

Candidate 2

Task	Expected response	Additional guidance	Marks available	Marks Awarded	Commentary on allocation of marks	
1	Database design and development					
1a	<p>1 mark for completing each missing item</p> <p>videoID – primary key vloggerID – foreign key videoName – required duration - number rating – ≥ 1 and ≤ 5</p>	<p>Rating could also be:</p> <ul style="list-style-type: none"> • 1,2,3,4,5 • $>0, <6$ • 1-5, 1 to 5 	5	4	<p>The candidate was awarded 1 mark each for correctly identifying the:</p> <ul style="list-style-type: none"> • primary key • foreign key • required field • range applied to the rating field <p>The candidate could have gained a further mark for identifying that the duration would be stored as seconds and would therefore be a number (not a time).</p>	Design (5)
1b	<p>1 mark each for printed evidence of:</p> <ul style="list-style-type: none"> ◆ Length Check = 6 on username ◆ Restricted Choice including: Programming, Gaming, Baking, Crafts, Makeup, Clothes on expertise 	<p>Field size 6 is not acceptable as this could allow ≤ 6 characters.</p> <p>Check syntax of SQL if unsure.</p>	2	1	<p>The candidate was awarded 1 mark for correctly implementing the restricted choice using the CHECK statement. Note that marks are still awarded for using an Advanced Higher statement at National 5 level.</p> <p>The candidate could have been awarded a mark if they had coded the length of the username to be exactly 6 characters and not ≤ 6.</p>	Implementation (8)

1ci	<p>1 mark each for:</p> <ul style="list-style-type: none"> ◆ SELECT username, videoname ◆ FROM Vlogger, Video <p>1 mark each for WHERE conditions:</p> <ul style="list-style-type: none"> ◆ rating>3 ◆ Video.vloggerID = Vlogger.vloggerID ; 	<p>Accept all other correct uses of JOIN statement. For example INNER JOIN. Note that JOIN statement may include second table name.</p> <p>Conditions could use either AND or comma depending on database environment.</p> <p>Check syntax of SQL if unsure.</p> <p>Note that if the candidate has generated SQL using an application no marks should be awarded.</p>	4	1	<p>The candidate could have gained a mark if they had not included the 'rating' field in the SELECT statement as this was not part of the stated output.</p> <p>The candidate was awarded 1 mark for correctly including both tables in the FROM statement.</p> <p>The candidate could have gained an additional mark for including a join between the primary and foreign key field that implement the relationship between the two tables.</p> <p>The candidate could have been awarded a further mark if they had entered the condition as >3 and not >=3.</p>	
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1cii	<p>1 mark for each for:</p> <ul style="list-style-type: none"> ◆ DELETE FROM Video ◆ WHERE videoID=3 	<p>Do not award a mark if the construct of the DELETE contains additional keywords either above or within the DELETE. If unsure test the candidates SQL.</p> <p>Alternative correct answers:</p> <p>DELETE * FROM Video WHERE videoID=3</p> <p>DELETE Video.* FROM Video WHERE videoID=3</p> <p>DELETE videoID, vloggerID, videoName, duration, dateCreated, content, rating FROM Video WHERE videoID=3</p> <p>DELETE FROM Video WHERE videoID=3 AND videoName= "slime"</p> <p>Note that if the candidate has generated SQL using an application no marks should be awarded.</p>	2	2	<p>The candidate was awarded 2 marks for correctly implementing the required DELETE command using SQL.</p>	
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2 Software design and development						
2a	<p>1 mark for each:</p> <p>Input : Enter the number of usernames</p> <p>Process: Generate random number or Generate/select (random) endings</p> <p>Output: Display the list of generated usernames</p>	Must be plural unless very clearly explained that input was only one student.	3	2	<p>The candidate was awarded 2 marks for correctly identifying one input and one process.</p> <p>The candidate could have gained a further mark if they had identified that more than one username would be displayed by the program.</p>	Analysis (3)
b	<p>One mark each for:</p> <ul style="list-style-type: none"> ◆ Array of strings used to store endings ◆ Assign endings 		2	2	The candidate was awarded 2 marks for correctly assigning the five required endings to a list of five elements.	
	<p>Variables or arrays used to store:</p> <ul style="list-style-type: none"> ◆ partial student name ◆ username 	Variable/array names may be anywhere within code	1	0	The candidate could have been awarded an additional mark if they had stored the username, before displaying it, as per the design they were required to implement.	
	Input number of students		1	1	The candidate was awarded 1 mark for asking the user to enter the number of students and storing the resulting input.	

