Pearson Edexcel

Mark Scheme

Summer 2022

Pearson Edexcel International Advanced Subsidiary
In Information Technology (WIT14/ 01)
Unit 4

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

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Question number	Answer		Additional Guidance	Mark
1(a)i	**Presence check for email**			
	A1	Presence check on email field Validation rule of 'Is Not Null' **OR** Required set to **yes**		1
	A2	Suitable error message e.g. "You must input the email address"	Must also have suitable validation rule to achieve this mark	1
			Total	**2**
1(a)ii		**List check for**		
	A3	Combo box/list box applied to AverageRatingReview	Must see the field name	1
	A4	Correct range 1;2;3;4;5 And Combo box has limit to list set to Yes List box accept as done by default		1
			Total	**2**

Question number	Answer		Additional Guidance	Mark
1(b)	**Add new party manager form**			
	B1	PartyManagerID **OR** DateAdded **OR** AverageReviewRating are disabled		1
	B2	**Three** from: • Form labels are appropriate (not database field names) • Form has meaningful title • Entry boxes on form are resized appropriately to reflect the expected data • Instructions on how to use • Asterisk on any field except PartyManagerID and DateAdded and AverageReviewRating		1
	B3	Button present and suitably labelled e.g. Save, save icon		1
	B4	PartyManagerID generated e.g. DMAX("PartyManagerID","tblPartyManager")+1		1
	B5	AverageReviewRating is automatically set to 5		1
	B6	DateAdded is automatically set to today's date		1
	B7	LastName and Email would save in party manager table		1

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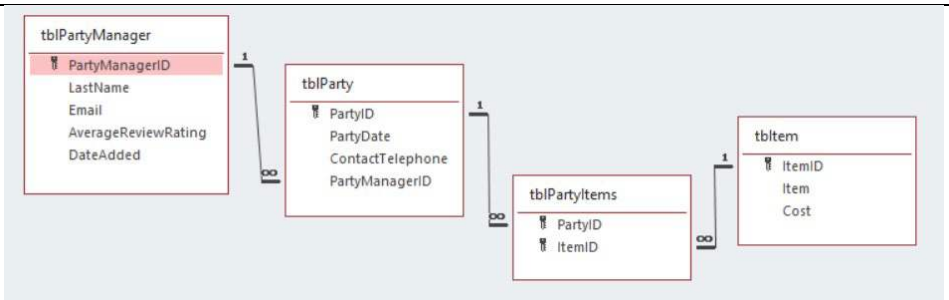
	B8	Save message would display		1
	B9	Save message would display only if **full** record has saved e.g. unbound fields – query used		1
			Total	**9**

Question number	**Answer**		**Additional Guidance**	**Mark**
1(c)	**Table Structure**			
				
	C1	Use of appropriate table and field names and naming conventions		1
	C2	Item table is present with suitable fields		1
	C3	Party table is present with suitable fields		1
	C4	Party item table is present with suitable fields		1
	C5	1:M relationship between Party manager and Party		1
	C6	1:M relationship between Item and Party Item		1
	C7	1:M relationship between Party and Party Item		1
	C8	Appropriate primary key used for Item table		1
	C9	Appropriate primary key used for Party table		1
	C10	Appropriate composite key used for Party Items		1
	C11	Date/Time is used for PartyDate **And** Currency used for Cost **And** Text used for ContactTelephone		1
			Total	**11**

Question number	**Answer**		**Additional Guidance**	**Mark**
1(d)	**Import**			
	D1	Item table – 18 records		1
	D2	Party table – 19 records		1
	D3	Party items table – 87 records		1
			Total	**3**

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Question number	Answer	Mark
1(e)	**Indicative content** *Factors* • Data types • Data duplication • Primary and foreign keys • Referential integrity *Consideration and significance* Data types • Currency used for Cost as it is a monetary field and could possibly require calculations • Date/Time used for PartyDate as the data shows dates and because calculations could be needed • Made sure the data types for primary/foreign keys matched • Contact telephone number text as has leading zero and would require no calculations Data duplication • For each party o PartyID, PartyDate, ContactTelephone and PartyManager duplicated this is because a party can have a number of party items. o These were removed and put into tblParty • Item o The item and cost were also duplicated every time an ItemID was used o tblItem was set up to stop this happening Links/keys • PartyID primary key in tblParty • PartyID, ItemID a composite key tblPartyItems. This is because a party may have more than one item and an item can be needed at more than one party. Neither PartyID nor ItemID would be unique on their own • Foreign key PartyManagerID placed in tblParty because a party needs a party manager and a party manager can manage more than one party. Referential integrity • Enforced to make sure a foreign key value cannot be used if it does not have a matching primary key. For example ItemID 20 could not be used in tblPartyItems as there is no such item in tblItem	9

