertyPostCode first. (1 point)
- PropertyPostcode is truncated (0 point)
- Only the fields that should be displayed have been (1 point)

(b) Create a query for rentals that have ended, to calculate:

- the duration of rentals in years for rentals that have ended
- the income generated.

Display:
- the property postcode
- the length of the rental in full years
- the income generated.

Trait 1
- PropertyPostcode and RentalEndDate are present (2 points)
- NumberOfYears includes at least one field that is relevant in determining the rental duration (1 point)
- Income generated includes at least one field that is relevant in the calcuation (1 point)

Trait 2
- The criterion used for RentalEndDate is correct. It would find rentals that have ended (1 point)
- There is a calculation that would calculate the number of years between the RentalStartDate and RentalEndDate, however, it would not give the length in full years (it would round part years up to a full year) (0 point)
- There is a calculation for IncomeGenerated which would determine the yearly rent for each of the years. Follow through was allowed in terms of the round up of years. (1 point)

Trait 3
- The ordering of the columns does aid readability (1 point)
- There is no truncation (1 point)
- Only the fields required have been displayed (1 point)
- The field names for the generated fields are meaningful (1 point)
- IncomeGenerated has been formatted to currency with two decimal places. (need two instances for a point)

(a) Report – Create a report that shows rentals for each property.

For each property calculate:
- The total number of rentals
- The highest monthly rent
- The lowest monthly rent.

Also calculate:
- the total number of rentals overall
- the highest monthly rent overall
- the lowest monthly rent overall.

Display:
- a suitable report title
- the property house numbers
- the property postcodes
- the property types
- the number of rentals for each property
- the highest monthly rent charged for each property
- the lowest monthly rent charged for each property
- the total number of rentals
- the highest monthly rent overall
- the lowest monthly rent overall.

The report must fit on one page.
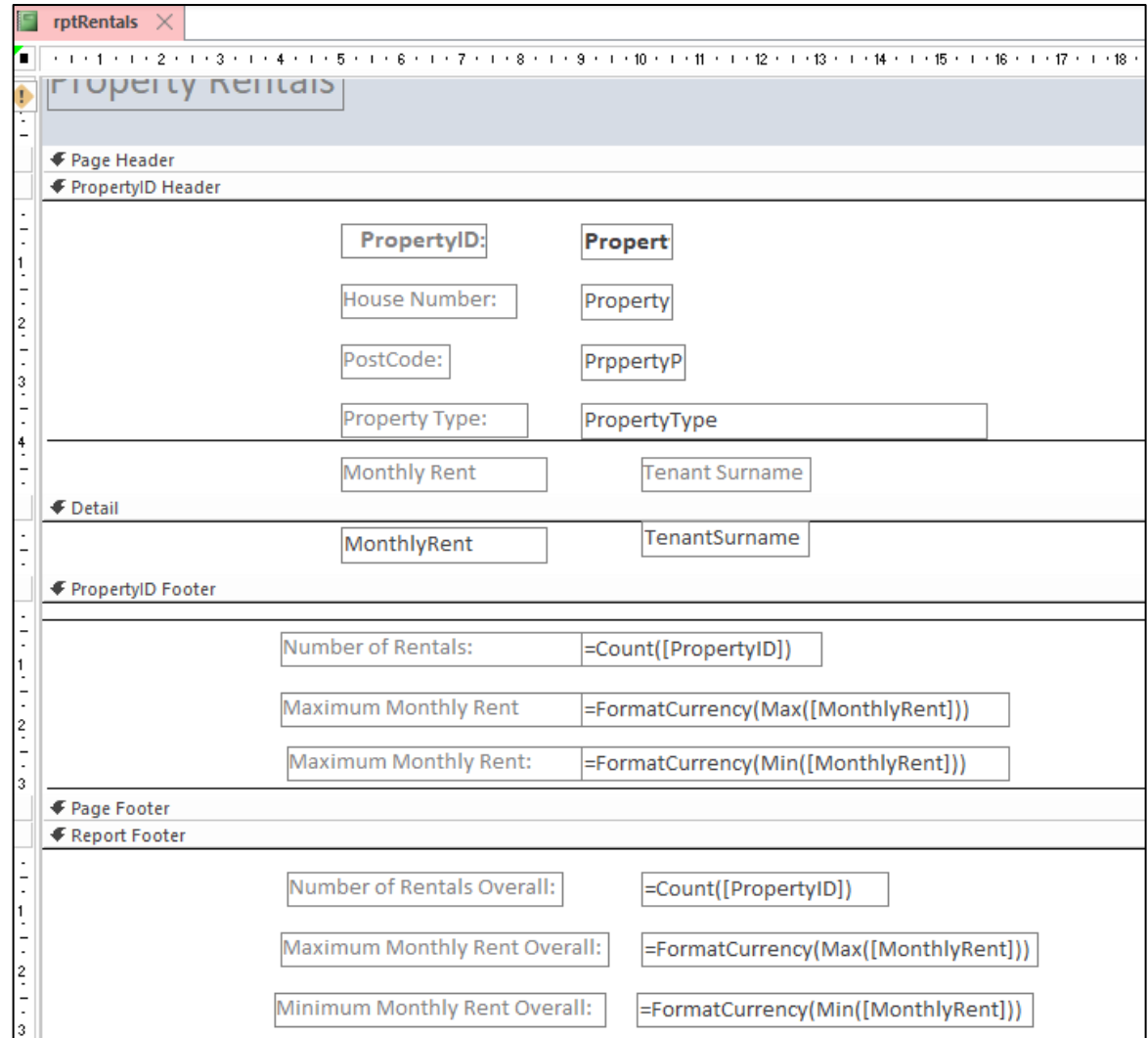
Property Rentals

PropertyID:	1
House Number:	5a
PostCode:	BV2 2CK
Property Type:	Detached bungalow

Monthly Rent	Tenant Surname
£850.00	Meek
£732.34	Garcia

Number of Rentals:	2
Maximum Monthly Rent	£850.00
Maximum Monthly Rent:	£732.34

PropertyID:	2
House Number:	2
PostCode:	BV2 8ZV
Property Type:	Terraced house

Monthly Rent	Tenant Surname
£294.67	Baker

Page 1 of the report

Number of Rentals:	1
Maximum Monthly Rent	£498.33
Maximum Monthly Rent:	£498.33
Number of Rentals Overall:	7
Maximum Monthly Rent Overall:	£850.00
Minimum Monthly Rent Overall:	£294.67

Page 5 of the report

Trait 1

- The report includes these relevant fields:
    - the property house numbers (1 point)
    - the property postcodes (1 point)
    - the property types (1 point)
    - the number of rentals for each property (1 point)
    - the highest monthly rent charged for each property (1 point)
    - the lowest monthly rent charged for each property (though called Maximum too) (1 point)
    - the total number of rentals (1 point)
    - the highest monthly rent overall (1 point)
    - the lowest monthly rent overall (1 point
- It also includes irrelevant fields:
    - PropertyID
    - TenantSurname
    - MonthlyRent

