

## **General Certificate of Secondary Education** 2019

## **Digital Technology**

Unit 3:

Digital Authoring Practice

## MARK SCHEME

1 (a) Designing a multimedia solution using appropriate tools	Marks
The candidate has successfully designed a high quality multimedia solution. User requirements and target audience needs have been clearly identified. Detailed planning for third party implementation is evident through: navigational structure diagrams, storyboarding (showing all elements including pages, video/animation and interactive/accessibility features). Details of all images/sound sources and scripted elements have been included. Prototyping and the use of feedback in refining the solution is evident.	[5]–[6]
The candidate has successfully designed a multimedia solution. User requirements have been identified. Planning for third party implementation is evident through: navigational structure diagrams, storyboarding (showing the majority of all elements including pages, video/animation and interactive/accessibility features). Prototyping has been attempted and there is some feedback in refining the solution.	[3]–[4]
The candidate has designed a limited multimedia solution. User requirements have been poorly identified. Some planning is evident through: navigational structure diagrams and storyboarding.	[1]–[2]
Not worthy of credit.	[0]

1 (b) Designing a database solution using appropriate tools	Marks
The candidate has successfully designed an appropriately structured relational database with all relevant fields. There is detailed planning of required database features, for example linking tables illustrated using an ERD, key fields, validation checks and data capture forms. User requirements have been clearly identified with details of all input, output and processing included. The front end user interface, forms, reports (grouping, sorting, calculations), queries (complex) and macros have been designed to allow for third party implementation.	[5]–[7]
The candidate has designed an adequate relational database with some relevant fields. The candidate has planned some database features appropriately for example two to three of the following: reference to how the tables in the solution are limited; key fields; validation checks and data capture forms. User requirements have been identified with details of most input, output and processing included. The front end user interface, forms, reports (grouping, sorting), queries (simple) have been designed to an acceptable standard.	[3]–[4]
The candidate has designed a database with limited or no use of appropriate fields. User requirements have not been clearly identified, with limited reference to input, output and processing.	[1]–[2]
Not worthy of credit.	[0]

AVAILABLE MARKS

6

2 (a) Building the multimedia solution	Marks
The candidate has produced a high quality multimedia solution which is highly suitable for the target audience. The solution makes effective use of: templates, hypertext, optimised media, appropriate sound original video, original animation. Scripted elements aid the interactivity of the solution. A range of accessibility elements are available.	[11]–[13]
The candidate has produced a good quality multimedia solution which is suitable for the target audience. The solution makes use of: templates, hypertext, optimised media, sound, original video or animation. Scripted elements have been used. An accessibility element is available.	[7]–[10]
The candidate has produced a good quality multimedia solution which is suitable for the target audience. The solution makes use of: templates, hypertext, optimised media, sound, original video or animation.	[4]–[6]
The candidate has produced a basic quality multimedia solution. The solution makes use of: templates, hypertext, optimised media, video or animation and sound.	[1]–[3]

2 (b) Building the database solution	Marks
The candidate has produced an excellent database solution which is highly suitable for the target audience. Tables are linked with appropriate relationships, have appropriate validation, lookup lists and input masks. Forms and navigation are user friendly and intuitive. Complex queries using two or more criteria and logical operators have been implemented. Reports incorporate the use of grouping, sorting, calculations and headers/footers.	[11]–[14]
The candidate has produced a very good database solution which is suitable for the target audience. Tables are linked, have appropriate validation, lookup lists and input masks. Forms and navigation are user friendly and intuitive. Queries using two or more criteria and logical operators have been implemented. Reports incorporate the use of grouping, sorting and headers/ footers.	[7]–[10]
The candidate has produced a good database solution which is suitable for the target audience. Tables have appropriate validation, lookup lists and input masks. Forms and navigation are logical. Queries using criteria and/or logical operators have been implemented. Reports incorporate the use headers/footers.	[4]–[6]
The candidate has produced a basic database solution. Tables have some validation, lookup lists and/or input masks. Forms, navigation, basic queries and reports have been attempted.	[1]–[3]
Not worthy of credit.	[0]

Not worthy of credit.

AVAILABLE MARKS

13

[0]

3 Testing the database solution	Marks
The candidate has successfully designed a detailed test plan derived from user requirements. The test plan is well structured in tabular format and incorporates a range of tests. Testing data includes valid, invalid and extreme data. Errors are clearly identified and testing reflects the general robustness of the system.	[8]–[10]
The candidate has successfully designed a test plan derived from user requirements. The test plan is structured in tabular format and incorporates a range of tests. Testing data includes valid, invalid and/or extreme data. Errors are identified and testing reflects the general robustness of the system.	[4]–[7]
The candidate has successfully designed a partial test plan. The test plan has some structured in tabular format. Testing data includes valid and invalid data.	[1]–[3]
Not worthy of credit.	[0]

## Testing of the multimedia solution is $\underline{\text{NOT}}$ required.

4 Evaluating the multimedia and database solution	Marks
The candidate has produced a well-structured evaluation of both solutions with clear reflection on the extent to which the user requirements have been met. Performance and robustness issues have been included. Refinements are clearly identified.	[8]–[10]
The candidate has produced a good evaluation of both solutions with reflection on the extent to which the user requirements have been met. Performance/robustness issues have been included. Some refinements are identified.	[4]–[7]
The candidate has produced an evaluation of the database or multimedia solution with limited reflection on the extent to which user requirements have been met. No performance/robustness issues have been included. No refinements are identified.	[1]–[3]
Not worthy of credit.	[0]

AVAILABLE

10

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