Level	Mark	Descriptor
	0	No Awardable content
Level 1	1-3	• Applies understanding with limited coherence, showing limited understanding of the given issue. • Assessment of solution is superficial or unbalanced, and judgements lack support from evidence.
Level 2	4-6	• Applies understanding to make some coherent connections, showing some understanding of the given issue.

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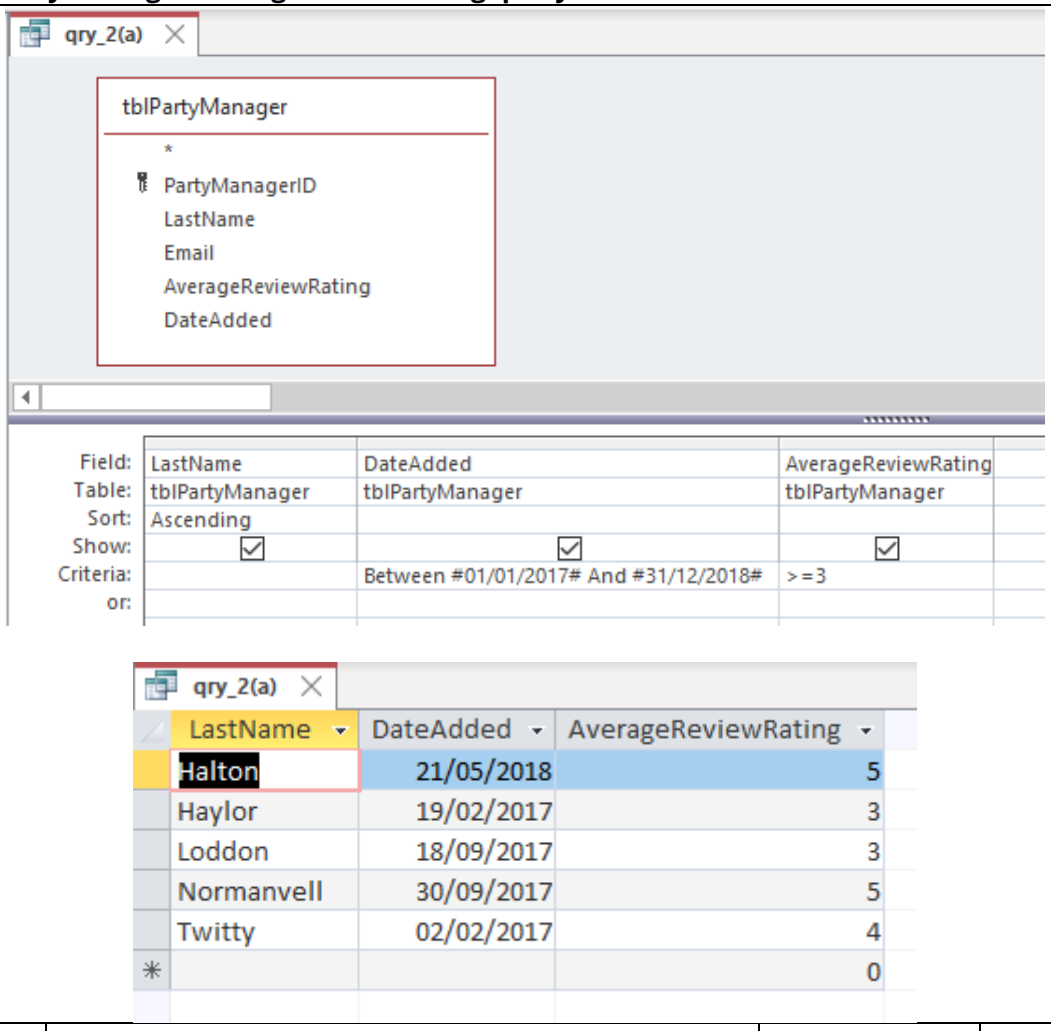
		• Assessment of solution is partially developed, but this may be unbalanced, using evidence to support some judgements.	
Level 3	7-9	• Applies understanding coherently, showing a thorough understanding of the given issue. • Assessment of solution is balanced and developed, using evidence to support judgements throughout.	
		Total for question	**36**