Trait 2

- For each property:
    - the number of rentals has been calculated (1 point)
    - The highest monthly rent has been calculated (1 point)
    - The lowest monthly rent has been calculated (1 point)
- Overall:
    - the number of rentals has been calculated (1 point)
    - The highest monthly rent has been calculated (1 point)
    - The lowest monthly rent has been calculated (1 point)
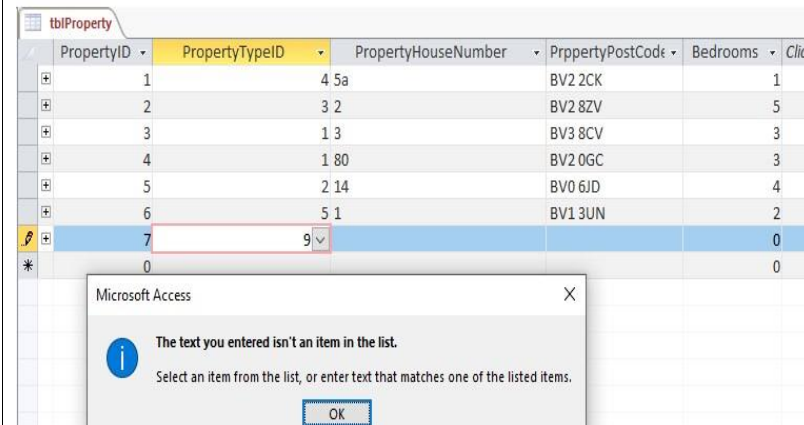
Trait 3
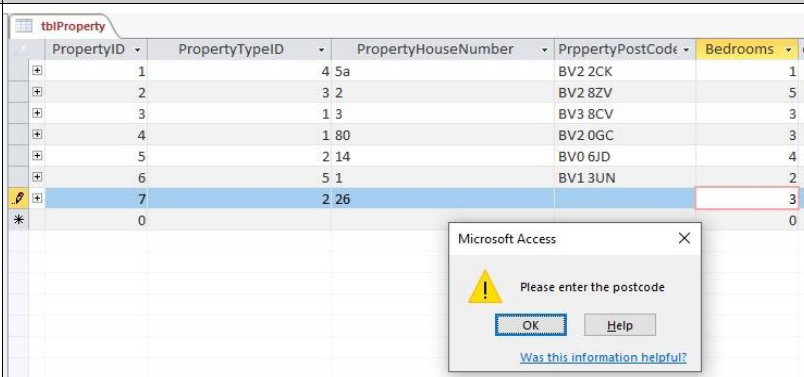
- The report was 5 pages long. It was supposed to fit on one page – this is classed as a weakness with layout (0 points)
- The title was suitable (1 point)
- Not all labels were appropriate - Maximum monthly rent in place of Minimum montly rent is not sensible (0 points)
- There is no truncation of data (1 point)
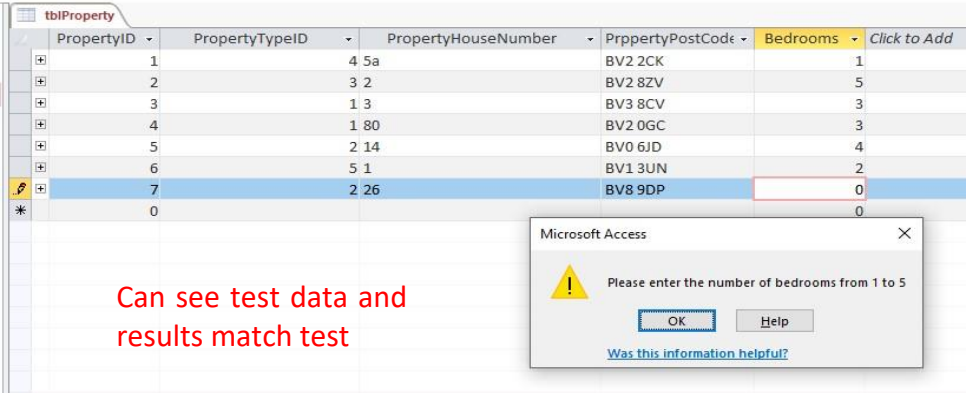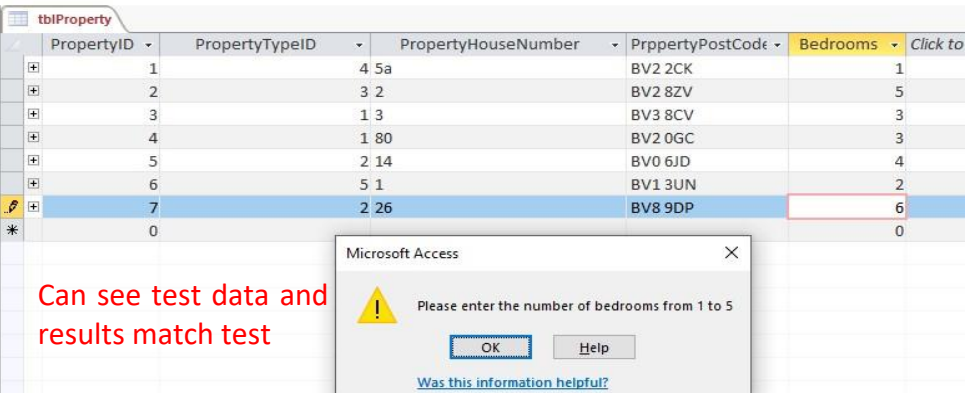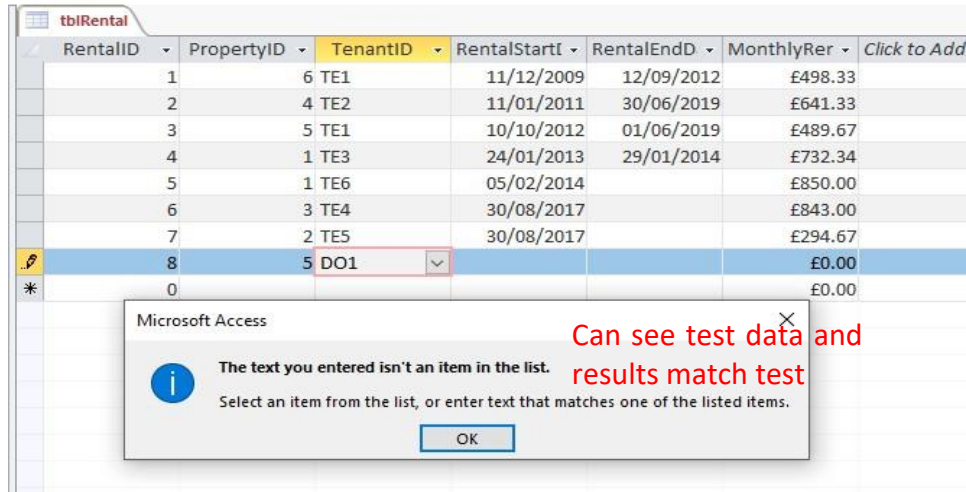- Currency has been used for monetary amounts (min or 2 across queries/report) (1 point)

Activity 3: Queries and Report	0	1-3	4-6	7-9	10-12	12
	No rewardable material	Queries and report include limited relevant fields.

Queries and report include details of some criteria and calculations required, which may include inaccuracies.

Presentation of data in queries and report will not aid readability and understanding of data. | Queries and report includes some relevant fields.

Queries and report include accurate details of some criteria and calculations required.

Presentation of data in queries and report will, in places, aid readability of and understanding of data. | Queries and report includes mostly relevant fields.

Queries and report includes accurate details of most criteria and calculations required.

Presentation of data in queries and report will mostly aid readability and understanding of data. | Queries and report includes all relevant fields only.

Queries and report include accurate details of all criteria and calculations required.

