



**L-Università
ta' Malta**

MATRICULATION AND SECONDARY EDUCATION CERTIFICATE
EXAMINATIONS BOARD

**SECONDARY EDUCATION CERTIFICATE LEVEL
2026 MAIN SESSION**

| | |
|---------------|-------------------------------|
| SUBJECT: | Information Technology |
| PAPER NUMBER: | Controlled – Unit 2 |
| DATE: | 13 th May 2025 |
| DURATION: | 10:00 a.m. to 11:35 a.m. |

**THIS PAPER SHOULD BE RETURNED TO THE INVIGILATOR
AFTER THE EXAMINATION.**

Name of candidate _____

I.D. number _____

School _____

Class _____

Answer **ALL** questions in the space provided.

Scenario

- Thomas will soon open a video game store.
- He is thinking of different ways to promote the store.

Question 1

K-1 (4 marks)

Thomas is wondering about the types of media that he can include in the promotional material.

- a. List **TWO** different types of media, apart from 'images', 'audio', and 'video'.

Media 1: _____ (0.5)

Media 2: _____ (0.5)

- b. Relate the following media with **ONE** of the human senses.

Images: _____ (0.5)

Video: _____ (0.5)

- c. Identify **TWO** different hardware devices that are required to develop or experience each of the following types of media, apart from keyboard and mouse. Make sure you identify different hardware devices for the different types of media.

Hardware 1 required for Images: _____ (0.5)

Hardware 2 required for Images: _____ (0.5)

Hardware 1 required for Video: _____ (0.5)

Hardware 2 required for Video: _____ (0.5)

Question 2

K-2 (4 marks)

- Thomas is working on the logo of the video game store.
- This logo will be included on all promotional material.

- a. State **FOUR** main characteristics of image formats, apart from 'resolution' and 'colour depth'.

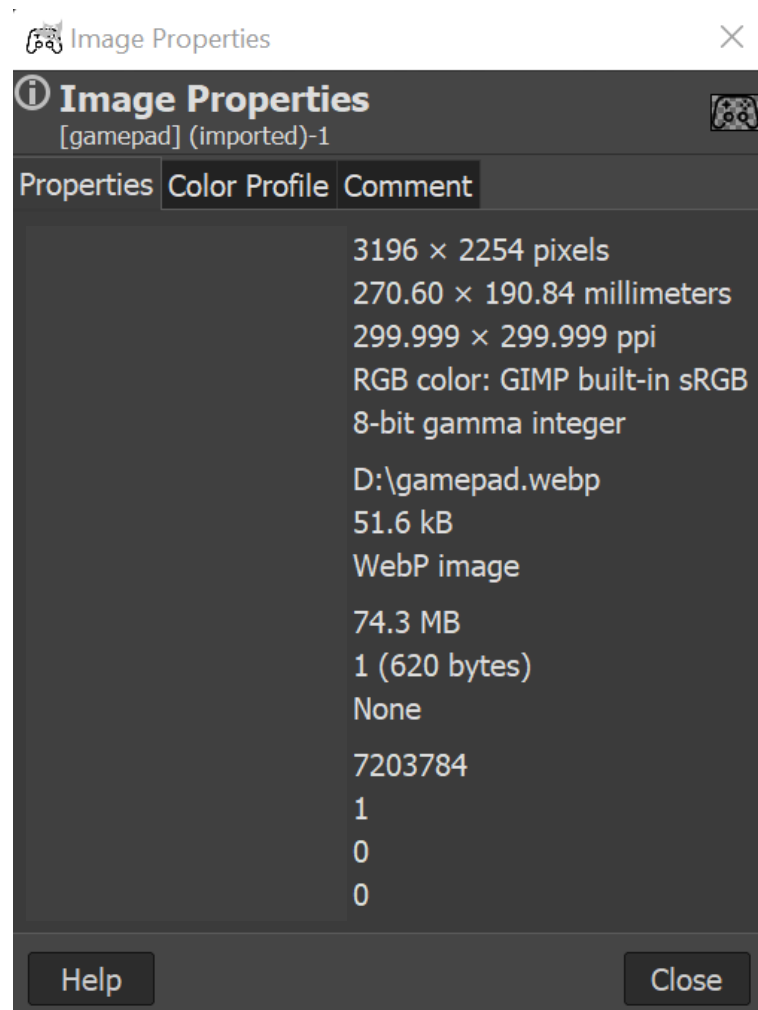
Characteristic 1: _____ (0.25)

Characteristic 2: _____ (0.25)

Characteristic 3: _____ (0.25)

Characteristic 4: _____ (0.25)

b. The following screenshot shows some properties of a .WebP image file.



