Mark Scheme (Results)

January 2013

GCSE Information and Communication Technology (5IT03)

Unit 3: Exploring Digital Design

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk for our BTEC qualifications.
Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

If you have any subject specific questions about this specification that require the help of a subject specialist, you can speak directly to the subject team at Pearson.
Their contact details can be found on this link: www.edexcel.com/teachingservices.

You can also use our online Ask the Expert service at www.edexcel.com/ask. You will need an Edexcel username and password to access this service.

Pearson: helping people progress, everywhere
Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk
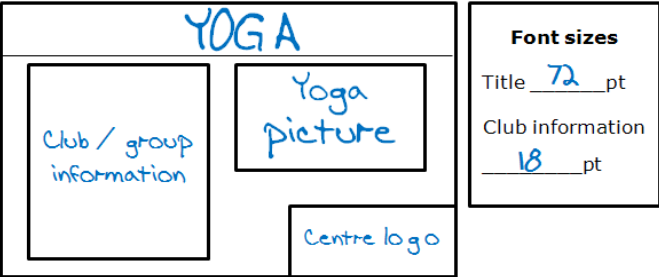
General Marking Guidance

- 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.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

  i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear
  ii) select and use a form and style of writing appropriate to purpose and to complex subject matter
  iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (a)	B 1 x 1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (b) (i)	Any **two** from: • Rollover effect/ALT text • Help message/onscreen user instructions • Add "button"/ graphic **next to name**/turn name into button • (Hyperlink shown by) underline 2 x 1	Hyperlink on its own.	Accept 'text changes colour' as rollover effect (response implies interaction from user)	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (b)(ii)

Candidate to provide a sketch.

Award **one** mark for each of:

- Indication of club title (Yoga) AND "group information" included
- Font size for title is larger than text for "club information"
- Indication of "(yoga) image" AND "logo" included
- Clear indication that "logo" is smaller than "yoga image"

4 x 1 | | Indication of size of logo may be taken from a CLEAR size difference in the asset drawing in the storyboard or through candidate annotation of dimensions etc

Font sizes do not need to be same as in example but should be sensible (club information minimum of 10pt)

Text box must show indication of contents not just 'text' | **4** |

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(b)(iii)	B 1 x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(b)(iv)	C 1 x 1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(c)(i)	Two reasons from: • Users will only use the system occasionally • Wide audience/user base • Users will have a range of ICT capability • Should not take time to learn /need help • System will be used for "quick" searches • People less likely to use the system again if they found it difficult/frustrating 2 x 1		Wide audience includes disabilities, literacy issues and age.	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(c)(ii)	Any **one** of: • Resizable/adjustable fonts / zoom in /magnifier • Read this screen/listen to this page feature/narration • High contrast option/colour scheme options 1 x 1	'voice over' without further explanation		**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(d)	An explanation such as: A logo will vary in size for its **different uses** (1) a vector image will not lose quality/pixellate when resized (1) 1 x2		Accept reference to pixellation of other file types in context. Accept 'the image retains a high resolution'	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (a)	Any **three** improvements from: • Use consistent font (type, size or style) for body text • Add more emphasis to subheading (Seat Belts) e.g. make it larger/use bold • Re-position main title (centre) • Make video screen larger/reduce white space • Add play control buttons for video • Add navigation to other pages • Make the information/sentences simpler (as aimed at children) 3 x1			**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (b) (i)	Compression/compress/compressed/ compressing 1x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (b) (ii)	Any **one** from: • Will reduce the **overall** file size of e-learning package • Page/video will load quicker 1 x1	Do not accept faster without reference to video loading.		**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (b) (iii)	Any **one** from: • May reduce quality of video • May not play on all platforms 1 x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (c) (i)	One linked example such as: (voice-over) added to a video (1) to explain key points shown/to help partially sighted users/aid comprehension (1) (voice-over) added to introduction/instructions/information page (1) to help partially sighted/low literacy users/aid comprehension (1) 1 + 1		2nd marking point can be awarded when 1st has not gained credit as long as the candidates response gives some relevant context (not roll over effects).	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (c) (ii)	An explanation involving two of the following: • Check copyright status • Get permission if needed • Credit the source 1+1			**2**

