

Mark Scheme (Results)

January 2012

GCSE ICT (5IT03)
Paper 1 Exploring Digital Design

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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.
- Candidate can be credited where they have given two or more correct responses in a single answer space, but have given incorrect or blank responses elsewhere.

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1(a)(i)	 Any four improvements from: Make the fonts (text) consistent / use a medieval (old style) font Make font easier to read (sans serif) / correct 'Bailey' Make the title bigger Move title - make sure text not overlapping images/make sure text readable/ make title more visible / resize picture so title is visible Add colour with reasonable explanation / justification e.g. to enhance user experience / make it more attractive Add text/ label the navigation buttons Change style of buttons/put graphics on the buttons to match theme of ebook Align navigation buttons / make the navigation buttons the same size Reposition some images (stocks need to be upright) and/or carts need to be separated from woodpile) Accept – add a home page button / additional navigation 			(4)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1(a)(ii)	Any three elements from: Sound / audio Sound effects Narration Background music Video / movie /slideshow Animation Rollover effect on buttons Transitions 3x1	 Text or images/graphics as in question 'Media clips' without expansion 	Award marks for detailed examples of an element e.g. Sound (1) OR Sound effects (1) and narration (1)	(3)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1(b)(i)	Any one description from:			
	To show the pages / the topics in the e-book (1)			
	how they are linked / the navigation routes (pathways) through the e-book (1)			
	1+1			(2)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
1(b)(ii)	 Any two reasons from: Provide a visual clue as to the function of the button / More accessible (no reading required) / more user friendly Fit in with the theme of the e-book / looks more attractive (more appealing to the user)/ enhance user experience / text could make button larger 			(2)

Question	Answer	Do Not Accept	Additional Guidance	Mark
Number				
1(b)(iii)	 Any three ways from: Use a template Common elements always in the same position and/or size Use same font type/styles/sizes throughout Use a colour scheme Use consistent navigational features 			
	Use consistent approach to style of transitions and /or multimedia elements e.g. cartoon/realistic etc 3x1			(3)

Total for Question 1 = 14 marks

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
2(a)(i)	 Any four tasks from: Allocate resources Gather/collect elements Prepare/create elements Create e-book / prototype (build) / template file / first version Test / collect feedback Make changes (and re-test) / respond to feedback User testing Functionality / performance testing 	Design packaging etc. or other tasks not directly related to the e-book		(4)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
2(a)(ii)	Any two reasons from:			
	 To formulate / get ideas about look and feel (theme) of the e-book / visualize initial thoughts, ideas and inspirations To communicate ideas and preferences regarding look and feel of the e-book To inform initial design and development 2x1 			(2)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
2(b)(i)	Any three features from:			
	 Graphical buttons / buttons that can be easily identified Easily readable font for main text (Tahoma) Interactivity e.g. hover over areas to get explanations Sound effects Simple navigation (buttons) / ease of use Text away from graphics Not too much text on page/short descriptions Images that will appeal to children 			(3)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
2(b)(ii)	Award 1 mark for inclusion/indication of three of the following features placed appropriately:		Must be clearly identified as a data entry box to award mark	
	 Suitable screen title Surname field First Name Field Gender field (radio buttons) Instructions Start quiz button 			(3)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
2(b)(iii)	 Any two from: Reduces data entry errors Reduce amount of typing Avoid open ended responses Saves space on the form Make form more user friendly/easier to use Pre-selected target audience age range 2x1 	"easier" without specific reference to ease of use		(2)

Total for Question 2 = 14 marks

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(a)(i)	Any four from:			
	 The user looks at first question and selects an answer If correct move to 'correct answer' screen. If wrong move to 'wrong answer' screen. From 'correct answer' screen to second question. From 'wrong answer' screen, given option to try and answer question again. If yes go to first question screen. If no move to second question screen. 			
	4x1			(4)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(a)(ii)	 Flowchart showing: A decision box asking 'six or more?' (1) A 'yes' arrow to a box displaying 'well done', and a 'no' arrow to a box displaying 'better luck next time' (1) 2x1 		Award for logic. Correct symbols not required.	(2)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(a)(iii)	 Any two reasons from: Provides standard flowchart symbols If an alteration needs to be made the flowchart might need to be redrawn. If it was created by hand, this could take a lot of work Can easily re-use sections Checks the logic of the flowchart and identifies errors Runs simulations based on the flowchart 2x1 	'Saves time' without justification		(2)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(b)(i)	Get permission from owner / manager of the castle (to film)			
	1x1			(1)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(b)(ii)	• D			
	1x1			(1)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(c)(i)	• A 1x1			(1)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
3(c)(ii)	 Any two ways from: Crop image using graphics package (1) Reduce resolution (1) Reduce colour palette (1) Remove all metadata (1) Compress the image (1) 	 Resize image 'Crop image' without mention of graphics package 	Allow 'change file type' with explanation	(2)