From the above screenshot, identify the following image characteristics.

i. Resolution: _____ (0.5)

ii. Colour depth: _____ (0.5)

c. Describe 'resolution' and 'colour depth' as characteristics of WebP images.

Resolution: _____

_____ (1)

This question continues on next page.

Colour depth: _____

_____ (1)

Question 3**K-4 (4 marks)**

- Thomas wants to have a theme song for the store.
- His goal is for people to hear the song and think of his store.
- He wants to learn more about audio files and their characteristics.

a. Name **TWO** audio file characteristics.

Characteristic 1: _____ (0.5)

Characteristic 2: _____ (0.5)

b. Relate the following **FOUR** audio file types to the statement which best states their characteristics.

| AAC | ALAC | LPCM | MP3 |
|-----|------|------|-----|
|-----|------|------|-----|

- i. An uncompressed audio file type typically used to store raw audio data. _____ (0.25)
- ii. This audio file uses lossless compression and is commonly used on Apple devices. _____ (0.25)
- iii. A modern and efficient lossy audio file which produces sound of a higher quality when compared to other lossy compressed audio files for the same file size. _____ (0.25)
- iv. An older audio file format that is compatible with most devices and uses lossy compression producing high to medium sound quality. _____ (0.25)

c. Describe the **TWO** audio file characteristics you named in Question 3a.

Characteristic 1: _____

 _____ (1)

Characteristic 2: _____

 _____ (1)

Question 4

K-5 (4 marks)

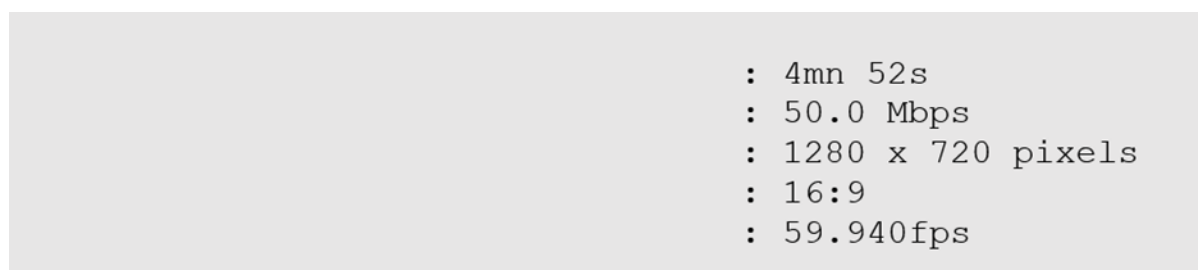
- Thomas is going to create a video to advertise the store.
- He found out that video files have different characteristics.

a. Name **TWO** different video file characteristics, apart from 'aspect ratio' and 'frame dimensions'.

Characteristic 1: _____ (0.5)

Characteristic 2: _____ (0.5)

b. The following screenshot shows some properties of a .MPEG4 video file.



This question continues on next page.

From the screenshot in the previous page, identify the value of the aspect ratio and the frame dimensions, of the video file.

Aspect ratio: _____ (0.5)

Frame dimensions: _____ (0.5)

c. Describe the following **TWO** video characteristics:

i. Aspect ratio: _____

 _____ (1)

ii. Frame dimensions: _____

 _____ (1)

Question 5

C-3 (6 marks)

- Thomas intends to use the theme song and the promotional advert online on various social media platforms, such as Instagram and Facebook.
 - He is still undecided about the audio and video file formats he should use.
- a. Explain **ONE** limitation of .WAV audio files and **ONE** limitation of .AVI video files with respect to using such file types on social media platforms.

Explanation of .WAV limitation:

 _____ (1)

Explanation of .AVI limitation:

- b. Justify why .MP3 audio files and .MPEG4 video files would be more appropriate than .WAV and .AVI files, for uploading content online on social media platforms.

