

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCSE

Information and Communication Technology

Unit 3: Exploring Digital Design

Monday 21 January 2013 – Morning
Time: 1 hour 30 minutes

Paper Reference
5IT03/01

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed
– *you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ►

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PEARSON

Answer ALL questions. Write your answers in the spaces provided.

Ruth is the manager of *Futures Community Centre*. She has asked Lee to develop a range of digital products for the Centre.

One of the products will be an information point.

Figure 1 shows the design for a screen from the information point.

Clubs and Support Groups

<p>Yoga Monday – 6:00 pm to 7:00 pm</p>	<p>Youth Club Monday – 7:00 pm to 9:00 pm</p>
<p>Parent and Baby Tuesday – 10:30 am to 12:30 pm</p>	<p>Dance Club Tuesday – 8:00 pm to 9:00 pm</p>
<p>Quit Smoking Wednesday – 10:30 am to 12:30 pm Thursday – 6:30 pm to 7:30 pm</p>	

Figure 1



Some questions must be answered with a cross in a box ☒. Mark only one answer for each question. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☒.

1 (a) Lee uses different types of documentation when designing digital products.

Before Lee starts to develop the products he discusses with Ruth the colours, images and styles she likes.

Which **one** of these design documents should they use?

(1)

- A Timeline storyboard
- B Moodboard
- C Flowchart
- D Entity relationship diagram

(b) (i) **Figure 1** shows when the clubs and groups meet at *Futures Community Centre*.

Each name is a link to a page about the club or group.

Give **two** features Lee could use to make it clear that the names are links.

(2)

Feature 1

.....

Feature 2

.....



(ii) Ruth has given Lee this design brief for the 'Yoga' page.

Design Brief

Title: *Yoga*

Text: *A text box with club information*

Images:

A yoga image

Centre logo

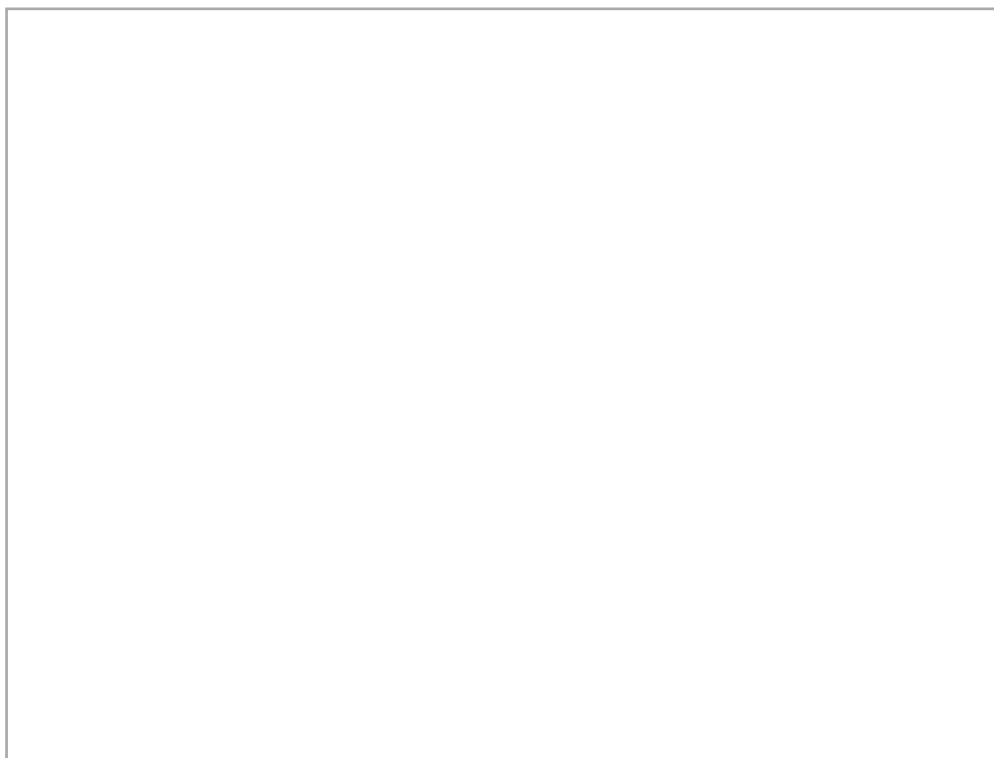
Additional design comments:

The text for the club title must be bigger than the club information.