Question Number	Answer	Answer Do Not Accept Additional Guidance		Mark
3(c)(iii)	 Any one disadvantage from: May affect quality / image may become blurred or pixilated (accept distorted) May reduce the functionality of the image / limits further manipulation of the image Loss of metadata e.g. time and location 1x1 			(1)

Question Number	Answer	Answer Do Not Accept Additional Guidar		Mark
3(c)(iv)	 Any two disadvantages from: She may not be able to use them because they are copyright / she must comply with legal requirements / will need to seek permission to use them May have to pay for images / may take time to obtain permission Can't find exactly what she needs / poor quality / wrong size / not unique 			(2)

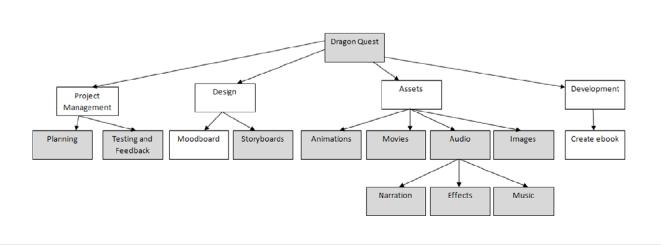
Total for Question 3 = 16 marks

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
4(a)(i)	Any two types from:VoiceoverNarration (listen to this page)Soundtrack (Music)	Sound effects	Award one mark for 'speech' if voiceover/narration not mentioned	
	2x1			(2)

Question Number		Answer	Do Not Accept	Additional Guidance	Mark
4(a)(ii)	Any two from:				
		Disadvantages			
	Internet /Download	 May not be good quality Copyright issues May not be able to find exactly what she is looking for Assets will not be unique to her product. 			
	Record herself	 Needs good quality microphone and editing software to produce good end result Quality may be low May not be able to record exactly what she wants Creating assets may be time consuming. 			
	Sound effects library (Internet,CD, DVD)	 Could be expensive to purchase and /or royalty payments could be high May not be exactly what she wants assets will not be unique to her product. 			
		(1+1)x2			(4)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
4(a)(iii)	 An explanation of why balance needs to be considered: If one sound is unbalanced it may drown out another sound/or it may be difficult to hear(1). User may have to keep altering volume controls(1) May create a poor user experience(1) If a sound is too loud it may reduce the impact/effectiveness of other sounds(1) 1x3 			(3)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
4(b)	 A description of a file management system: Change name of root folder to name of ebook /ebook files or similar Ensure efficient folder and sub folder structure. E.g. all sounds into sub folders such as sound effects, music, narration. Better naming conventions for files so that she knows exactly what each file is. Give files useful names 			(3)



Question Number	Indicative Content
4(c)	This question is about Katherine making sure that the digital assets she uses make the ebooks suitable for use online. Make sure download times are acceptable Faster page loading Optimise assets so they have a small file size. Need to repurpose assets Making images smaller therefore reducing file size Reducing resolution therefore reducing file size Compressing video reducing files size Compressing audio into acceptable format e.g. mp3 Correct choice of file formats Using streaming video techniques Trade off between download times and quality of media Ensure that book can be accessed by different browsers Make sure accessibility standards are adhered to
	 Correct choice of file formats Using streaming video techniques Trade off between download times and quality of media Ensure that book can be accessed by different browsers

level is set based on content

- 1) position in level is set based on the quality of **discussion**
- 2) if at top of level (i.e. your mark is now 2, 4, or 6 marks) and the candidate's response *does not* match the Quality of Written Communication (QWC) descriptor for that level, then markers must reduce the mark by 1. NB QWC can only be applied to *reduce* the mark *within a level*.