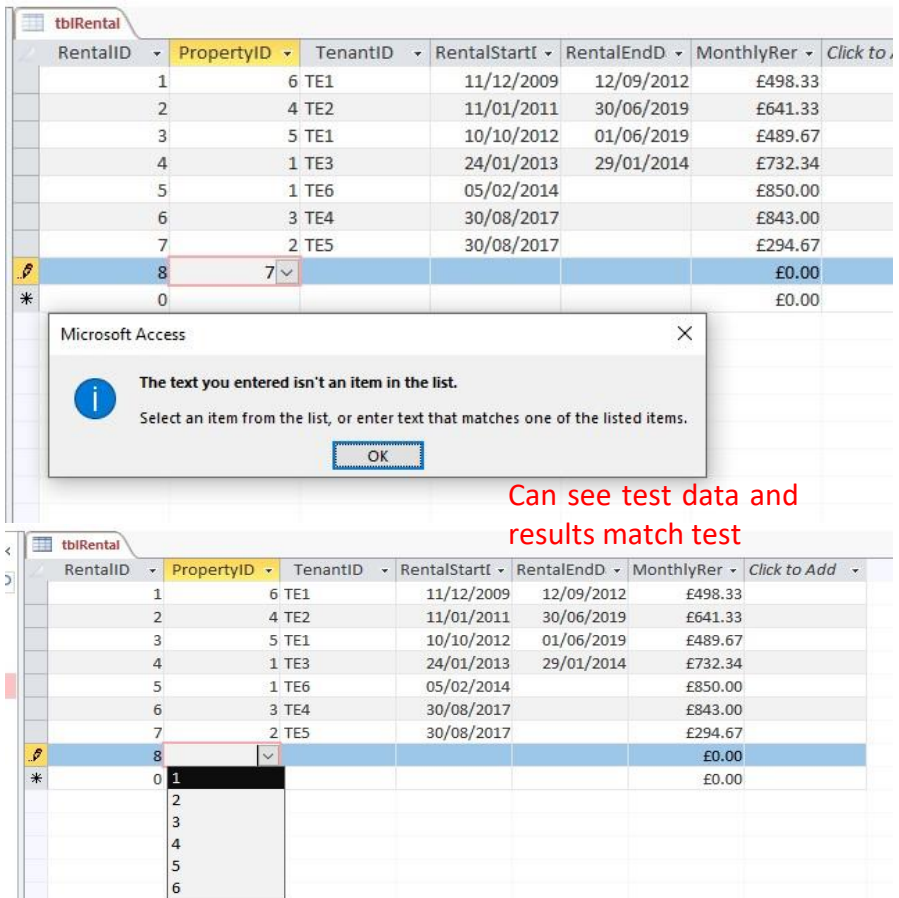Presentation of data in queries and report will aid readability and understanding of data. | |

Trait	Band	Comments
1	4 bottom	A very good attempt was made. However, it was impossible to see whether any irrelevant tables/fields had been included as the tables were not included in design view of the query. The report also included irrelevant fields. Bottom of band 4 appropriate. Top of band 4 cannot be achieved without being confident no irrelevant tables/fields were included in the design.
2	3 top	• Query 1: The sort was incorrect. The criterion for RentalEndDate was incorrect. The criterion for Bedrooms was fine.
• Query 2: The number of years would generate but it would not be entirely correct – it would count partial years as full years. The income would be generated. The criterion for RentalEndDate is correct.
• Report – for each property the number of rentals, highest rent and lowest rent have been calcuated. The overall number of rentals, highest and lowest rent have also been calculated. Evidence sits at bottom of band 4. (9 points)
3	3 top	• Query 1: Shows only the fields that were required. There is truncation of one field which would not aid readability etc.
• Query 2: Shows only the fields that were required. Income generated has been formatted as currency with two decimal places. The ordering of columns is good – aids understanding and readability. All generated fields have suitable labels other than the incorrect labelling of the Minimum Monthly Rent on the report.
• Report: Includes three irrelevant fields. The report is spread across 5 pages, which does not aid readability, however, there is a clear title and good label names.
• Overall 9 points. The evidence sits at the top of band 3.
Band	3	All three tasks have been attempted including the more complex calcuations etc. There is enough evidence to place at the top of band 3.
Mark	9	

Activity 4 – Structure Testing, Band 3, Marks 5

Note: final two columns have been merged in order to show the results more clearly. The actual testing template is set at A3 paper size using landscape orientation.

Test No	Type (N, R, X)	Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)	
1	R ✔	PropertyID = 7 PropertyTypeID = 2 PropertyHouseNumber = 26 PropertyPostcode = Null Bedrooms = 3 Test data given for every field. All test data relevant to the test	Message appears on screen – Please enter the postcode Specific relevant expected results		Matches test. Clearly show data being used
2	R ✔*	PropertyID = 7 PropertyTypeID = 9 PropertyHouseNumber = 26 PropertyPostcode = BV8 9DP Bedrooms = 3 Test data given for every field. All test data relevant to the test Type of test: Numeric primary/foreign key tests can be classed as either R or X. Either erroneous or extreme (invalid)	If 9 is entered an error message will appear stating that the text entered is not an item on the list The dropdown list does not include 9 it goes from 1 - 5 Specific relevant expected results		Matches test. Clearly show data being used

3	X ✔	PropertyID = 7 PropertyTypeID = 2 PropertyHouseNumber = 26 PropertyPostcode = BV8 9DP Bedrooms = 0 Test data given for every field. All test data relevant to the test	Error message will appear – Please enter the number of bedrooms from 1 to 5 Specific relevant expected results	 Can see test data and results match test
4	X ✔	PropertyID = 7 PropertyTypeID = 2 PropertyHouseNumber = 26 PropertyPostcode = BV8 9DP Bedrooms = 6 Test data given for every field. All test data relevant to the test	Error message will appear – Please enter the number of bedrooms from 1 to 5 Specific relevant expected results	 Can see test data and results match test
5	R ✔	RentalID = 8 PropertyID = 5 TenantID = DO1 Test data given for some fields. All test data relevant to the test. However, should have included RentalStartDate and MonthlyRent too Type of test: See comments for test 2	An error message will appear stating that the text entered is not an item on the list Specific relevant expected results	 Can see test data and results match test

| 6 | R ✓ | RentalID = 8
PropertyID = 7

Test data given for some fields. All test data relevant to the test. However, should have included TenantID, RentalStartDate and MonthlyRent too

Type of test:
See comments for test 2 | An error message will appear stating that the text entered is not an item on the list

The dropdown list does not include 7 it goes from 1 - 6
Specific relevant expected results | |

Can see test data and results match test

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 * X or R can be used when testing outside of the range on a numeric foreign key or when just outside of a value range is being tested ----- see Lead Examiner Report for the live examination January **2020** for further information

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max Marks
Activity 4: Structure Testing	0	1-2	3-4	5-6	6
	No rewardable material	Testing is too narrow to confirm a working interface, including limited normal, erroneous and/or extreme data. Expected results are generic or mostly inaccurate. Test data may not be present Test results prove that that the database operates under some normal circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a limited understanding of any errors that were found.	Testing is adequate to confirm a working solution, including some normal, erroneous and/or extreme data. Expected results are mostly accurate and based on identified test data but may lack detail. Test results prove that that the database operates under some normal circumstances and that the interface can cope with some erroneous and extreme data relevant to the scenario. Test result comments are present when errors have been found. These comments show partial understanding of any errors that were found.	Testing is thorough, including a range of normal, erroneous and extreme data. Expected results are specific and accurate based on identified test data. Test results prove that that the database operates under all circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a clear understanding of any errors and how they were fixed.	

Trait	Band	Comments
1	3	Testing does include erroneous and extreme. Normal is not relevant in this particular paper for this task. Outside of the range tests can be classed as either R or X as stated.
2		
3		
Band	3	All of the test data given are specific. However, tests 5 and 6 did not give a full set of test data. Expected results were specific and accurate throughout.
Mark	5	Holistically, the test results do prove that the database operates under all the circumstances that were part of the testing process. Actual results include screenprint evidence. No errors were found – hence no comments. If there are no errors it does not mean the evidence is weak – it would be weakened if errors were present but not identified etc.

Activity 5 – Structure Evaluation, Band 2, Marks 4

After normalising the data given to 3NF to ensure there is no data duplication and all the tables are related with one to many relationships. The normalisation showed that four tables would need to be created. The tables are tblProperty, tblPropertyType, tblRental and tblTenant. The tables are related together using forein key fields and relating the primary key to the foreign key. The tblPropertyType is related to the tblProperty, one to many. The tblProperty is related to the tblRental one to many and the tbltenant table is related to the tblRental one to many. There is no duplication of fields.