The yoga image must be bigger than the logo.

Use this space to create a storyboard design for the 'Yoga' page.

(4)



Font sizes

Title _____pt

Club information
_____pt



(iii) All other club and group pages will use the same layout as the 'Yoga' page.

Which **one** of these should Lee use to make sure this happens?

(1)

- A** House style
- B** Template
- C** Copy and paste
- D** Animation

(iv) Lee needs to test the information point to make sure it functions as planned.

He keeps a record of what he tests and any changes that he makes.

Which **one** of these documents should he use?

(1)

- A** Questionnaire
- B** User guide
- C** Test plan
- D** Site map

(c) The information point could be used by anyone in the community.

(i) Give **two** reasons why it should be easy to use.

(2)

1

.....

2

.....

(ii) State **one** accessibility feature that Lee might include in the information point.

(1)

.....

.....



(d) The Centre logo will be used on a range of digital products.

Lee has saved the logo as a vector image.

Explain why a vector image is suitable for a logo.

(2)

.....

.....

.....

.....

(Total for Question 1 = 14 marks)



- 2 Lee is creating an e-learning package about road safety. It is aimed at young people who use the Centre.

Figure 2 shows a screen from the first version of the e-learning package.

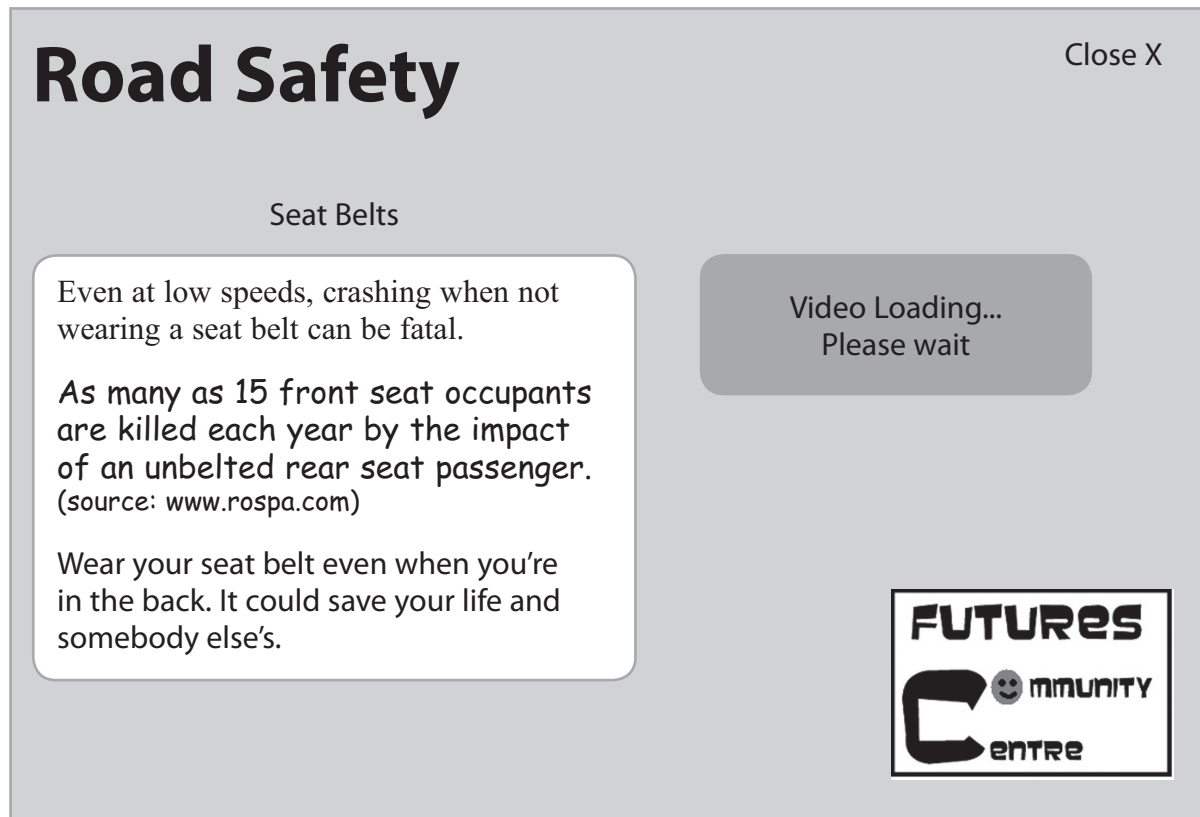


Figure 2

- (a) Lee knows that the screen design needs to be improved.

Identify **three** improvements that he could make.

(3)

1

2

3



(b) The video file Lee wants to use in the e-learning package is very large. He uses software to reduce the file size of the video.

(i) Give the correct term for this process.

(1)

Using software to reduce the file size of the video affects the e-learning package.

(ii) Give **one positive** impact on the e-learning package.

(1)

(iii) Give **one negative** impact on the e-learning package.

(1)

(c) The e-learning package uses different types of audio.

One type of audio it uses is a voice-over.

(i) Describe **one** way that Lee might use a voice-over in the e-learning package.

(2)

(ii) The e-learning package also uses sound effects. Lee finds a sound effect he would like to use on the internet.

Explain what Lee must do before using this sound effect, so that he does not break any laws.

(2)



(d) Lee re-purposes some of his own digital content for the e-learning package.

(i) Define the term 're-purposing'.

(2)

.....

.....

.....

.....

(ii) Give **one advantage** to Lee of re-purposing his own content.

(1)

.....

.....

(iii) Give **one disadvantage** to Lee of re-purposing his own content.

(1)

.....

.....

(Total for Question 2 = 14 marks)



3 Lee is re-designing the *Futures Community Centre* website. He checks the properties of the assets he plans to use.

Figure 3 shows the properties of one of the assets.