	One mark each for: ◆ single fixed loop which matches design ◆ correct number of iterations for input		2	2	The candidate was awarded 2 marks for implementing a single fixed loop with the correct number of iterations.
Input Validation	input validation carried out before username is generated		1	1	The candidate was awarded all 4 marks for correctly implementing input validation that insisted the user enter only a three character string, and supplied a suitable message to a user who didn't.
	loop condition correct	Condition loop may be either pre or post condition: • Length(Partial Name) = 3 • Length(Partial Name) NOT(3)	1	1	
	input inside loop	If no validation loop at all a single mark may be awarded for the input.	1	1	
	error message inside loop		1	1	
	1 of 5 random numbers generated/stored		1	1	The candidate was awarded 1 mark for generating a random integer between 1 and 5.
b	Use random number to select correct ending		1	1	The candidate was awarded 1 mark for using the generated random number to select one of the five endings.
	Step 6 refinement matches design	Award mark if candidate uses else if (with criteria on each line). Do not award a mark if else if is completed with else.	1	0	The candidate could have been awarded an additional mark if they had implemented the 'if' statements required by the supplied design.

	Concatenation student name and ending		1	1	The candidate was awarded 1 mark for successfully concatenating the input and randomly generated ending.	
	Display username		1	1	The candidate was awarded 1 mark for displaying the username.	
	<p>One mark for each correct example of test data:</p> <ul style="list-style-type: none"> ◆ normal ◆ exceptional 	<p>Accept multiple answer in each test table box.</p> <p>Do not accept:</p> <ul style="list-style-type: none"> • 123, 567 etc as exceptional data as this would be accepted as a 3 character string. • a description of normal and exception test data (for example: normal = 3 characters) • screenshots of a test run, as a test table should include potential tests to be carry out 	2	2	The candidate was awarded 2 marks for correctly identifying suitable examples of normal and extreme test data.	Testing (3)

d	Printed evidence of the output of a test run showing 6 usernames, each starting with chr.	If no input validation in code then accept usernames which include the full student names. (for example Chrising)	1	1	The candidate was awarded 1 mark for providing evidence of a successful test run using the supplied six names.	
e	<p>Evaluation of efficiency of constructs within the candidates own code may include:</p> <ul style="list-style-type: none"> ◆ inefficiency <ul style="list-style-type: none"> ○ Multiple if statements used instead of a single if ○ If statement could have used array index instead of multiple if statements ◆ efficiency <ul style="list-style-type: none"> ○ Use of an array instead of separate variables for endings ○ Use of loops to reduce code 	Other acceptable answers may be marked correct if evident in candidates code.	1	1	The candidate was awarded 1 mark for stating that their code uses a loop to save repeating code.	Evaluation (4)
	<p>Evaluation of robustness of candidates own code may include:</p> <ul style="list-style-type: none"> ◆ Discussion of validation or absence of validation 		1	1	The candidate was awarded 1 mark for discussing the lack of robustness of their program where inputting text would cause their program to crash.	
	Evaluation of readability:	Evaluation must contain an element of evaluation rather than simple statements of	1	1	The candidate was awarded 1 mark for correctly identifying one aspect of readability and explaining why that aspect made their code more readable.	