A separate table was created for the property type which as stated previously is related one to many with the property table. This was done by adding the PropertyTYpeID field to the property table as a forign key. If a separate table had not been created and the property type included in the property table the property type field would have contained duplicate data.

Validation has been added to most fields in the database to reduce data input errors. The number of bedroom field has a validation rule which is Between 1 and 5. This ensures that zero or anything above five will generate an error message asking the user to enter a number between 1 and 5. This was done as the properties all have at least one bedroom and a maximum of 5.

Quite descriptive. It would have been nice to see reasoning as to why the four tables were required i.e what would have been duplicated etc. Whilst technical language is present, evaluative understanding cannot really be seen.

This is better. Explains what would have happened if the table had not been created. Would have been nice to see an example of what was meant by the duplicated data. Some technical language.

Clear to see what validation was used. Would be nice to see reasoning why a range check was used. They were asked to do this in the paper but would be nice to see evaluative thoughts in terms of a value look up instead.

Holistically, the evidence sits at the top of band 2.

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max. mark
Activity 5: Structure Evaluation	0	1-2	3-4	5-6	6
	No rewardable material	Superficial understanding of relevant technical concepts shown with some inaccuracies. Limited or unsupported justification of the relational database structure selected. Limited links between aspects of the solution and the requirements of the scenario. Technical vocabulary is used but it is not used appropriately to support arguments.	Some accurate and relevant understanding of technical concepts shown. Some valid justification, which may lack support of the relational database structure selected. Some logical links between aspects of the solution and the requirements of the scenario but may lack clarity. Mostly accurate technical vocabulary is used to support arguments.	Accurate and detailed understanding of relevant technical concepts shown throughout. A valid and fully supported justification of the relational database structure selected. Makes logical coherent links between aspects of the solution and the requirements of the scenario throughout. Fluent and accurate technical vocabulary is used to support arguments.	

Trait	Band	Comments
1	2	The evaluation is quite descriptive. However, it does include some accurate and relevant understanding of technical concepts and there is some valid justificaiton to support the relational database strucutre used. It links to the scenario.
2		
3		
Band	2	There is enough evidence to place at the top of mark band 2.
Mark	4	

Activity 6 – Interface and Functionality, Band 3, Marks 10

Add Owner Form

Trait 1

Expectations

- Sensible title
- Instructions on how to use, asterisks where data entry is required
- Field widths appropriate for data they will hold
- Appropriate labels
- Layout good
- OwnerID disabled
- Relevant, consistent, easy to read labels (e.g. spaces)
- Combo box for branch
- Save button

Evidence

- The form has a sensible title that is relevant to its purpose
- There are instructions on how to use the form and asterisks have been included to show required data entry
- The field widths are mostly appropriate. However, OwnerID is too wide for the data it will hold
- There is an attempt at a house style. The form is not the default layout and there has been a decent attempt to customise it. Alignment of the labels could be better in places. The labels are readable
- The OwnerID has been disabled to show data entry is not required. Sign Up Date has also been disabled, which is suitable for their solution
- A combo box has been included for BranchID
- A save button has been included and there are no unnecessary buttons

Form design view (left) showing:

Please complete all the fields marked with an *.
Click on the Save button to save the record.

Label	Control
OwnerID	=Max([OwnerID])+1
Owner Surname:	Unbound *
Owner Email:	OwnerEmail *
Owner Telephone:	OwnerTelephone *
Sign Up Date:	=Date()
BranchID:	Unbou ∨ *
Number of Properties:	Unbour *

Save

Property sheet (right):

Property	Value
Gridline Style Right	Transparent
Gridline Width Top	1 pt
Gridline Width Bottom	1 pt
Gridline Width Left	1 pt
Gridline Width Right	1 pt
Top Margin	0cm
Bottom Margin	0cm
Left Margin	0cm
Right Margin	0cm
Top Padding	0cm
Bottom Padding	0cm
Left Padding	0cm
Right Padding	0cm
Horizontal Anchor	Left
Vertical Anchor	Top
Can Grow	No
Can Shrink	No
Display When	Always
Reading Order	Context
Scroll Bar Align	System
Numeral Shapes	System
Keyboard Language	System
Row Source	SELECT [tblBranch].[BranchID] FROM tblBranch;
Row Source Type	Table/Query
Bound Column	1
Limit To List	Yes
Allow Value List Edits	Yes

4

Trait 2

Expectations

- ID will be automatically generated

Evidence

- The learner has used MAX to generate the ID. This is fine as the field is not bound to the OwnerID field in the table. However, it was unnecessary as the OwnerID is an AutoNumber field. Please see Lead Examiner report for the live examination January 2020 for more explanations about generating an ID.

Form Header

Add New Owner

Detail

Please complete all the fields marked with an *.
Click on the Save button to save the record.

OwnerID =Max([OwnerID])+1

Owner Surname: Unbound *

Owner Email: OwnerEmail *

Owner Telephone: OwnerTelephone *

Sign Up Date: =Date()

BranchID: Unbou ∨ *

Number of Properties: Unbour *

Save

Selection type: Text Box

NumProperties ⌄

| Format | Data | Event | Other | **All** |

Gridline Style Top	Transparent
Gridline Style Bottom	Transparent
Gridline Style Left	Transparent
Gridline Style Right	Transparent
Gridline Width Top	1 pt
Gridline Width Bottom	1 pt
Gridline Width Left	1 pt
Gridline Width Right	1 pt
Top Margin	0cm
Bottom Margin	0cm
Left Margin	0cm
Right Margin	0cm
Top Padding	0.053cm
Bottom Padding	0.053cm
Left Padding	0.053cm
Right Padding	0.053cm
Horizontal Anchor	Left
Vertical Anchor	Top
Can Grow	No
Can Shrink	No
Display When	Always
Reading Order	Context
Scroll Bar Align	System
Numeral Shapes	System
Keyboard Language	System
Input Mask	
Default Value	
Validation Rule	Between 1 And 10
Validation Text	Please enter the number of proerties between 1 and 10
Filter Lookup	Database Default
Enabled	Yes

5

qryAppendNewOwner

tblOwner

*
- 🔑 OwnerID
- OwnerEmail
- OwnerTelephone
- OwnerSurname
- SignUpDate
- BranchID
- NumProperties

Field:	OwnerID: [Forms]![frmAddNewOwner]![OwnerID]	OwnerSurname: [Forms]![frmAddNewOwner]![OwnerSurname]	BranchID: [Forms]![frmAddNewOwner]![cmbBranchID]
Table:			
Sort:			
Append To:	OwnerID	OwnerSurname	BranchID
Criteria:			

Field:	NumProperties: [Forms]![frmAddNewOwner]![NumProperties]	OwnerEmail: [Forms]![frmAddNewOwner]![OwnerEmail]	OwnerTelephone: [Forms]![frmAddNewOwner]![OwnerTelephone]
Table:			
Sort:			
Append To:	NumProperties	OwnerEmail	OwnerTelephone
Criteria:			
or:			

Field:	SignUpDate: [Forms]![frmAddNewOwner]![SignUpDate]
Table:	
Sort:	
Append To:	SignUpDate
Criteria:	

6

frmAddNewOwner   **frmAddNewOwner : Save : On Click**

⊟ **If** IsNull([OwnerSurname])   **Then**

    MessageBox

        Message Please enter the owners surname

        Beep   Yes   **2**

        Type   None

        Title

End If

⊟ **If** IsNull([cmbBranchID])   **Then**   **3**

    MessageBox

        Message Please select the BranchID

        Beep   Yes

        Type   None

        Title

End If

⊟ **If** IsNull([NumProperties])   **Then**

    MessageBox

        Message Please enter the number of properties between 1 and 10

        Beep   Yes

        Type   None

        Title

End If

OpenQuery

    Query Name   qryAppendNewOwner   **6**

        View   Datasheet

    Data Mode   Edit

MessageBox

        Message The new owner details have been saved

        Beep   Yes

        Type   None   **7**

        Title

GoToRecord

    Object Type   Form

    Object Name   frmAddNewOwner

    Record   New   **8**

    Offset

Trait 3 (Owner form)
  Expectations
- Opens at a new record (1)
- Validation to ensure
    - the surname is present (2)
    - BranchID has been selected/is present (3) and valid (4)
    - number of properties is within specified range (1 – 10) (5)
- Saving includes:
    - appending valid data to the owner table (6)
    - displaying a save message (7)
    - clearing the form ready for next record (8)
    - displaying suitable error message(s) (9)

  Evidence
  1 The form can be seen to be blank on page 19.