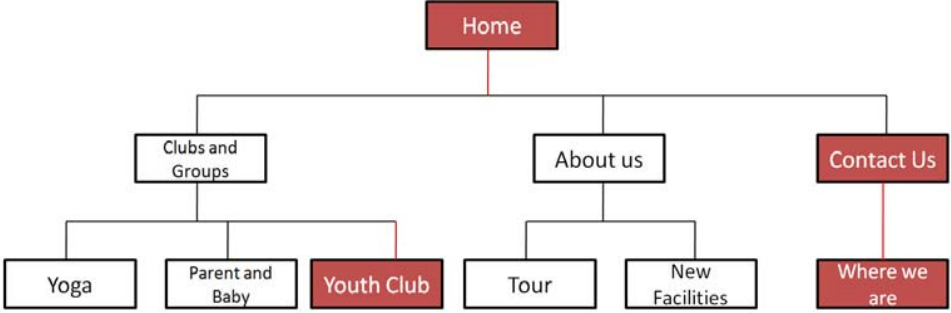| Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (d) (i)	Definition of repurposing such as: To modify/alter an existing asset (1) to make it suitable for use in another context/product (1) 1+1	'changing the purpose'		**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (d) (ii)	Any **one** advantage of repurposing from: • Quicker than creating assets from scratch/may not require as many test stages as an original asset • Can create greater consistency across products (if repurposed from same suite of products) • Avoids copyright issues that occur from using assets created by others • Avoid having to get permission multiple times 1x1	Quicker/saves time without further explanation		**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
2 (d)(iii)	Any **one** disadvantage of repurposing: • Asset may not fit product style as well as bespoke assets • May cause some compatibility issues compared to a bespoke asset • Product will not be unique/may be obvious that asset was not originally for that product 1 x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(a)	Any **two** reasons from: • File size too large • File type not image (file type pdf) (2 x 1)		Web page would not load pdf as an image source.	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(i)	Explanation for choice of Image 1: Smaller file size will **load faster/easier to upload** (1) which will give website user better experience (1)/ will reduce potential server bandwidth problems/increase range of devices it can be used on (1) JPG is a **common file type**(1) which will make it compatible with more browsers(1) (1x2)			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(ii)	Explanation for choice of Image 2: Larger file size will mean greater detail (1) so map might be more accurate/easier to read and use (1) .TIFF **file type is usually higher quality** than .jpg (1) so would be good if users wanted to zoom in on screen / wanted to print a high quality map (1) (1 x 2)			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3 (c)	Award **one** mark for each page in correct place in structure diagram: • "Home" at top of hierarchy • "youth club" added in 3rd layer of hierarchy (linked to "clubs and groups") • "contact us" added to second layer of hierarchy • "where we are" added to 3rd layer of hierarchy (linked to contact us) 4x1			**4**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(d)(i)	Streaming/Stream/Streamed 1x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(d)(ii)	Definition of codec such as: A codec is a file/piece of software (which the user must download/install)needed to view the video (1) the codec allows the computer to correctly decompress the video (1) Compresses/reduces the file size of **audio/video** file (1) to make it easier to download/upload (1) 1x2		Credit responses that show an understanding of a codec being used to compress/decompress an **audio/video** file Accept 'code/decode' for 'compress/decompress'	**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(e)	Award 1 mark for identifying an appropriate change to the design of the Homepage. AND Award a maximum of 2 marks for a suitable linked explanation for impact of the suggested change	'Add colour' on its own	Reference to adding/changing of colour should be for a specific, identified feature.	