Question number	Answer		Additional Guidance	Mark
2(a)	**Party manager average review rating query**  			
	A1	AverageReviewRating at least 3 e.g. • >=3 • >2		1
	A2	DateAdded only dates in 2017 or 2018 e.g. • Between #01/01/2017# AND #31/12/2018# • (Like) *2017 OR (Like) *2018 • >=#01/01/2017# AND <=#31/12/2018# • >#31/12/2016# AND <#01/01/2019#		1
	A3	Last name sorted into ascending order		1

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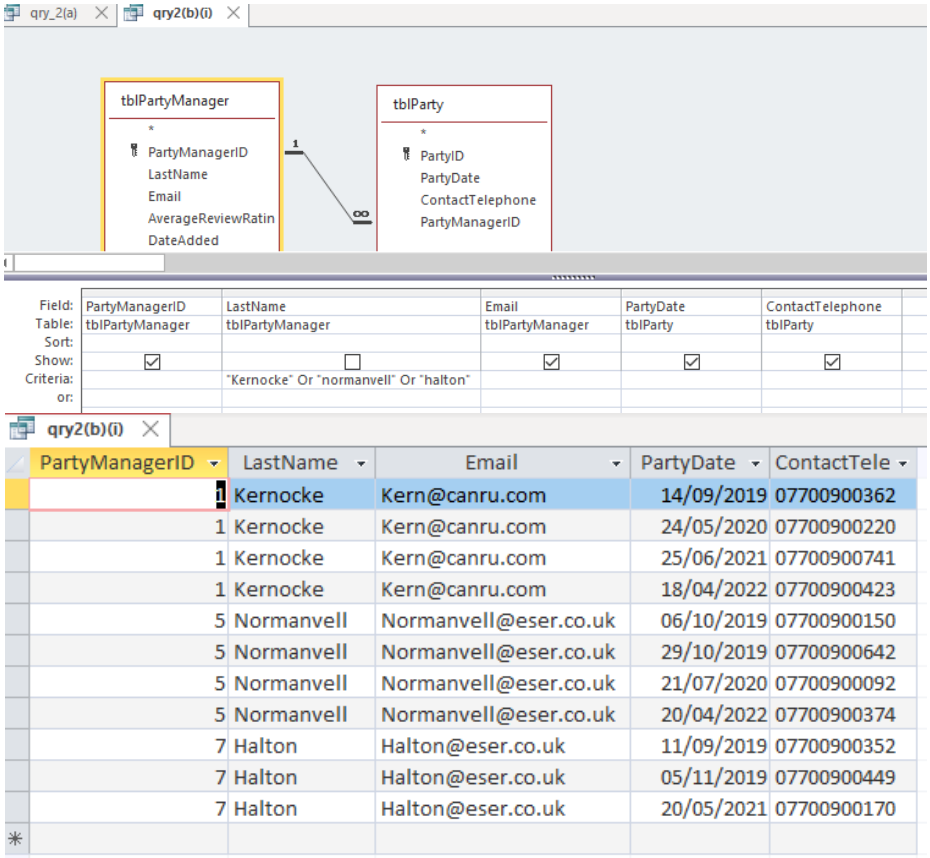
	A4	Columns not truncated		1
	A5	Correct results shown	May also include records added as part of their testing.	1
			Total	**5**

Question number	**Answer**		**Additional Guidance**	**Mark**
2(b)(i)	**Party manager query**			
				
	B1	Correct related tables added (Party, PartyManager) or equivalent. No extra tables.		1
	B2	Criteria correct for PartyManagerID or LastName • 1, 5, 7 • Kernocke, Normanvell, Halton		1
			Total	**2**