  2 A presence check has been implemented in the macro code (page 23)

  3 A presence check has been used. This is suitable for the method used i.e. the BranchID is an unbound field. Please see sample solution document for more information (page 23)

  4 The source of the BranchID has been shown (page 20)

  5 A validation rule has been used including the correct range. This is fine, could also have been achieved as part of a save macro/code (page 21). NOTE A VALIDATION RULE IS NOT SUITABLE FOR EVIDENCING A PRESENCE CHECK

  6 An append query has been shown. There is no truncation and all fields are shown. However, the OwnerID is an AutoNumber field so trying to append the OwnerID is not suitable (page 22). The query is run in the macro code (page 23).

  7 An appropriate save message is displayed (page 23)

  8 The form has been cleared ready for the next entry (page 23)

  9 Suitable error messages have been used with the macro code and the validation text for the number of properties.

The macro includes a presence check on the number of properties. This was not part of the requirements but is sensible.

Whilst this is a very good attempt at automation it is not entirely logical. The OwnerID should not be appended as it is an AutoNumber field. The append and save message would be attempted regardless of errors. This should have been picked up on and rectified e.g. ELSE..IF as opposed to IF statements. The append query would also attempt to append all the existing records too as the 'Totals' tool has not been switched on in the design of the query.

Update Property Management Fee

Please select the branch address from the dropdown list. Enter the amount of the increase. Click on the update button.

Branch Address	84 Schlimgen Court ▾
BranchID	10
Town	Hartburgh
Manager Surname	Haycraft
Property Management Fee	£216.00
Enter the Potential Increase	1%
Increase Amount	£2.16
New Property Management Fee	£218.16
New Yearly Income	£2,617.92

Update Property Management Fee

Trait 1

Expectations
- Sensible title
- Instructions on how to use
- Relevant, consistent, easy to read labels (e.g. spaces)
- Field widths appropriate for data they will hold
- Layout good
- Combo box to branch address
- These fields present
  - Town
  - Manager surname
  - Property management fee
- Control to input percentage of potential increase (as a whole number)
- All fields disabled other than combo for branch address and percentage of potential increase
- These generated controls should be on the form (ignore content of fields)
  - New management fee
  - Yearly income

Evidence
- The form has a sensible title that is relevant to its purpose
- There are instructions on how to use the form
- The labels are relevant, consistent and easy to read (it is fine not to have a space in an ID field)
- The field widths are mostly appropriate – some could be better but good overall
- There is a combo box to select the branch address
- The layout is good
- All of the relevant fields and controls are present. The Increase Amount has been set to 0 decimal places (page 27)
- There is a weakness in that automatically generated controls/fields have not been disabled

Trait 2

Expectations

- Town, Manager surname, Property management fee links to branch address selected (should be current manager)
- New management fee calculated (including the increase)
- Yearly income calculated from the new management fee

Evidence

- There is no evidence to show that the Town, Manager surname and Property management fee link to the branch address selected. There are many ways this could have been achieved. See Script B and the solution document for examples.
- The new management fee has been calculated correctly
- The new yearly income has been calculated correctly

The screenshot shows an Access form design with property panel:

- Form Header: **Update Property Management Fee**
- Detail: "Please select the branch address from the dropdown list. Enter the amount of the increase. Click on the update button."
  - Branch Address — Unbound
  - BranchID — BranchID
  - Town — Town
  - Manager Surname — ManagerSurname
  - Property Management Fee — PropertyManagementFee
  - Enter the Potential Increase — Unbound

Property Sheet:
- Selection type: Text Box
- txtEnterIncrease
- Tabs: Format | Data | Event | Other | All

Name	txtEnterIncrease
Control Source	
Format	Percent
Decimal Places	0
Visible	Yes
Text Format	Plain Text
Datasheet Caption	
Show Date Picker	For dates
Width	3.698cm
Height	0.6cm
Top	7.099cm
Left	7.998cm
Back Style	Normal
Back Color	Background 1
Border Style	Solid
Border Width	Hairline
Border Color	Background 1, Darke
Special Effect	Flat
Scroll Bars	None
Font Name	Calibri (Detail)
Font Size	11
Text Align	General

The learner has considered the increase has to be a whole number

Trait 3

Expectations
- Town, ManagerSurname, PropertyManagementFee will update after the BranchAddress has been selected
- The new property management fee and new yearly income will be generated automatically after the increase amount has been input