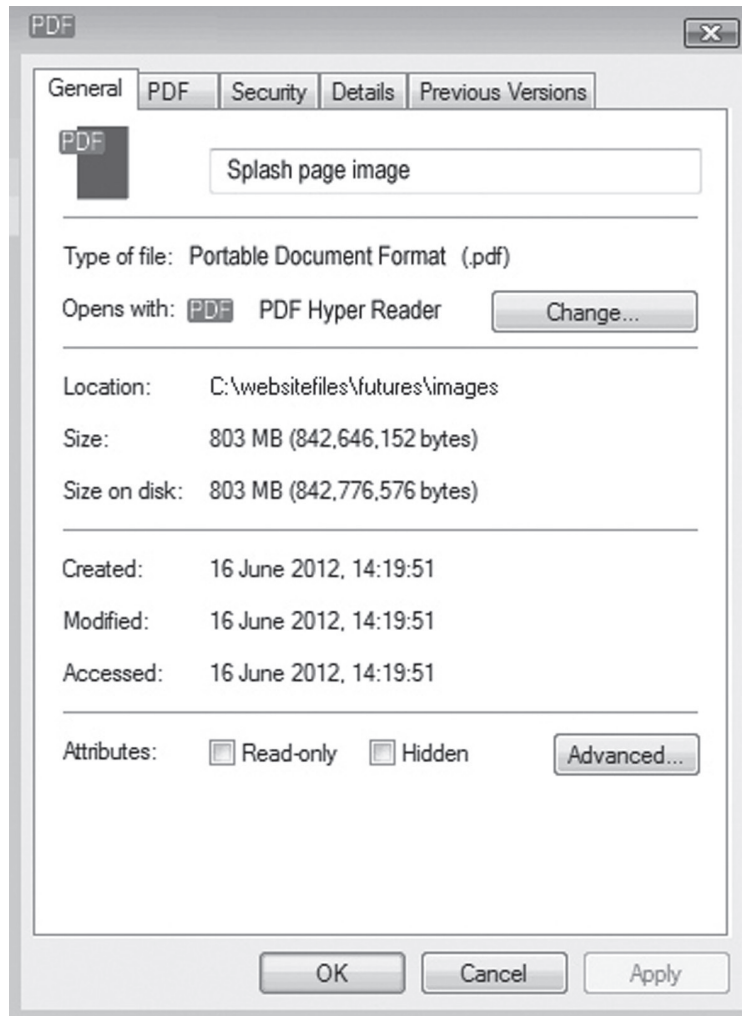


Figure 3

(a) Give **two** reasons why the properties of this asset might cause problems if used as an image on the website.

(2)

1

2



(b) Lee wants to include a map on the website. He has two images he could use. Here are the properties of the images.



	Map1
Type of file:	JPEG Image (.JPG)
Opens with:	 Photo Gallery
Location:	C:\websitefiles\futures
Size:	852 KB (873.075 bytes)
Size on disk:	856 KB (876.544 bytes)

Image 1



	Map2
Type of file:	TIFF Image (.TIF)
Opens with:	 Photo Gallery
Location:	C:\websitefiles\futures
Size:	8.89 MB (9.329.784 bytes)
Size on disk:	8.89 MB (9.330.688 bytes)

Image 2

Lee compares the properties of the images.

(i) Explain why Lee might choose to use Image 1.

(2)

.....

.....

.....

.....

(ii) Explain why Lee might choose to use Image 2.

(2)

.....

.....

.....

.....



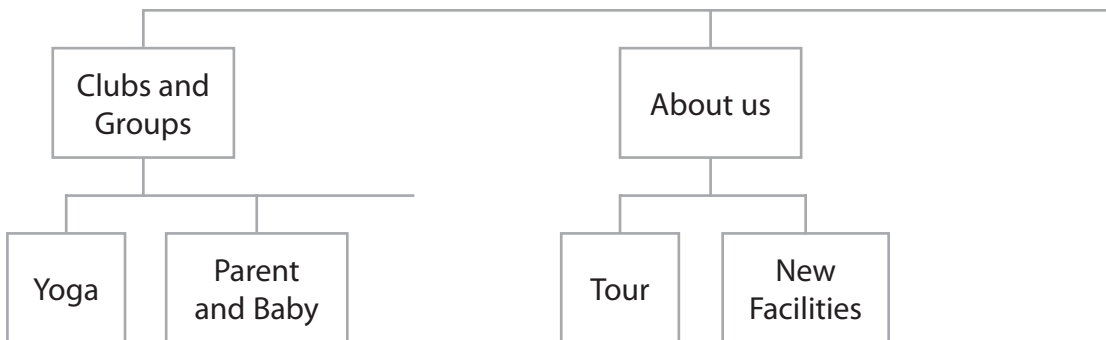
(c) Lee uses a site map to plan the structure of the re-designed website. Ruth has asked Lee to include these pages in the site:

Home with links to:

- **Clubs and Groups** with links to:
 - **Yoga**
 - **Parent and Baby**
 - **Youth Club**
- **About us** with links to:
 - **Tour**
 - **New Facilities**
- **Contact us** with a link to:
 - **Where we are**

Complete the site map to show the structure of the website.

(4)



(d) *Futures Community Centre* is being extended to provide new facilities. The builders have provided an animation of what the facilities will look like.

The animation is saved as a video file.

The video can be downloaded from the website.

(i) State **one** method, other than downloading, of accessing video on the internet.

(1)

(ii) Users will need a codec to watch the video.

Explain what a codec is.

(2)



(e) Lee has produced the Homepage for the re-designed site. He wants feedback.



Identify **one** change that could be made to the design of the Homepage and explain how the change would improve the user experience.

(3)

Change

Explanation

(Total for Question 3 = 16 marks)



4 Ruth wants Lee to create a video for *Futures Community Centre*. He plans the video using a timeline storyboard.

Figure 4 shows part of Lee's timeline storyboard.