Change	Indicative content
Use a font colour that stands out against the background(1)/lighten the background so that the text stands out (1) /use a larger/clearer font for main text(1)	This would make the text easier to read (1) which would help people with poorer eyesight/the user wouldn't have to strain to read it (1)
Group buttons together(1)	This would make navigating around the site easier (1) as all buttons will be easy to find/all in one place (1)
Add accessibility features (such as support for screen readers / listen to this page feature) (1)	More people would be able to access the site (1) even those with a disability (1)
Change colour of background/buttons/banner (1)	Navigation features/content will be easier to see (1) which would make the site more accessible (for all users) (1)
	1 +(1+1)

3

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(a) (i)	Label X – image/video (layer) Label Y –sound/audio (layer) 2x1	Types of audio e.g voiceover, narration, etc		**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(a) (ii)	A description such as: Allows the designer to identify 'layers' of assets (1) and plan timings (and transitions) appropriately (1) Gives a visual representation of how each of the assets (sound/video etc) (1) will overlap/follow on from each other (1) 2x1			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(a)(iii)	C 1x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(b)(i)				
	Candidate provides a diagram of a data entry form. Award **one** mark for **each** of the following • Data entry field for email • Data entry field for password • A submit button 3x1		To award marks the features of the form must clearly be identifiable. Data entry fields should have label and text entry field.	**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(b)(ii)	Any one data entry feature from: • Drop down list • Radio buttons • Check boxes • Look-up/auto complete 1x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(c) (i)	Creative Commons (Licence) 1x1			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
4 (c) (ii)	One "linked" explanation of how these creative commons permissions affect how assets can be used such as: Lee may use and alter these images (including commercially) (1) as long as the original creator/copyright holder is credited (1) 1x2			**2**

Question Number	Indicative Content
4(d)	The designer (Lee) will make use of a range of testing methods to ensure it has met its technical brief (easily available to a range of people).
	He creates a test plan which identifies and checks certain criteria such as files size and format. Lee ensures throughout development, through the choice of assets and use of file compression etc, that his finished video is in a file format that is intended to be broadly compatible and that the file size allows for easy download. Testing throughout development will ensure that his video adhere to his interpretation of the brief.
	Ongoing testing by the developer may not identify issues with meeting the brief such as how connection speed/type effects download so test users may need to be used/identified
	Video is tested on a range of different platforms to cover compatibility and usability on a range of different hardware specifications. Lee might not have access to a wide range of platforms so may need to employ test users. Employing test users will allow video to be tested on a wider range of hardware than he may have available to him.
	Video file format is tested to ensure compatibility with a wide range of players both through ongoing testing by Lee and through use of test users.
	Beta testers might be used to test compatibility with different machine specifications and to identify easy/speed of download depending on connection.
	Lee will have to make use of a range of test users who have varying levels of ICT capability to ensure that the video is accessible to a range of audiences. Engaging low ICT capability users may cause results of testing being skewed because of capability.

Level descriptors continue on next page.

Level	Mark	Descriptor
	0	No rewardable content.
1	**1-2**	Using a number of simple statements the student identifies some suitable methods for testing accessibility of the video. The student's response may include technical aspects (such as the browser), user characteristics or the processes of testing and collecting feedback. These might not be linked to the given context and may contain little or no discussion. The student uses everyday language but their response lacks clarity and organisation. Spelling, punctuation and the rules of grammar are used with limited accuracy.
2	**3-4**	The student identifies a number of suitable methods for testing accessibility of the video. The student's response will include some technical aspects (such as the browser) and will usually also identify some user characteristics or the processes of testing and collecting feedback. The discussion will be linked to the given context. The student uses some specialist terms and their response shows some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.
3	**5-6**	The student uses a range of well chosen examples for testing accessibility of the video. The student's response identifies a range of technical aspects and user characteristics or the processes of testing and collecting feedback. The description will be clearly linked to the given context. The student uses 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)	Any **two** from: • Font style • Size/dimensions of assets • Details of background colour/image • Details (filenames)/locations of specific pre made files (that relate to the assets such as banner) • What headlines/text should be • Position of logo • Date/edition • Size/dimensions of page • Details of how to navigate to next page 2x1	Font size Font Colour		**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5 (a) (ii)	Suitable explanation of the "visual hierarchy" such as: Text/information and images are in (descending) **order of size or emphasis** (1) depending on their importance (1) Award **one** mark for: 'more important information is bigger' 1+1			**2**

Question Number	Answer		Do not accept	Additional Guidance	Mark
5(b) (i)	Crop Marquee/ Lasso	1x1			**1**