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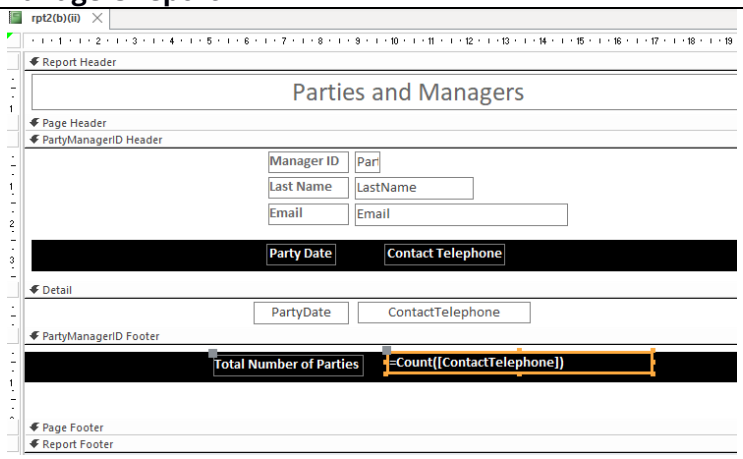
Question number	Answer	Additional Guidance	Mark
2(b)(ii)	**Parties and managers report**		



Parties and Managers

Manager ID 1
Last Name Kernocke
Email Kern@canru.com

Party Date	Contact Telephone
18/04/2022	07700900423
25/06/2021	07700900741
24/05/2020	07700900220
14/09/2019	07700900362
Total Number of Parties	**4**

Manager ID 5
Last Name Normanvell
Email Normanvell@eser.co.uk

Party Date	Contact Telephone
20/04/2022	07700900374
21/07/2020	07700900092
29/10/2019	07700900642
06/10/2019	07700900150
Total Number of Parties	**4**

Manager ID 7
Last Name Halton
Email Halton@eser.co.uk

Party Date	Contact Telephone
20/05/2021	07700900170
05/11/2019	07700900449
11/09/2019	07700900352

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	B3	Title is in the page or report header – **mark from Design view only** (do not accept title in detail section)		1
	B4	Title is as given	Ignore minor errors in spelling and case	1
	B5	Grouped by PartyManagerID– **mark from Design view only**		1
	B6	Shading rectangle used around Party Date and Contact Telephone **OR** Total number of parties and the number		1
	B7	Centre alignment used on at least one of the fields **and** at least one of the values shown		1
	B8	Total number of parties uses correct formula e.g. =Count(ContactTelephone) =Count(PartyDate) =Count(*)		1
	B9	Total number of parties in PartyManagerID footer		1
	B10	Report and formatting are as given in Figure 1		1
			Total	**8**
			Total for question	**15**

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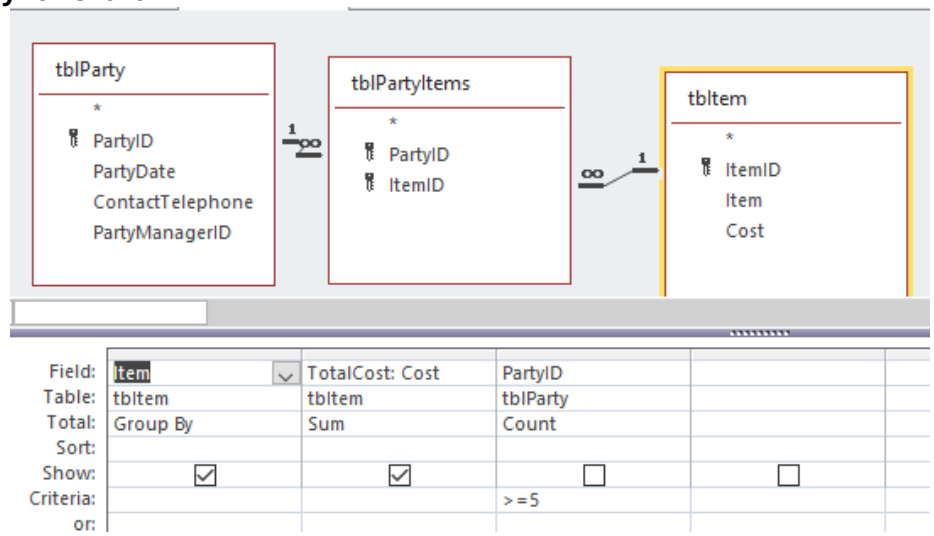
Question number	Answer		Additional Guidance	Mark
3a	**Query for Chart**  			
	A1	Appropriate fields included: • Item • Field that could be used as a count • Field that could be used for the cost		1
	A2	Number of parties calculated correctly e.g. • Count(PartyID)	Any field is appropriate for the count	1
	A3	Total cost calculated correctly e.g. • Sum(Cost)		1
	A4	Criteria correct for number of parties • >=5 • >4		1
	A5	At least one generated field has a suitable field name		1
			Total	**5**