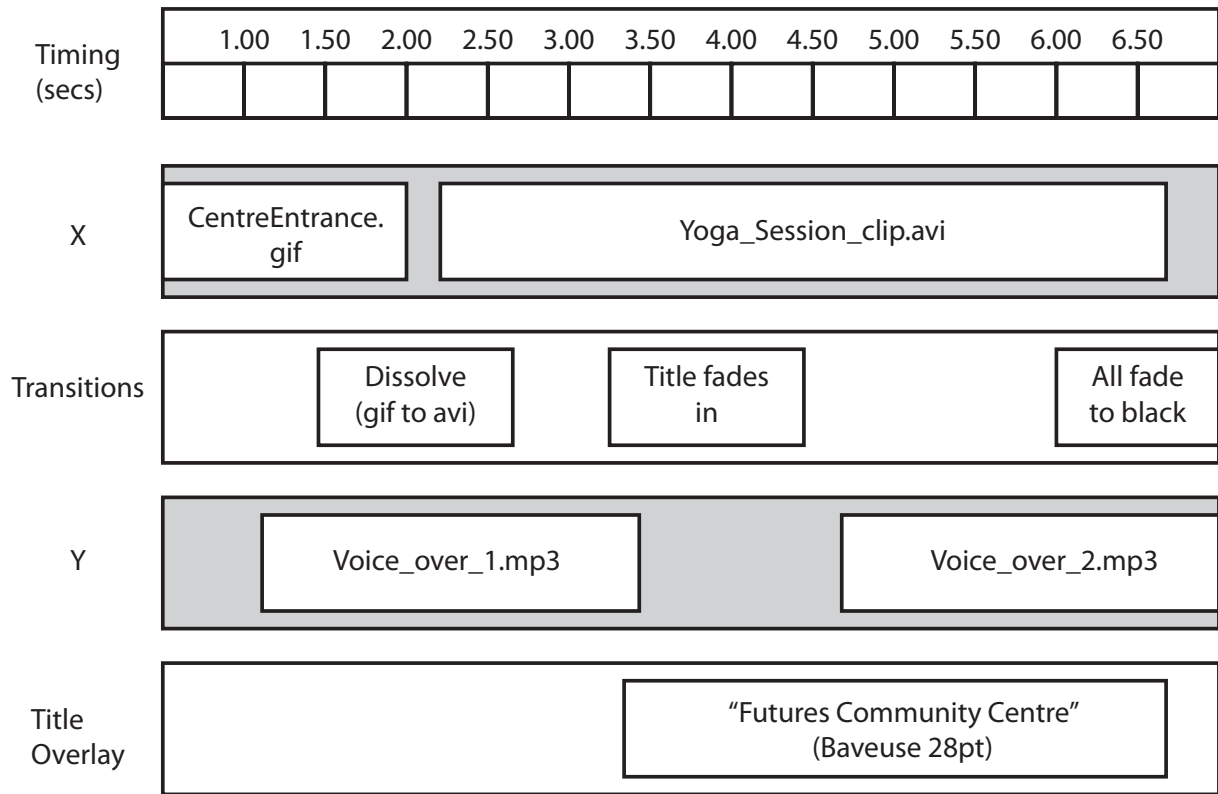


Figure 4

(a) (i) Two labels, X and Y, have not been identified on the storyboard.

Identify what the labels X and Y represent.

(2)

Label X

Label Y

(ii) Describe **one** purpose of using a timeline storyboard when designing a video.

(2)



(iii) Lee exports his video before saving it.

Which **one** of these is **not** a suitable file format for a video file?

(1)