Question Number	Answer		Do not accept	Additional Guidance	Mark
5(b)(ii)	Any **one** of: Pixellation Blurring Distortion	1x1		Incorrect enlargement may lead to distortion. Accept 'loses quality'	**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b) (iii)	Award 1 mark for each correctly identified tool (max 2) AND 1 mark for a suitable use of each in the given context 	Tool	Possible Use	 |---|---|
Marquee/lasso/select area tool	to select dog (and cut/copy) from image 1
Layering	to place dog in front of cloud image
Rotate/ transform tool	to place "coming soon" text at an angle
Eraser/rubber tool/transparency/ cutout	to remove background of image 1
Import/copy and paste/fill	To add cloud image /cloud texture to background of final image
Resize/transform/scale	Resize image of dog to fit into new image | 2x (1+1)		Mark for "use" must only be given for a suitable/correct use in the given example	**4**

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b) (iv)	Explanation of what may have caused missing image such as: Lee might not have exported (saved) the image in a **suitable file format** (1) so the browser/e-zine is unable to display it ('online is not enough') (1) The webpage/e-zine cannot load/find the image (1) as the file path of the image may be incorrect /the image may have been moved from the target folder (1) The file size may be too big to load (1) for the target devices memory/connection speed (1) Award **one** mark for: 'may not have the correct software to view the file'(1) 1+1			**2**

Question Number	Indicative Content
5(c)	The designer should take in to account the audience of the e-zine will be when designing the product. The audience will affect a number of design decisions such as content, use of language, style of the presentation, aesthetics etc. These will be affected by the audience's age, gender, interests and level of education. If the e-zine is aimed at a younger audience the designer might choose to use brighter colours to make it more appealing to them. The images that he chooses might alter too, such as more use of "cartoon" style images for particularly young children or a more graffiti/"street" style if aimed at teenagers. Older audiences such as adults may prefer more realistic images such as pictures taken of the groups at the community centre and the colours chosen may be more sedate colours that are not as bright being used and a narrower colour palette. Older audiences may prefer the content of the articles to be more in depth than a younger audience and the articles are more likely to be written using a broader vocabulary than if aimed at young people. However the e-zine might be aimed at adults who are not well educated so the designer may choose to use articles that have a lot of content but still use a relatively simple vocabulary. The audiences' gender may affect the design of the e-zine. For example if aiming the e-zine at a young female audience, stereotypically shades of pink etc might be used more where as if aimed at young boys blues and "sporty" themes might be chosen instead. The fonts chosen might vary for different audiences such as choosing fonts that are easier to read (san serif) for younger audiences, large font types for elderly audiences etc. The interests of an audience would affect the way the designer presents the e-zine. The community centre e-zine is aimed at people in the local community so the headlines and content would reflect the local area through inclusion of adverts for local services, pictures of people from the community etc. The audience's level of ICT skill or potential disability may influence the user interface of the product or the features that are included. For instance alternate colour schemes may be provided for people with

Level	Mark	Descriptor
		visual impairment or a simplified interface may be used to ensure all levels of skill can use the product.
	0	No awardable content
1	**1-2**	Using a number of simple statements the student identifies a limited number of ways that the characteristics of the intended audience will affect the design of the e-zine. The student's response may focus on only one area of design (such as aesthetics) and there is little or no reference to the e-zine. The student uses everyday language but their response lacks clarity and organisation. Spelling, punctuation and the rules of grammar are used with limited accuracy.
2	**3-4**	Using the given context the student describes ways that that the characteristics of the target audience affect the design and/or content of the e-zine. The student considers different characteristics and explains how they affect the areas they have identified. The student uses some examples from the given context but these may not always be accurate. The student uses some specialist terms and their response shows some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.
3	**5-6**	Using well chosen examples the student identifies a range of audience characteristics that will affect the design and content of the e-zine. The student's response provides clear explanation of how the identified characteristics might affect the design decisions made. A range of valid examples, within the given context, are used to illustrate the varying influences of audience characteristics. The student uses appropriate specialist terms consistently and the response shows good focus and organisation. Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Ofqual

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Rewarding Learning