Justification of .MP3 audio file:

Justification of .MPEG4 video file:

This question continues on next page.

- c. Justify why .MP4 video containers are more appropriate than DivX containers for sharing Thomas' promotional advert on social media. Justifications should be based on compatibility and file size.

Justification based on compatibility:

(1)

Justification based on file size:

(1)

Question 6

K-7 (4 marks)

Thomas wants to create a website to help grow his business.

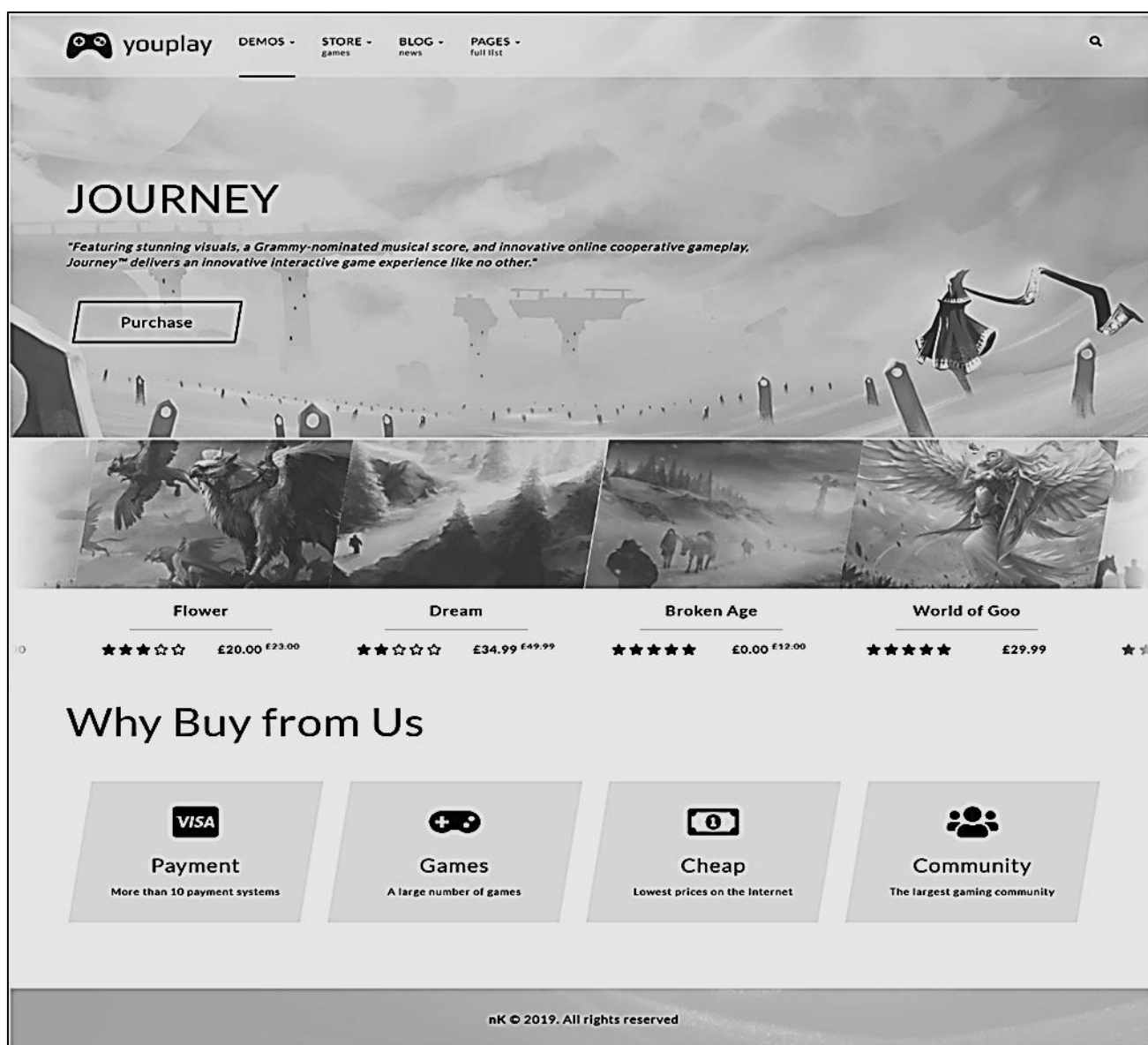
- a. List **TWO** basic elements of a website apart from 'header' and 'main content'.