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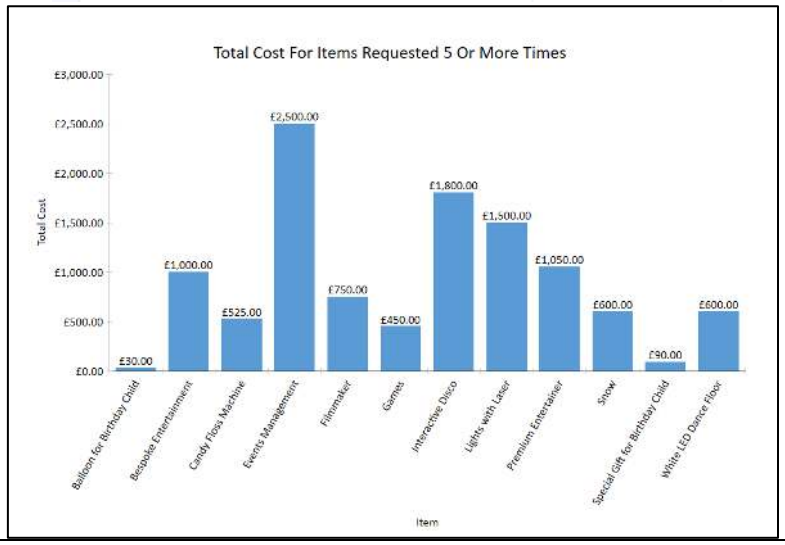
Question number	Answer	Additional Guidance	Mark
3b	**Chart**		

Chart data

rpt_2(b)(ii) | qry_3(a)

Item	TotalCost
Balloon for Birthday Child	£30
Bespoke Entertainment	£1,000
Candy Floss Machine	£525
Events Management	£2,500
Filmmaker	£750
Games	£450
Interactive Disco	£1,800
Lights with Laser	£1,500
Premium Entertainer	£1,050
Snow	£600
Special Gift for Birthday Child	£90
White LED Dance Floor	£600



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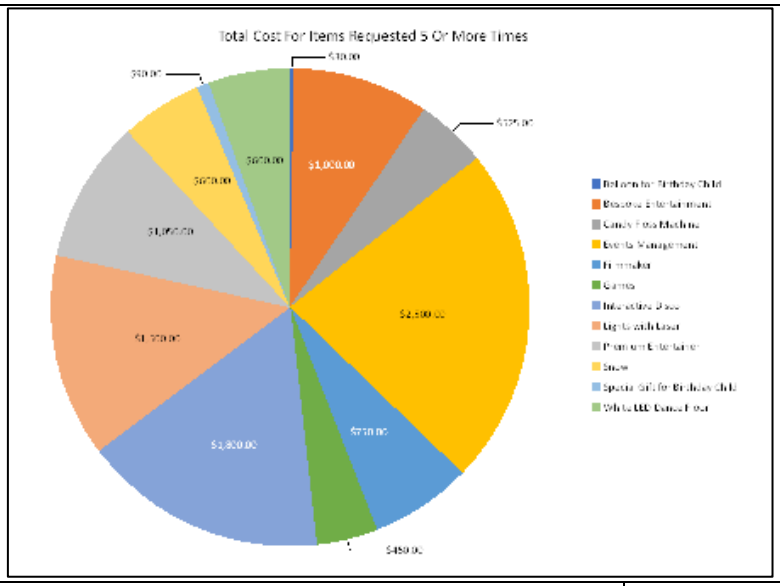

	B1	Bar/column/pie chart created		1
	B2	Meaningful chart title used		1
	B3	Bar/column axis shows item names Pie legend/segments shows item names		1
	B4	Bar/column • At least one axis has suitable label Pie • Suitable legend		1
	B5	Bar/column • Axis contains suitable scale **OR** • Data values are shown Pie • Data values are shown		1
	B6	Total cost is formatted as Currency (with or without decimal places)		1
	B7	Chart is fit for purpose B1 to B6 awarded Bar/column • No legend • Appropriate sizing of elements on page (e.g. title larger than axis labels, data labels) Pie • Appropriate sizing of elements on page (e.g. title larger than legend labels, data labels)		1
			Total	**7**
			Total for question 3	**12**