- A** .wmv
- B** .mov
- C** .png
- D** .avi

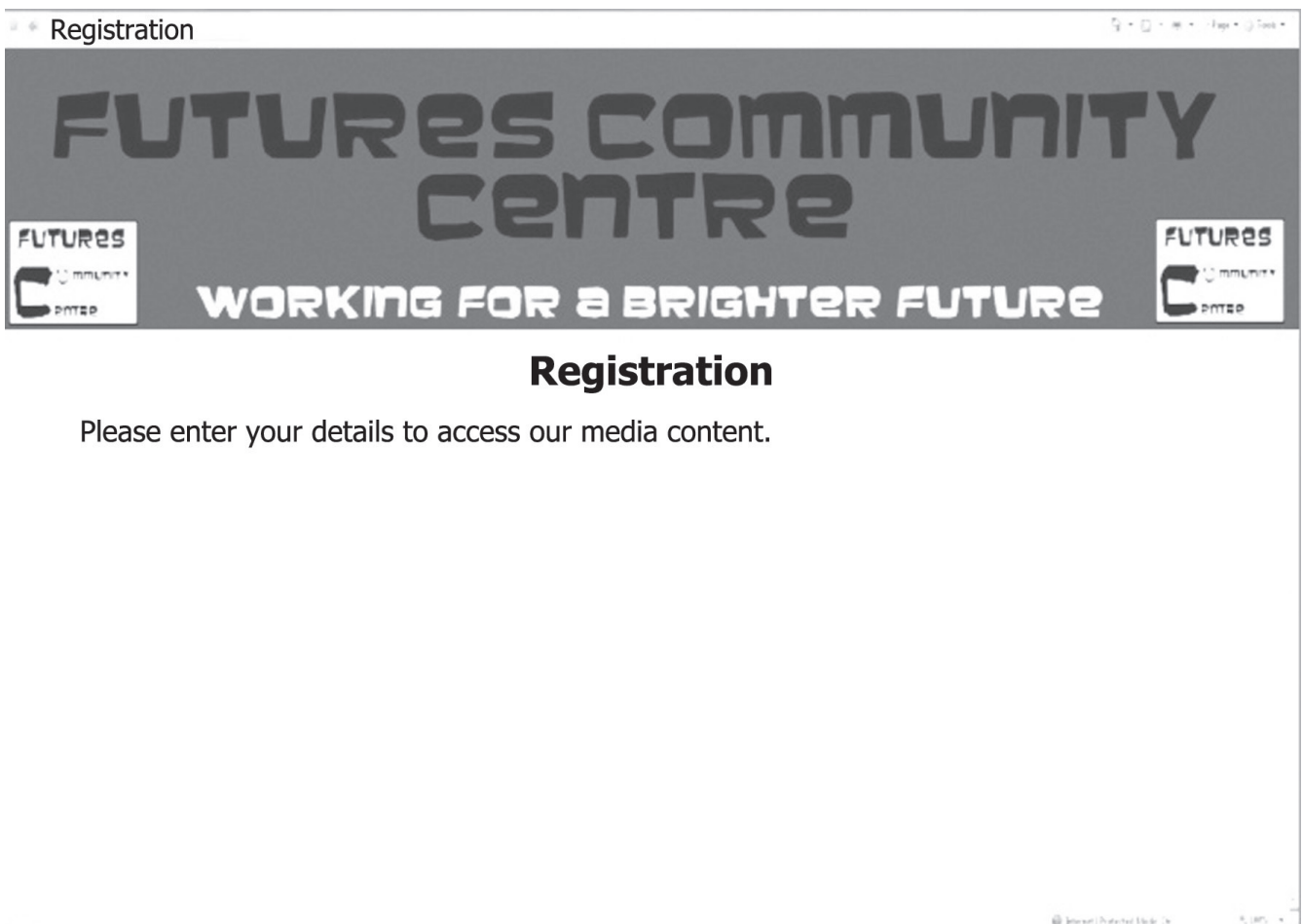
(b) (i) Users of the Centre's website must register to access the video online.

The Registration page will contain:

- a data entry field for the user's email address
- a data entry field for their password
- a submit button.

Complete the design for the Registration page.

(3)



(ii) **Figure 5** shows a page that Lee has added to the site. The page allows the user to search on the name of a club or group.



Figure 5

Give **one** feature that Lee could add to the page to make data entry easier.

(1)

.....

.....



(c) Lee wants to add more images to the website.

When he searches he sees these symbols on an image.



(i) State the name of the licence on the image.

(1)

.....

.....

(ii) Explain how these symbols affect the way Lee must work when using the image.

(2)

.....

.....

.....

.....