Element 1: _____ (0.5)

Element 2: _____ (0.5)

- b. The image on the next page shows a possible design for the website.

Identify the **TWO** basic website elements you listed in Question 6a by drawing a box around these elements in the image on the next page. Each website element should be labelled by writing its name next to it. (1)



(Adapted from: <https://wp.nkdev.info/youplay/demo-light/>)

c. Outline the purpose of the following **TWO** basic website elements, header and main content.

i. Header: _____

 _____ (1)

ii. Main Content: _____

 _____ (1)

Please turn the page.

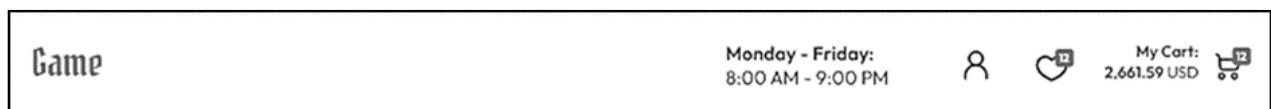
Question 7**C-4 (6 marks)**

- Thomas would like the website to:
 - share information about the video game store with his customers;
 - let customers know about the products for sale;
 - allow buying of products through the website.
- The website is intended for adults and needs to be user-friendly.
- It should have features, such as search facilities, sorting facilities and filters that make online shopping easier so that the displayed products meet the needs of the customers.

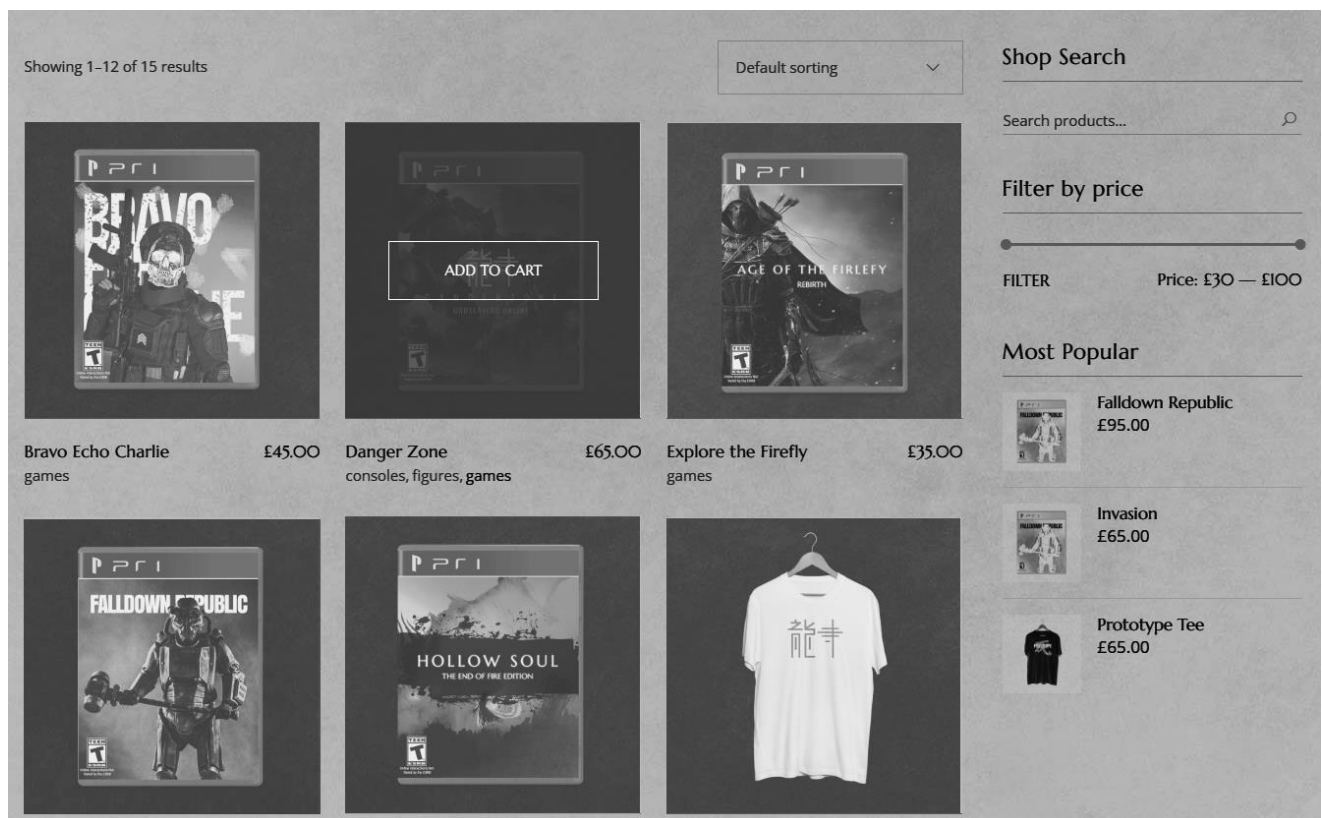
The following are two possible designs for the header and the main content.