	<ul style="list-style-type: none"> ◆ Discussion of candidates own code. 	<p>terms. For example “I have used white space to highlight structures in my program” not “I have used white space”.</p>				
	<p>Evaluation of Fitness for purpose of the solution may include:</p> <ul style="list-style-type: none"> ◆ Username not unique ◆ Limited number of endings 		1	1		The candidate was awarded 1 mark for correctly identifying that the supplied solution is not fit for purpose as it can generate duplicate usernames.
3	Web design and development					
3a	<p>Functional requirements could include two of the following for 1 mark each:</p> <ul style="list-style-type: none"> ◆ must be able to display the title text “Too Good to Throw Away!” ◆ must be able to display the clothes photograph ◆ must be able to display coloured sections “what we need”/“what we have in stock” ◆ must be able to display numbered list of the items wanted by the charity shop ◆ must be able to play the video showing current stock 	<p>Answers must refer to what the code has to do.</p> <p>Answers must relate to scenario.</p>	2	0		The candidate could have gained 2 marks if they had referred to the required content detailed in the analysis. As such, their answers are too generic to have identified functional requirements.
						Analysis(2)

b	<p>Using the printout of the HTML file, confirm the following for 1 mark each:</p> <ul style="list-style-type: none"> ◆ content added within structural head, body elements and all five items of text/graphic/video within appropriate elements ◆ video added with size 300x240 ◆ CSS styles included anywhere within HTML document 	<p>Text and graphic content:</p> <ul style="list-style-type: none"> ◆ Heading – “Too Good to Throw Away!” ◆ Graphic (clothes.png) ◆ What we need subheading ◆ Numbered list using correct element ◆ What we have in stock subheading <p>Video size may be implemented using CSS rules.</p>	3	1	<p>The candidate could have been awarded a mark if they had correctly implemented the structure of the page by including the <head> </head> elements in the required position. The <body> element and content was coded correctly.</p> <p>The candidate was awarded 1 mark for having correctly included video controls and a link to the required video.</p> <p>The candidate could have been awarded a further mark for implementing CSS rules within the HTML file as required by the task.</p>	
	<p>Using the CSS and HTML, confirm the following for 1 mark each: Note that styles may be implemented using elements, ids or classes.</p> <ul style="list-style-type: none"> ◆ All three Headings styled using a single rule ◆ Numbered List styled ◆ Graphic sized correctly 300x200 (CSS or HTML) ◆ Three colours: <ul style="list-style-type: none"> ○ page background green ○ sub-section 1 light blue ○ sub-section 2 white 	<p>Headings {font-size:18px; text-align:center; font-family:calibri; color:darkblue} Numbered List {font-size:12px; font-family:calibri; color:white} Accept either pt or px for font sizes.</p>	4	3	<p>The candidate could have been awarded a mark if they had used only <h1> elements for the page headings as per the design.</p> <p>The candidate was awarded 1 mark for correctly styling the ordered list.</p> <p>The candidate was awarded 1 mark for implementing the graphic, with sizes, correctly.</p> <p>The candidate was awarded 1 mark for creating and correctly applying colours to the body and two subsequent page areas.</p>	Implementation (7)
3c	<p>The test table may include any two of the following, for 1 mark each, from:</p> <ul style="list-style-type: none"> ◆ Media (text, graphic or video) is displayed correctly ◆ Content sized correctly 	<p>These are tests that <u>could</u> be carried out on this web page.</p>	2	2	<p>The candidate was awarded 2 marks for correctly identifying two suitable tests which could be carried out on their own implementation of the web page.</p>	Testing (2)

	<ul style="list-style-type: none"> ◆ Colours displayed correctly ◆ Video plays correctly ◆ Content position matches design ◆ Content styles match design 					
d	<p>Evaluation of fitness for purpose of candidate's own solution and its match to one of:</p> <ul style="list-style-type: none"> ◆ the bullet list of requirements in the introduction of task 3 ◆ their functional requirement answers to 3a ◆ the wireframe given in task 3b <p>or</p> <p>Evaluation of fitness for purpose in relation to the problem and solution. For example:</p> <ul style="list-style-type: none"> ◆ The page has no contact details ◆ The page does not include the location of shop to donate clothes 		1	0	<p>The candidate could have been awarded a mark if their answer had referenced the requirements or design rather than discussing their implemented code.</p>	Evaluation

Total marks awarded – 36/50