Evidence
- There is no evidence to show that the Town, ManagerSurname, PropertyManagementFee will update after the BranchAddress has been selected. However, However, the learner is not being double penalised in terms of the calculations updating. The PropertyManagementFee field is present and bound. It is clear from the formulae that the controls on the form are being used (good naming) and so it is taken that the results of two required calculations would update after the increase had been input.
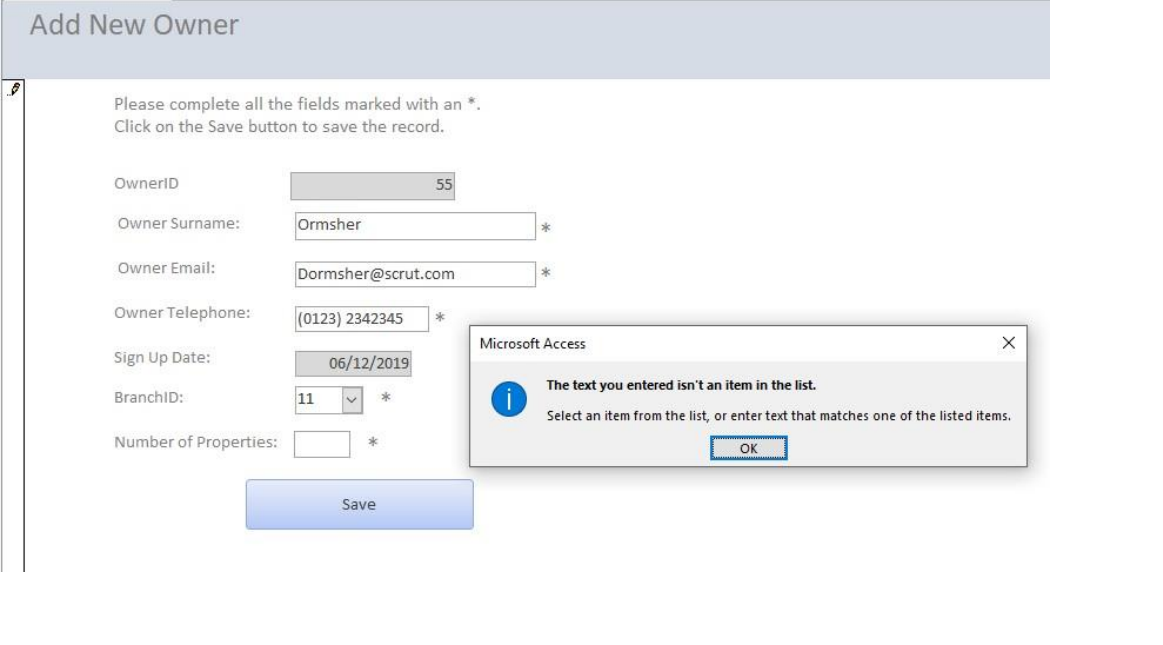
Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4	Max. mark
Activity 6: **Interface and Functionality**	0	1-4	5-7	8-10	11-14	14
	No rewardable material	Interface is unclear or provides limited information and there are inconsistencies and inaccuracies in formatting, so a user would experience difficulty in using the database and making maintenance by a third party difficult.	Interface is clear but there are some inconsistencies and inaccuracies in formatting allowing a user to use the database with minor difficulties and allowing maintenance by a third party with minor difficulties.	Interface is clear with minimal inconsistencies and inaccuracies in formatting allowing a user to use the database easily and allowing maintenance by a third party with minor difficulties.	Interface is clear and intuitive, consistently and accurately formatted allowing a user to easily use the database and allowing it to be easily maintained by a third party.	
		Interface may not have details of criteria/calculations required, or these may include inaccuracies.	Interface includes accurate details of some criteria/calculations required.	Interface includes accurate details of most criteria/calculations required.	Interface includes accurate details of all criteria/calculations required.	
		Interface uses minimal validation, checking procedures and automation resulting in a system with limited capacity to reduce errors or handle unexpected events.	Interface uses some accurate validation, checking procedures and automation, resulting in a system that minimises the most common errors and handles some unexpected events.	Interface uses accurate validation, checking procedures and automation, resulting in a system that minimises the majority of errors and handles most unexpected events.	Interface uses accurate validation, checking procedures and automation throughout, resulting in a robust system that minimises errors and handles unexpected events.	
		Interface may not be fully functional and/or may have major errors that prevent the interface from meeting the given criteria.	Interface is functional and meets some of the given criteria with minimal errors.	Interface is functional with minimal errors and meets the given criteria.	Interface is fully functional and fully meets the given criteria.	
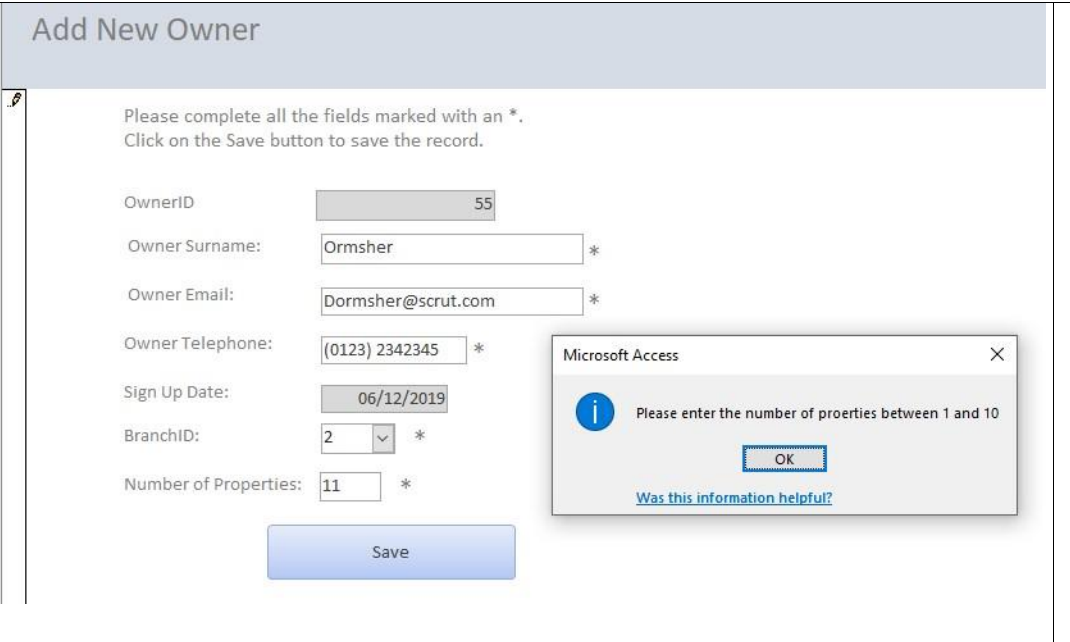
Trait	Band	Comments
1	4 middle	**Owner form** The form matches its purpose. It includes a sensible title, instructions that would be useful to the user and asterisks to show where data entry must occur. The field widths are mostly appropriate, the OwnerID field has been disabled, a combo box has been included to allow the user to select the BranchID and a save button (with no unnecessary buttons) is present. There is an attempt at a house style – does not rely on default wizard settings etc. The alignment of the fields could be slightly better. **Management fee form** The form matches its purpose. It includes a sensible title and instructions that would be useful. The labels are relevant, consistent and easy to read. There is a combo box to select the branch address and the layout is good. The learner has also ensured the increase amount is a whole number. There is a weakness in that the automatically generated controls/fields have not been disabled. Holistically the evidence sits in band 4. A very good attempt has been made. The weakness prevent top of the band.
2	3 bottom	**Owner form** The ID has been automatically generated. It was not entirely sensible to use this method (see earlier comments) but the ID would be generated. **Management fee form** The calculations are all present and correct. However, there is no evidence to show that the Town, Manager surname and Property management fee fields link to the branch ID selected. Holistically the evidence just moves into band 3. It is slightly better than **some** but not enough to say **most.**
3	3 middle	**Owner form** This is a very good attempt at automation though it is not entirely logical. The OwnerID should not be appended as it is an AutoNumber field. The append and save message would be attempted regardless of errors. The append query would also attempt to append all the existing records too as the 'Totals' tool has not been switched on in the design of the query. **Management fee form** There is no evidence to show that Town, Manager and Property management fee would be updated after the branch address has been selected. However, the learner is not being double penalised in terms of the calculations updating. The PropertyManagementFee field is present and bound. It is clear from the formulae that the controls on the form are being used (good naming) and so it is taken that the results of two required calculations would update after the increase had been input. Holistically the evidence makes it into the band 3. It is better than **some** but not enough for **accurate** and **most.**
4	3 top	Holistically functionality is top of band 3.
Band	**3**	**There is enough evidence to award marks at the top of band 3.**
Mark	**10**	
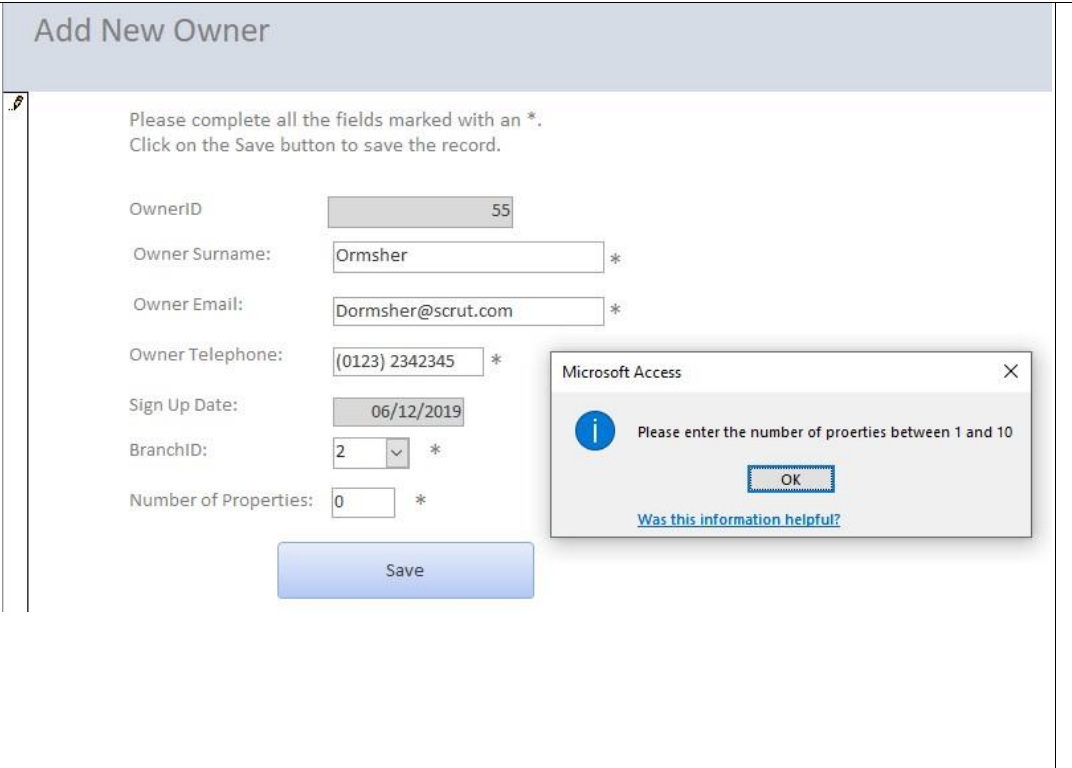
Activity 7 – Interface and Functionality Testing, Band 3, Marks 5
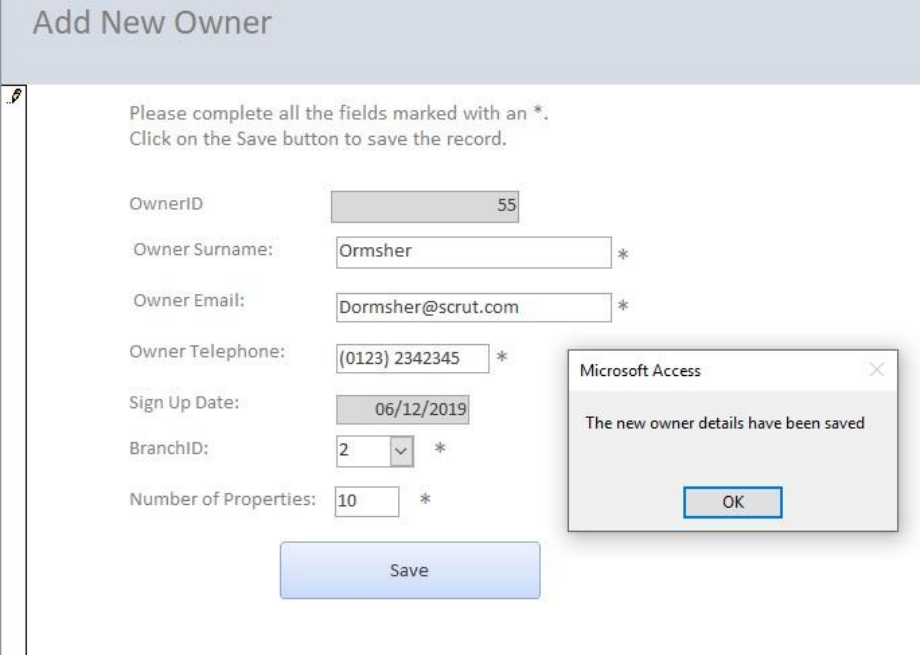
Note: final two columns have been merged in order to show the results more clearly. The actual testing template is set at A3 paper size using landscape orientation.