Header 1

(Adapted from: <https://www.wordstream.com>)

Header 2

(Adapted from: <https://workdo.io>)


Main Content 1

(Adapted from: <https://eldritch.qodeinteractive.com/shop-home/#>)

View: Grid List

Show per page

★★★★☆




Call of Duty- Advanced Warfare - Xbox 360

\$16.00 ~~\$20.00~~ -20%

ADD TO CART

★★★★★




Destiny - Standard Edition - PlayStation 3

\$19.00

ADD TO CART

★★★★★




The Witcher 2- Assassins Of Kings - Silver...

\$20.00

ADD TO CART

★★★★☆




Halo 4- Game of the Year Edition

\$20.00

ADD TO CART

★★★★★




Mortal Kombat X Fight Pad for PlayStation...

\$21.60 ~~\$27.00~~ -20%

ADD TO CART

★★★★★



Turtle Beach Ear Force XLa Gaming Headset...

\$24.00

ADD TO CART

Main Content 2

(Adapted from: <https://demo.templatemonster.com/>)

a. Select the most appropriate header and main content for this website.

Header: _____ (1)

Main content: _____ (1)

This question continues on next page.

b. Justify the choice of the header and main content you selected in Question 7a.

Justification of Header: _____

_____ (1)

Justification of Main Content: _____

_____ (1)

c. Given that the website for the video game store will allow online shopping, argue whether it would be better for Thomas to create a static website or a dynamic one.

_____ (2)

Question 8**K-9 (4 marks)**

Thomas intends to develop the website using HTML.

a. Define HTML and its use.

 (1)

b. Different HTML tags are used when developing websites.

i. List **ONE** example of the following tags, apart from
 and <header>.

HTML element tag: _____ (0.25)

HTML 5 tag: _____ (0.25)

ii. List **TWO** examples of HTML basic tags, apart from <html> and <a>.

HTML basic tag 1: _____ (0.25)

HTML basic tag 2: _____ (0.25)

c. Relate the following **FOUR** attributes to the appropriate statement which defines their use in relation to HTML tags.

| class | href | id | target |
|-------|------|----|--------|
|-------|------|----|--------|

i. This attribute is used with the <a> tag to specify where the linked file will open. _____ (0.5)

ii. This attribute is used with HTML elements to link them to a specific CSS style, so that all elements have the same look. _____ (0.5)

iii. This attribute is used to uniquely identify HTML elements. _____ (0.5)

iv. This attribute is used with the <a> tag to specify the URL of the webpage that the link points to. _____ (0.5)

Please turn the page.

Question 9**K-10 (4 marks)**

Thomas will use CSS alongside HTML to create the website.

a. Define CSS and its use.

 (1)

b. Distinguish between inline and internal CSS.

 (1)

c. The following lines of code are to be included in the CSS of the website.

```
* {  
    font-family: Arial, sans-serif;  
}  
  
#header {  
    background: lightgray;  
    width: 100%;  
    height: 60px;  
}
```

Outline the specific use of the following CSS selectors and declarations as utilised in the code above.

i. * (selector): _____

 (0.5)

ii. # (id selector): _____

_____ (0.5)

iii. background (declaration): _____

_____ (0.5)

iv. height (declaration): _____

_____ (0.5)

Blank Page