	Mark		Descriptor
	0		No rewardable content
		Content	The candidate will identify a limited number of techniques that Katherine would need to use to make the assets suitable for use online.
Level 1	1-2	Discussion	Responses produced by the student will be generalised , with little explanation as to how the techniques would make the ebook suitable for use online.
		QWC	They have used everyday language and their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy.
	3-4	Content	The candidate will identify a number of techniques, with limited examples of the possible impact the techniques would have on the suitability of the ebook for use online.
Level 2		Discussion	Candidates will have discussed the techniques and have made some links in their discussion to how they would make the ebook suitable for use online.
		QWC	They have used some specialist terms and their response shows some focus and organisation . Spelling, punctuation and the rules of grammar are used with some accuracy.
		Content	The candidate will provide a range of techniques illustrated with well chosen examples of the possible impact the techniques would have on the suitability of the ebook for use online.
Level 3	5-6	Discussion	They will have discussed the impact of the techniques, making well explained links in their discussion as to how these techniques would make the ebook suitable for use online.
		QWC	They have used appropriate specialist terms consistently and the response shows good focus and organisation . Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
5(a)(i)	 Correct the link (1) then retest to ensure button now working (1) 1+1 			(2)

Question Number	Answer		Do Not Accept	Additional Guidance	Mark
5(a)(ii)	• C				
		1x1			(1)

Question	Answer	Do Not Accept	Additional Guidance	Mark
Number				
5(b)(i)	An explanation covering:			
	 views/opinions/reactions/ suggestions of the target audience to see if suitable for different levels of computer skills of users to see if suitable for the target age range to see if suitable for different levels of language ability to see if suitable for both genders to see if suitable for use in different locations e.g. a noisy classroom 			(3)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
5(b)(ii)	 Any two methods from: Observation/watch them use book Interview/speak to/ask Questionnaire/survey 			
	2x1			(2)

Question Number	Answer		Do Not Accept	Additional Guidance	Mark
5(c) (i)	Any two from: Alt text Resizable fonts Listen to page option / voiceover Screen reader support Colour combinations Captions/transcripts for audio Captions/transcripts for video Provide a zoom feature Ensure high resolution images				
	3	2x1			(2)

Question Number	Answer	Do Not Accept	Additional Guidance	Mark
5(c)(ii)	 Any explanation from: To ensure that all the content in her books (1) is accessible to all people (1) (including those with a disability e.g. visual, hearing, cognitive or motor impairments) She has to comply with the law (1) DDA –disability discrimination act (1) She has to comply (1)with Multimedia accessibility standards (1) 			(2)

Question Number	Indicative Content
5(d)	Design of a user interface affects the usability of the digital product – a well designed user interface will make the product both easier to use and in some cases more enjoyable. Design of user interface also impacted by the purpose of the product and the proposed target audience.
	Example of good and bad features of interface design Navigation Use of multimedia Layout Colour Interactivity Accessibility features Language level Knowledge of the characteristics and preferences of the target audience important A whole range of computer skills from potential users of the product Age Gender Ethnicity Disability Range of language abilities Suitability on different computers and platforms – minimum specification outlined

level is set based on content

- 1) position in level is set based on the quality of discussion
- 2) if at top of level (i.e. your mark is now 2, 4, or 6 marks) and the candidate's response *does not* match the Quality of Written Communication (QWC) descriptor for that level, then markers must reduce the mark by 1.

 NB QWC can only be applied to *reduce* the mark *within a level*.

	Mark		Descriptor
	0		No rewardable content
		Content	The candidate will produce a limited response, probably with limited reference to how the characteristics of a target audience may affect the design of the user interface.
Level 1	1-2	Discussion	Responses produced by the student will be generalised and will include few references to how the characteristics affect the user interface.
		QWC	They have used everyday language and their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy.
	3-4	Content	Candidate's responses will be mostly accurate and will include reference to the specific characteristics of at least one target audience affect the design of the user interface.
Level 2		Discussion	Candidates will have discussed the characteristics of the target audience and how this affects the design of the user interface. Limited attempt to argue the case.
		QWC	They have used some specialist terms and their response shows some focus and organisation . Spelling, punctuation and the rules of grammar are used with some accuracy.
		Content	The candidate will produce a factually accurate response that includes the discussion of a range of appropriate target audience characteristics and how they affect the design of the user interface.
Level 3	5-6	Discussion	The characteristics identified are appropriate and the case well argued.
	3 3	QWC	They have used appropriate specialist terms consistently and the response shows good focus and organisation . Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Total for Question 5 = 18 marks Total for Paper = 80 marks

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