Test No	Type of test (N, R, X)	Test data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)
1	N	Open form	OwnerID = 55 All other text boxes null	**Add New Owner** Please complete all the fields marked with an *. Click on the Save button to save the record. OwnerID 55 Owner Surname: * Owner Email: * Owner Telephone: * Sign Up Date: 06/12/2019 BranchID: * Number of Properties: * Save

Type of test	The type of test is correct
Test data	The test data is correct
Expected Results	The expected results are relevant and mostly specific. However, the learner has not specified the sign up date results. Whilst this was not a requirement, if the learner has included extra features then they should be fully including them in their testing
Actual Results	Actual results are fine. Clear to see the form and its data.

2	R	OwnerSurname = Ormsher Email = DOrmsher@scrut.com Owner Telephone = (0123) 2342345 BranchID = 11	Error Message – The text entered isn't an item on list	

Type of test	The type of test is correct (could also have been X – see Lead Examiner report for the live examination January 2020)
Test data	The test data is specific and it is present for every field other than OwnerID and Sign Up Date
Expected Results	The expected results are relevant and specific
Actual Results	Actual results are fine. Clear to see the form and its data. The data on the form matches the test data and the error message can be clearly seen

3	X	OwnerSurname = Ormsher Email = DOrmsher@scrut.com Owner Telephone = (0123) 2342345 BranchID = 2 NumProperties = 11	Error Message – Please enter the number of properties between 1 and 10	

Type of test	The type of test is correct (could also have been R – see Lead Examiner report for the live examination January 2020)
Test data	The test data is specific and it is present for every field other than OwnerID and Sign Up Date
Expected Results	The expected results are relevant and specific
Actual Results	Actual results are fine. Clear to see the form and its data. The data on the form matches the test data and the error mesasge can be clearly seen

4	X	OwnerSurname = Ormsher BreanchID = 2 Email = DOrmsher@scrut.com Owner Telephone = (0123) 2342345 NumProperties = 0	Error Message – Please enter the number of properties between 1 and 10	

Add New Owner

Please complete all the fields marked with an *.
Click on the Save button to save the record.

OwnerID   55

Owner Surname: Ormsher   *

Owner Email: Dormsher@scrut.com   *

Owner Telephone: (0123) 2342345   *

Sign Up Date: 06/12/2019

BranchID: 2 ˅   *

Number of Properties: 0   *

Microsoft Access   ✕

ⓘ Please enter the number of proerties between 1 and 10

OK

Was this information helpful?

Save

Type of test	The type of test is correct (could also have been R – see Lead Examiner report for the live examination January 2020)
Test data	The test data is specific and it is present for every field other than OwnerID and Sign Up Date. It is nice to see values just outside the range being used
Expected Results	The expected results are relevant and specific
Actual Results	Actual results are fine. Clear to see the form and its data. The data on the form matches the test data and the error message can be clearly seen

5	N	OwnerSurname = Ormsher Email = DOrmsher@scrut.com Owner Telephone = (0123) 2342345 BranchID = 2 NumProperties = 10	A message will appear - New record will show in the tblOwner table	

Add New Owner

Please complete all the fields marked with an *.
Click on the Save button to save the record.

OwnerID: 55

Owner Surname: Ormsher *

Owner Email: Dormsher@scrut.com *

Owner Telephone: (0123) 2342345 *

Sign Up Date: 06/12/2019

BranchID: 2 *

Number of Properties: 10 *

Save

Microsoft Access

The new owner details have been saved

OK

OwnerID	OwnerEmail	OwnerTelephone	OwnerSurna	SignUpDate	BranchID	NumProper	Click to Ad
35	M.Lil@mlt.com	(0276) 4063692	Marshall	02/08/2014	10	2	
36	Fu.Ala@mlt.org	(0276) 3552224	Fuller	13/08/2014	5	4	
37	Bu.Lou@bzi.com	(0276) 1583452	Burke	03/09/2014	10	5	
38	RRalp@cru.org	(0276) 8414128	Reyes	26/10/2015	6	3	
39	HEri@mlt.org	(0276) 6748865	Harrison	23/12/2015	4	4	
40	Ca.Fred@greenmail.com	(0276) 3414756	Carter	23/12/2015	1	9	
41	P.Jessi@mlt.co.uk	(0276) 1247474	Peterson	21/03/2016	1	6	
42	RuChris@greenmail.com	(0276) 6949250	Ruiz	19/05/2016	8	10	
43	And.Nanc@mlt.com	(0276) 9685418	Andrews	30/05/2016	6	6	
44	KinErnes@mlt.co.uk	(0276) 6383838	King	02/03/2017	7	8	
45	ADor@greenmail.co.uk	(0276) 7758945	Allen	06/09/2017	3	5	
46	PJac@greenmail.co.uk	(0276) 5113556	Payne	16/02/2018	10	4	
47	G.Greg@mlt.org	(0276) 9632846	Garrett	28/02/2018	2	6	
48	F.Amand@bzi.org	(0276) 1219396	Ferguson	24/03/2018	7	2	
49	Ra.Ear@bzi.co.uk	(0276) 3743528	Ramos	31/03/2018	1	4	
50	TMild@bzi.co.uk	(0276) 3510616	Thomas	14/06/2018	4	3	
51	ChaKeit@mlt.co.uk	(0276) 9237571	Chavez	11/09/2018	9	6	
52	Ra.Irene@bzi.co.uk	(0276) 2360866	Ramirez	01/12/2018	2	9	
53	C.Bruc@mlt.org	(0276) 2339429	Carroll	05/01/2019	5	9	
54	Wa.Micha@bzi.com	(0276) 7672384	Ward	31/08/2019	1	6	
55	Dormsher@scrut.com	(0123) 2342345	Ormsher	06/12/2019	2	10	
					0	0	