5 Ruth has asked Lee to produce an e-zine about *Futures Community Centre*.
Lee uses a storyboard to design the front cover of the e-zine.

Figure 6 shows Lee's partially completed storyboard.

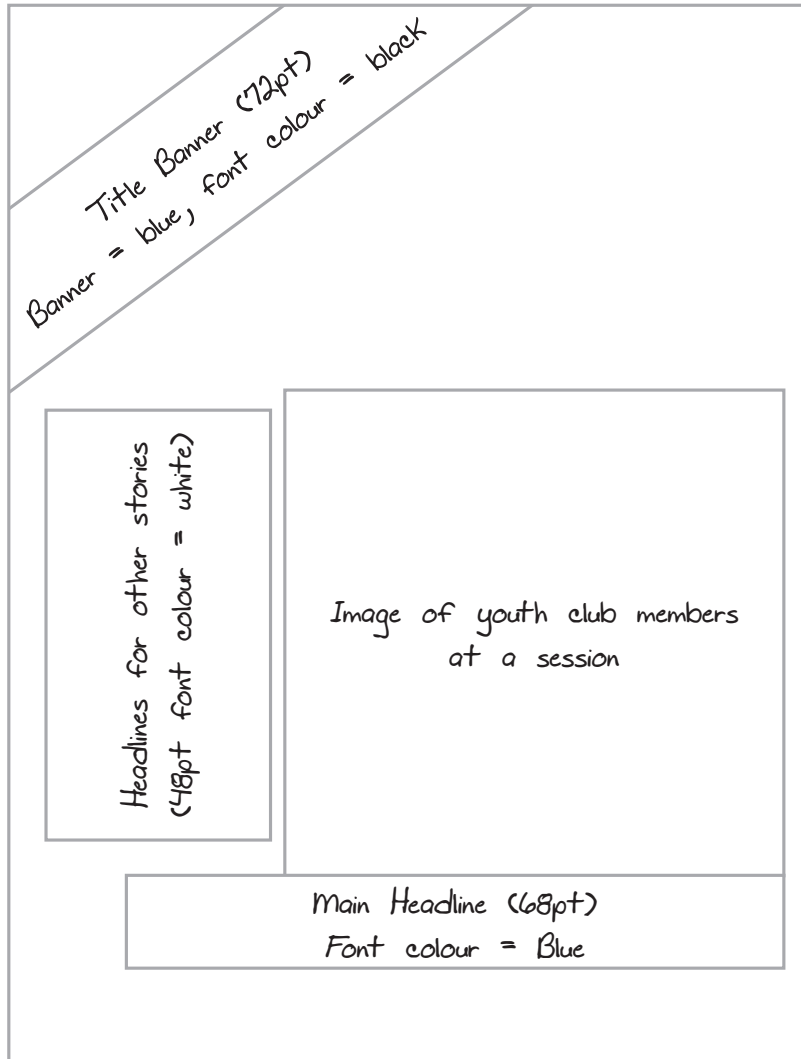


Figure 6

(a) (i) The storyboard shows some design details.

Identify **two** other design details that Lee should add to complete the storyboard.

(2)

1

2



(ii) Lee's design follows the *visual hierarchy*.

Explain what is meant by *visual hierarchy*.

(2)

.....

.....

.....

.....

(b) Lee is preparing some images for the e-zine.

This is an original image:



(i) Lee wants to use the area of the image inside the dotted line.

Identify a graphic tool he could use.

(1)

.....

(ii) Lee wants to enlarge the selected area.

State **one** problem that might occur when this area is enlarged.

(1)

.....

.....





Image 1



Final image

Figure 7

(iii) **Figure 7** shows two of Lee's images.

Lee has used graphic tools to create 'Final image' from 'Image 1'.

He has used the text tool to add information.

Identify **two** other graphic tools and explain how they were used to create 'Final image' from 'Image 1'.

(4)

Tool 1

How used

Tool 2

How used



(iv) Lee would like to use his 'Final image' in the e-zine.

When he accesses the e-zine online this is what he sees:



Explain why this may have happened.

(2)

.....

.....

.....

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