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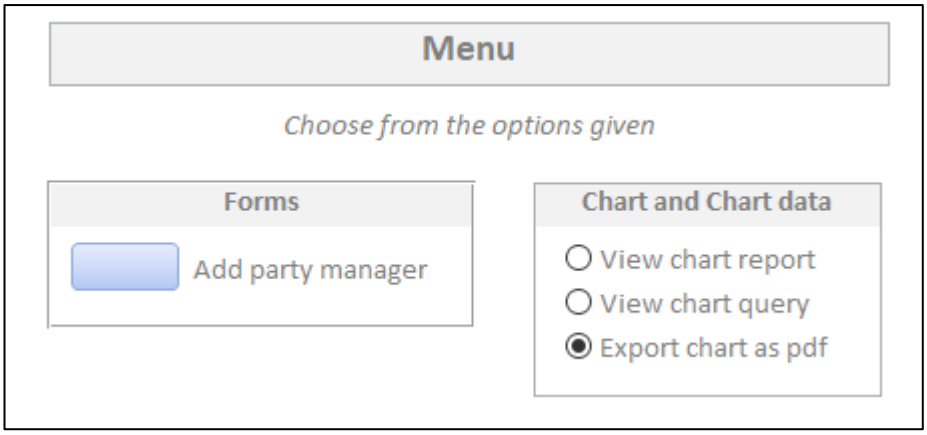
Question number	Answer		Additional Guidance	Mark
4	**Dashboard**  			
	A1	Button and at least one radio button added		1
	A2	All options are as given	Ignore minor spelling errors and case	1
	A3	Data input form from 1(b) would open when **Add party manager** is selected		1
	A4	Any one from: • View chart report - report from 3(b) would open in Print Preview when view chart option is selected • View chart query - query from 3(a) would run when view chart query is selected		1
	A5	Shading used where shown in Figure 2		1
	A6	Borders used where shown in Figure 2		1
	A7	Menu content is as given	Ignore minor spelling errors and case	1
	A8	PDF is created and exported as part of the macro/code		1
			Total	**8**
			Total for question 4	**8**

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Question number	Answer	Mark

5	**Indicative content**
	Note: Analysis and recommendations must be based on the content of Figure 3.
	
	Analysis
	• Fields
	  ○ The database does not currently have
	  ▪ Customer ID
	  ▪ Last name
	  ▪ First name
	  ▪ Email address
	  ▪ Start time
	  ▪ Notes
	  ▪ Total cost
	  ▪ 10% deposit
	  ▪ Balance to pay
	• Party manager table
	  ○ Already holds the name of the party manager
	• Item table
	  ○ Already holds the Item ID, Item and Cost
	• Party table
	  ○ Already holds the Party date and Contact telephone and is already related to the Party Manager table
	• Party Items table
	  ○ Already holds the Item ID and is already related to the Party table too
	• Customers
	  ○ There is no customer table. There can be many customers and a customer could potentially have more than one party
	
	Recommendations
	• Customer table
	  ○ Create a new table with CustomerID as its primary key. Move the Contact telephone number from the Party table into here and put the fields Last name, First name and Email address.
	• Party table
	  ○ Remove the Contact telephone number and replace with CustomerID as a foreign key and enforce referential integrity
	  ○ Add the Notes and Start time fields
	  ○ Do not add Total cost, 10% deposit or Balance to pay as these fields can all be generated from the SUM of the item costs
		9

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Level	Mark	Descriptor	
	0	No Awardable content	
Level 1	1-3	• Analysis is flawed or superficial, containing simple statements that show limited understanding of the subject matter. • Solution may contain some aspects that are appropriate, but is generally ineffective.	
Level 2	4-6	• Analysis is sound, containing minor inaccuracies or omissions, showing some understanding of the given issue. • Solution is workable but may have minor issues.	
Level 3	7-9	• Analysis is sound and developed, containing ideas that are linked together in a fluent and logical way, showing a thorough understanding of the given issue. • Solution is appropriate and workable.	
		Total for question 5	**9**

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