Type of test	The type of test is correct
Test data	The test data is specific and it is present for every field other than OwnerID and Sign Up Date
Expected Results	The expected results are relevant though not entirely specific i.e what mesasge will appear? Where is the recognition that the form will be cleared?
Actual Results	Actual results are not fully shown i.e. the clearing of the form after the save has taken place. What has been shown does show that a valid record saves in the owner table

| 6 | N | BranchAddress = 101 Sloan Point Potential increase: null | BranchID = 7 Town = Oulbrook Manager Surname = Lune Property Management Fee = £169.00 | **Update Property Management Fee**

Please select the branch address from the dropdown list. Enter the amount of the increase. Click on the update button.

Branch Address — 101 Sloan Point
BranchID — 7
Town — Oulbrook
Manager Surname — Lune
Property Management Fee — £169.00
Enter the Potential Increase —
Increase Amount —
New Property Management Fee —
New Yearly Income —

Update Property Management Fee | |

Type of test	The type of test is correct
Test data	The test data is specific and it is present for every relevant field.
Expected Results	The expected results are relevant and specific – they match the branch address
Actual Results	Actual results are fine. Test data shown and results are clear

7	N	Potential Increase = 2% BranchAddress = 101 Sloan Point Automatic: BranchID = 7 Town = Oulbrook Manager Surname = Lune Property Management Fee = £169.00	New Property Management Fee = £172.38 New Yearly Income £2068.56	**Update Property Management Fee** ▶ Please select the branch address from the dropdown list. Enter the amount of the increase. Click on the update button. Branch Address — 101 Sloan Point BranchID — 7 Town — Oulbrook Manager Surname — Lune Property Management Fee — £169.00 Enter the Potential Increase — 2% Increase Amount — £3.38 New Property Management Fee — £172.38 New Yearly Income — £2,068.56 Update Property Management Fee	Increase Amount still shows on the form this needs to be set to visible = No in the text box properties and the text boxes adjusted

Type of test	The type of test is correct
Test data	The test data is relevant and specific
Expected Results	The expected results are relevant and specific – they match the inputs and the calcuations that should take place
Actual Results	Actual results are fine. Test data shown and results are clear. it is good to see the learner recognise that the Increase Amount field is not required on the form and how they would amend this. It would have been nice to see the amendment and the form after the amendment had taken place

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max Marks
Activity 7: Interface Testing	0	1-2	3-4	5-6	6
	No rewardable material	Testing is too narrow to confirm a working interface, including limited normal, erroneous and/or extreme data.

Expected results are generic or mostly inaccurate. Test data may not be present

Test results prove that that the database operates under some normal circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a limited understanding of any errors that were found. | Testing is adequate to confirm a working interface, including some normal, erroneous and/or extreme data.

Expected results are mostly accurate and based on identified test data but may lack detail.

Test results prove that that the database operates under some normal circumstances and that the interface can cope with some erroneous and extreme data relevant to the scenario. Test result comments are present when errors have been found. These comments show partial understanding of any errors that were found. | Testing is thorough, including a range of normal, erroneous and extreme data.

Expected results are specific and accurate based on identified test data.

Test results prove that that the database operates under all circumstances relevant to the scenario. Test result comments are present when errors have been found. These comments show a clear understanding of any errors and how they were fixed. | |

Trait	Band	Comments
1	3	Testing is better than adequate. However, it is not thorough enough to award full marks. Generally, the test data is good, though there is the repeated omission of OwnerID and Sign Up Date. Expected results are mostly specific. Test results do prove the database works though not quite enough to say under all circumstances relevant to the scenario. It was nice to see the learner pick up on the inclusion of an unnecessary field and to give detailed steps as to how they would amend. It would have been nice to see the amendment.
2		
3		
Band	3	**Overall, there is enough evidence to place the learner at the bottom of band 3.**
Mark	5	

Activity 8 – Interface and Functionality Evaluation, Band 3, Marks 5

The forms have all been produced with the user in mind and are all user friendly.

The Add new owner form opens with only the OwnerID showing all the other text boxes are empty ready for data entry. This will prevent any existing fields being over written.

The BranchID is a combo box which is limited to list therefore no entries which are not on the list can be entered. The Number of properties text box has a validation rule which is between 1 and 10 with an error message if an invalid number is entered. The message is helpful to the user and is also polite, and not judgmental. Until the user enters a number between 1 and 10 they will not be allowed to progress with the data entry. This will help to prevent data entry errors. The signupdate is automatically generated to prevent an incorrect date being entered.

When all the data requested has been entered the user simply needs to click on the save button and the record will save to the tblOwner table and a message informing the user of the save will appear. Keeping the user informed as to the progress of the system. If however any of the required fields have been left null the system will show the user an error message asking for the field to be completed.

On the update property management fee for the user simply has to select the address of the branch and the BranchID, Town, Manager Surname and the Property Management Fee all appear automatically. After entering the Potential increase the New Management Fee and the New yearly income are generated automatically. This reduces data input error. It also means the user does not have to perform any calculations themselves. The generated fields are all locked so the user cannot input data into them.

This is quite a good attempt at the evaluation. However, it would have been nice to see specific consideration of usability through the 'eyes of the user'. For example, in the second paragraph …. *This will prevent any existing fields being overwritten* …. indeed it will, but why is that important to the user? Could also have mentioned the time saved in having the form ready for data entry. What would the user have to do if the form was not ready?

It is also strange that the learner did not pick up on the fact that their method of saving is not entirely appropriate (see comments in activity 6). The solution does not have to be perfect but the evaluation should be honest. It is far better to see weaknesses discussed …….'while the error messages would clearly let the user know what was wrong and how to amend the problem, I think they would be very confused as to why the system still went ahead trying to save the record and displaying the save message. The user would not know whether the record had saved or not.'

Assessment focus	Band 0	Band 1	Band 2	Band 3	Max. mark
Activity 8: Interface Evaluation	0	1-2	3-4	5-6	6
	No rewardable material	Superficial understanding of relevant technical concepts shown with some inaccuracies. Limited or unsupported justification of the quality, performance and usability of the interface. Limited links between aspects of the solution and the requirements of the scenario. Technical vocabulary is used but it is not used appropriately to support arguments.	Some accurate and relevant understanding of technical concepts shown. Some valid justification, which may lack support of the quality, performance and usability of the interface. Some logical links between aspects of the solution and the requirements of the scenario but may lack clarity. Mostly accurate technical vocabulary is used to support arguments.	Accurate and detailed understanding of relevant technical concepts shown throughout. A valid and fully supported justification of the quality, performance and usability of the interface. Makes logical coherent links between aspects of the solution and the requirements of the scenario throughout. Fluent and accurate technical vocabulary is used to support arguments.	

Trait	Band	Comments
1	3	Overall, though there are some weaknesses, it is clear to see the learner understands technical concepts. It is also clear to see the links between the solution and the scenario/activity requirements. What could be better is the impact on the user – usability.
2		
3		
Band	3	
Mark	5	Holistically, there is **just** enough evidence to place the learner at the bottom of band 3.